Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson St., Suite 320
Topeka, KS 66612-1366

Kansas

Phone: 785-296-1600
Fax: 785-296-1592 or 785-296-8909
bwmweb@kdheks.gov
www.kdheks.gov/waste

Susan Mosier, MD, Secretary | Department of Health & Environment | Sam Brownback, Governor

September 4, 2015

Mr. Jerry L. Galloway
Director, Maintenance, Environmental & Pilot Projects
Munitions & Government
Day & Zimmermann
Highway 82 West
Texarkana, TX 75505

RE: 2014 Annual Groundwater Monitoring Report, Rev. 01
Day & Zimmermann, Kansas LLC, Parsons Kansas
EPA RCRA ID No. KSR000511964

Dear Mr. Galloway,

The Kansas Department of Health and Environment (KDHE) has received revisions for the 2014 Annual Groundwater Monitoring Report, submitted in response to the KDHE letter dated June 16, 2015. Following review, KDHE finds the revisions acceptable. The revised pages have been incorporated into KDHE's copy of the report. KDHE will confirm that wells demonstrating well screen occlusion equal to or in excess of 10% of the well screen length have been redeveloped during review of the 2015 Annual Groundwater Monitoring Report (due to be submitted by March 1, 2016). If you have any questions regarding this letter, please do not hesitate to call me at (785) 291-3132.

Sincerely,

Ryan Pfeiffer
Environmental Specialist
Corrective Action & Geology Unit
Hazardous Waste Permitting Section

cc: David Homer – Tetra Tech
Jeremy Johnson – Mo/IA Remediation & Permitting Sect - EPA Region VII - RCRA Branch
Ken Herstowski – EPA Region VII - RCRA Branch
Victoria O'Brein – DEA/SEDO/Waste Programs
Bill Bider – BWM
Mostafa Kamal – BWM (electronic)
Richard Flanary – BWM (electronic)

Richard Flanary

From: Homer, David <David.Homer@tetratech.com>
Sent: Wednesday, August 26, 2015 9:29 AM
To: Ryan Pfeiffer
Cc: Mostafa Kamal; Richard Flanary; 'Herstowski, Ken' (Herstowski.Ken@epa.gov); 'Johnson.jeremy@Epa.gov'; Galloway, Jerry (Jerry.Galloway@dayzim.com); 'Miller, Lisa'
Subject: D&Z Annual Groundwater Report Response to Comments
Attachments: Section 3.pdf; Table 3-1.pdf; Title Page.pdf; RTC CV.pdf

Ryan,
As requested, Tetra Tech is a response to comments for the 2014 Annual Groundwater Monitoring Report. If you have any questions or need additional information please let us know.

Thanks,
David

David H Homer, PhD | Senior Environmental Scientist, Program Manager
Direct: 816.412.1762 | Main: 816.412.1741 | Fax: 816.410.1748 | Cell: 913.645.0453
david.homer@tetratech.com

Tetra Tech Inc. | Complex World, Clear Solutions™
Kansas City Operations
412 Oak Street | Kansas City, MO 64106 | www.tetratech.com

Bureau of Air
Curtis State Office Building
1000 SW Jackson, Suite 310
Topeka, KS 66612-1366

Kansas

Phone: 785-296-1544
Fax: 785-296-7455
rbrichac@kdheks.gov
www.kdheks.gov/bar

Susan Mosier, MD. Secretary | Department of Health & Environment | Sam Brownback, Governor

August 24, 2015

Mr. Steve Kosman
Day and Zimmermann, Inc.
23018 Rooks Road
Parsons, Kansas 67357-8403

Source ID No. 0990010

RE: Request for Limited Exceptions from K.A.R. 28-19-645, Open Burning Prohibition for specific open burning activities by Day and Zimmermann, Inc.

Dear Mr. Kosman:

On August 12, 2015, the Kansas Department of Health and Environment (KDHE) received the Day and Zimmermann, Inc. (DZI) request for an exception to K.A.R. 28-19-645 for open burning activities at the DZI facility. The open burning exception request pertains to the open detonation/open burning of unstable munitions at its Open Detonation (OD) Range located within the secured area of the DZI's facility at 21017 Scott Road, Parsons, Kansas. This request is based on the need to safely dispose of unstable munitions at the site, due to their unstable and explosive nature.

Exception to the open burning prohibitions can be granted by KDHE under specific limitation and conditions, in accordance with the provisions of K.A.R. 28-19-647, *Exception to prohibition on open burning*. Under K.A.R. 28-19-647(f), KDHE may issue an approval for open burning operations that does not meet the conditions set forth in subsection (f) upon clear demonstration that the proposed burning:

(1) is necessary and in the public interest

(2) can be conducted in a manner that will not result in emissions which may be injurious to human health, animal or plant life, or property, or may unreasonably interfere with the enjoyment of life or property; and

(3) will be conducted in accordance with such conditions as KDHE deems necessary.

KDHE hereby conditionally grants approval for open burning exceptions in accordance with requirements contained in K.A.R. 28-19-647(b), (c), (d), and (e) and with the following additional requirements in accordance with K.A.R. 28-19-647(f) as follows:

1. Open Detonation shall be limited to a maximum of 10 (ten) 50 pound charges per day. This exception is restricted to 100 days of open detonation per 12 months rolling average, calculated monthly.

2. DZI will provide KDHE-BOA with semiannual reports to document the days upon which open detonation occurred, the amount of munitions detonated each month (in pounds), and the current 12-month rolling average of amount of munitions detonated at the OD range. These semiannual reports, based on calendar years, are due 30 days after each semiannual period, on January 30th, and July 30th each year.

3. NOTE: This conditional open detonation/open burning approval becomes effective upon the date of the issuance of the KDHE Bureau of Waste Management's Hazardous Waste Facility Permit for EPA ID No. KSR000511964. As of the date of this conditioned open denotation/open burning exception approval, this KDHE-BWM permit has not been issued by the department. This conditioned approval shall not circumvent any requirements within the Hazardous Waste Facility Permit for EPA ID No. KSR000511964, yet to be issued.

4. KDHE may revoke this open burning approval at any time where KDHE deems appropriate and justified, without the 30 day notice as contain in K.A.R. 28-19-647(e)(9).

5. This open burning approval expires on December 31, 2020. Open burning activities after this date will require another exception approval to be issued by KDHE, Bureau of Air prior to continuation of open burning at the OD range.

If you have any additional questions or concerns related to the approval or applicable state or federal regulations, please contact me at (785) 296-1544 or by email at rbrichac@kdheks.gov.

Sincerely,

Russ Brichacek

Russ Brichacek
Environmental Scientist
Air Compliance & Enforcement Section

RLB: cm
c: Doug Cole - SEDO
Mostafa Kamal – BWM
File

Enclosure: Day & Zimmermann Kansas LLC; Application for Approval for Open Burning Operations, received August 12, 2015

Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson St., Suite 320
Topeka, KS 66612-1366

Kansas

Phone: 785-296-1600
Fax: 785-296-1592 or 785-296-8909
bwmweb@kdheks.gov
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Susan Mosier, MD, Secretary | Department of Health & Environment | Sam Brownback, Governor

Memorandum

Date: August 21, 2015

To: Facility File - Day & Zimmermann Kansas LLC - EPA ID# KSR000511964

Through: Richard Flanary

From: Jason Koontz

Subject: Draft Cost Estimate Evaluation for Day and Zimmermann Kansas LLC

A cost estimate evaluation was conducted by the Kansas Department of Health and Environment, Bureau of Waste Management Hazardous Waste Permitting Division (KDHE) for Day and Zimmermann Kansas LLC (D&Z) to determine the financial assurance requirement of the RCRA Part B Permit Application. KDHE reviewed the October 2013 Part B Permit Application, March 2013 Purchase Agreement between the United States of America and Day & Zimmermann Kansas LLC, and various closure work plans, cost estimate summaries, and cost estimating software data files submitted by Tetra Tech on behalf of D&Z. Closure cost estimate documents were submitted with the Part B application as an attachment and also on digital compact disc. Closure activities described in Section I of the Part B Application, included costs for removal and disposal of final waste inventory and closure of the OD grounds. Areas 1000 and 1100 sump and trough corrective action cost estimates and work plans were submitted to KDHE by Tetra Tech in December 2013, and the Above Ground Storage Tank (AST) removal work plan and cost estimate were submitted to KDHE by Tetra Tech in March 2014.

Project Summary

Requirements for closure

- Open Detonation Range Clean-up
- Area 1800 Magazine Building Decontamination
- Area 1900 Igloo Waste Disposal and Decontamination
- Area 2700 Igloo Waste Disposal and Decontamination

Requirements for corrective action

- Area 1000 and 1100 AST's
- Building 1000 and 1100 sumps and troughs removal
- Area 1000 Groundwater Monitoring
- Area 1100 Groundwater Monitoring
- SWMU 17 – Open Detonation Range Groundwater Monitoring

Estimate

Cost estimate software data files for RACER 9.1 and CostPro programs were reviewed and compared to work plans and cost estimate summaries submitted by Tetra Tech and D&Z. With the information provided in these documents, KDHE evaluated the cost estimates for the removal of Area 1000 and 1100 sumps and troughs, closure of container storage units in Areas 1800, 1900, and 2700, and groundwater monitoring in the 1000 Area, 1100 Area, and OD grounds. Cost estimates for many of the items identified in the purchase agreement have not been generated by the facility consultant, and only those presented within the Part B application and work plans submitted by Tetra Tech were evaluated and considered for the draft financial assurance email to D&Z on October 17, 2014. The draft financial assurance letter,cost

estimate summary, assumptions, and cost details are provided in the RACER and CostPro reports are provided at the end of this document as attachments.

Table1. Day & Zimmermann Kansas LLC Cost Estimate.

D&Z Cost Estimate - 2014			
Area	**Phase**	**D&Z estimate Software**	**D&Z cost (Mark-up & Escalation)**
Container Storage Area	Magazine 1813	CostPro	$778,531
	1900 igloos	CostPro	$1,018,566
	2700 igloos	CostPro	$74,494
Open Detonation Range	Open Detonation Area (Inside Fence)	RACER 9.1	$3,855,633
	Open Detonation Area (Outside Fence)	RACER 9.1	$3,266,885
	*SWMU 17 (OD Range) Groundwater Monitoring (**25** years, 8 wells)	CostPro	$555,013
1000 and 1100 Area AST's	Area 1000 and 1100 (AST's)	RACER 9.1	$131,967
1000 Area	*Area 1000 Groundwater Monitoring (**5** years, 9 wells)	CostPro	$130,512
	Area 1000 Sumps and Troughs	RACER 9.1	$246,439
1100 Area	Area 1100 Sumps and Troughs	RACER 9.1	$275,981
	Area 1100 Groundwater Monitoring (**25** years, 19 wells)	CostPro	$1,268,944
		Total	**$11,602,965**

Notes:

D&7 RACER 9.1 (2007 Cost Database with escalation to 2013,except for AST removal and sampling to 2014 escalation)

CostPro generated cost items 2009 to 2013 include an esclation factor of 1.06733

The D&Z Cost Pro Estimates include: an engineering expense of 10% and contingency cost of 20%.

Estimate Evaluation

Costs determined with RACER software were presented by D&Z as Marked-up costs, which include Prime Contractor and Subcontractor Overhead and Profit as well as a 5% contingency allowance. CostPro determined costs include a 10% engineering cost and a 20% contingency allowance for each component presented in Table 1. The D&Z cost estimate in Table 1 provides costs for corrective action and closure activities at the facility identified in Section I or J of the Revised Permit Application. Post-closure costs were not assessed due to the anticipated clean closure of units addressed in the Part B Application. KDHE identified additional corrective action items from the 2013 Purchase Agreement between the US Army and D&Z that may require cost estimate evaluation. These items were presented to D&Z in the October 17, 2014 financial assurance email. Costs associated with additional clean-up of identified SWMUs/AOCs/releases or newly discovered SWMUs/AOCs/releases are subject to evaluation by KDHE in the future.

Conclusion

The cost estimate total in Table 1 is considered an adequate assessment of the financial assurance obligation for the D&Z facility. KDHE has determined this amount to be sufficient, considering that D&Z Marked-up cost estimates exceed the direct costs associated with those items determined by the RACER software, and CostPro estimates include engineering and contingency costs that provide additional financial security to the State of Kansas. Furthermore, completion of the RCRA Facility Investigation may eliminate, reduce, or possibly increase the amount of remediation necessary to fulfill corrective action and closure obligations stipulated in the 2015 Hazardous Waste Management Facility Draft Permit for Day & Zimmermann Kansas LLC. Until revisions to the cost estimate are determined necessary to address changes in the facilities corrective action requirements or closure plan, the established financial assurance instrument documented in the Part B Application Section I, Appendix I shall equal the value of this approved cost estimate, annually adjusted for inflation as stipulated in Section II.M of the 2015 D& Z Draft Permit.

Reference Documents

Day & Zimmermann Kansas LLC and Tetra Tech. Day & Zimmermann Kansas LLC, Part B Permit Application. October 2013.

Day & Zimmermann Kansas LLC and Tetra Tech. Corrective Action Cost Estimates Day & Zimmermann Kansas LLC, Parsons, Kansas. December 2013.

Day & Zimmermann Kansas LLC and Tetra Tech. Corrective Action Cost Estimates_ Above Ground Storage Tanks Day & Zimmermann Kansas LLC, Parsons, Kansas. March 2014.

Day & Zimmermann Kansas LLC and Tetra Tech Inc. Revised Permit Application for Hazardous Waste Management Facility Day and Zimmermann Kansas LLC. May 2015.

Kansas Department of Health and Environment. Hazardous Waste Management Facility Draft Permit for Day & Zimmermann Kansas LLC. July 2015.

Tetra Tech Inc. 1000 Area Sumps_02 RACER Estimate for transportation and disposal.pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. 1000 Area Sumps_04 RACER Estimate for removal coordination and soil samp.pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. 1000 Area Sumps_05 RACER Estimate for closure report.pdf (RACER Detail Report). October 2013

Tetra Tech Inc. 1800 costs.pdf (CostPro Detail Report). October 2013.

Tetra Tech Inc. 1900 costs.pdf (CostPro Detail Report). October 2013.

Tetra Tech Inc. 2700 costs.pdf (CostPro Detail Report). October 2013.

Tetra Tech Inc. AST Removal Line 01.pdf (RACER Detail Report). March 2013.

Tetra Tech Inc. AST Removal Line 02.pdf (RACER Detail Report). March 2013.

Tetra Tech Inc. AST Removal Line 03.pdf (RACER Detail Report). March 2013.

Tetra Tech Inc. DZI OD Grounds Closure Cost Estimate.xlsx. October 2013.

Tetra Tech Inc. Igloo closure cost estimate - 1800.cstpro. October 2013.

Tetra Tech Inc. Igloo closure cost estimate - 1900.cstpro. October 2013.

Tetra Tech Inc. Igloo closure cost estimate - 2700.cstpro. October 2013.

Tetra Tech Inc. RACER Detail - Line 05 (Soil Sampling Collection).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER Detail - Line 07 (Soil sampling reporting).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Line 10 (MEC Intrusive Investigation by Hand).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Line 11 (MEC Destruction).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Line 12 (Site Management).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Line 13 (Reporting).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Line 18 (Soil sample collection).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Line 19 (Soil Sample Reporting).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Line 20 (Interim Closure Report).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Line 21 (Final Closure Report).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER Detail - Lines 01 - 03 (MEC Surface Clearance).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Lines 01_03 (MEC - Site Characterization).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Lines 04_06 (MEC - Sifting - OD Grounds).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER detail - Lines 07_09 (MEC - Sifting - Adjacent Area).pdf (RACER Detail Report). October 2013.

Tetra Tech Inc. RACER_OD Closure.mdb (RACER program file). October 2013.

U.S.A. and Day and Zimmermann Kansas LLC. Purchase and Sale Agreement Between the United States of America and Day & Zimmermann Kansas LLC (D&Z-KS) Regarding a Portion of the Kansas Army Ammunition Plant. March 2013.

Richard Flanary

From: David Homer <David.Homer@tetratech.com>
Sent: Monday, July 27, 2015 11:15 AM
To: Richard Flanary
Subject: Day & Zimmermann LLC Revised Part A and B applications

Click the links below to download the files. Files will expire Sat Aug 08 11:13:53 2015.
20150727 Part A_DZ.pdf (6,562,527 bytes)
20150721 Part B App Sect B_DZ.pdf (6,886,267 bytes)
20150721 Part B App Sect C_DZ.pdf (1,016,480 bytes)
20150721 Part B App Sect D_DZ.pdf (4,773,760 bytes)
Appendix D-4_Draft Final Risk Assessment_DZ OD.zip (30,968,530 bytes)
20150721 Part B App Sect E_DZ.pdf (8,538,486 bytes)
20150721 Part B App Sect F_DZ.pdf (1,243,044 bytes)
20150724 Part B App Sect G DZ.pdf (7,078,396 bytes)
20150721 Part B App Sect H_DZ.pdf (326,856 bytes)
20150721 Part B App Sect I_DZ.pdf (8,582,061 bytes)
20150724 Part B App Sect J_DZ.pdf (1,019,822 bytes)
20150721 Part B App Sect K_DZ.pdf (803,510 bytes)
20150727 Part B App Sect L_DZ.pdf (251,219 bytes)
20150721 Part B App Sect O_DZ.pdf (338,261 bytes)

Package details:
From: david.homer@tt
To: MKamal@kdheks.gov ; RFlanary@kdheks.gov ; RPfeiffer@kdheks.gov ; Jerry.Galloway@dayzim.com ; Lisa.Miller@dayzim.com ; dean.cramer@dayzim.com ; Steve.Kosman@dayzim.com
Subject: Day & Zimmermann LLC Revised Part A and B applications
Arrived: Mon Jul 27 11:14:12 2015

Mostafa/Richard,

Attached is the electronic copy of the revised Part A and B for the Day & Zimmermann LLC facility in Parsons, Kansas. If you have any questions, comments or revisions, please let me know. We will print the needed hard copies once you give us the go ahead.

Thanks,

David Homer

Total file size: 78,389,219 bytes

Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson St., Suite 320
Topeka, KS 66612-1366

Phone: 785-296-1600
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Susan Mosier, MD, Secretary | Department of Health & Environment | Sam Brownback, Governor

July 10, 2015

Mr. Jerry L. Galloway
Director, Maintenance, Environmental & Pilot Projects
Munitions & Government
Day & Zimmermann
Highway 82 West
Texarkana, TX 75505

RE: Final Closure of Hazardous Waste Storage Units Igloos and Magazine
Day & Zimmermann, Kansas LLC, Parsons Kansas
EPA ID # KSR000511964

Dear Mr. Galloway,

We are in receipt of the subject closure report along with closure certification dated July 6, 2015. The closure report includes: hazardous waste storage Igloos 1914-1917, 1958, 1961, 1974 and 1976; and storage magazine 1813. Based on our review the Kansas Department of Health and Environment (KDHE) approves the closure of the units subject to adequate institutional controls to be placed through the upcoming hazardous waste facility permit planned for issuance later this year.

Based on the subject closure report, all final rinsate water samples from washing the floors and walls of the subject units met closure standards based KDHE's 2014 Tier 2 Risk-Based Standards for Kansas (RSK) except for Igloo 1974. Following additional treatment using 1N and 2N sodium hydroxide solutions, the concentration of RDX in rinsate remained above the non-residential Tier 2 RSK screening level of 26 ug/l. Soil samples collected below Igloo 1974's floor slab were found to be non-detect at KDHE's screening standard of 100 ug/kg for RDX. Therefore, KDHE is confident that any remaining RDX on the concrete floor will not be a health or safety concern given the planned future use of the unit for munitions storage.

Should there be any further questions, please feel free to contact me at (785) 296-6562. Your cooperation with KDHE is appreciated.

Sincerely,

Richard L. Flanary

Richard L. Flanary, PE, M.S.
Hazardous Waste Permits Section

cc: Ken Herstowski - EPA Region 7/AWMD/RCAP
Victoria O'Brein - DEA/SEDO/Waste Programs
Charles Bowers - SEDO
David Homer - Tetra Tech
Bill Bider - BWM

TETRA TECH

July 6, 2015

Mr. Mostafa Kamal, Chief
Hazardous Waste Program
Bureau of Waste Management
Kansas Department of Health and Environment
1000 SW Jackson Street, Suite 320
Topeka, Kansas 66612

Subject: **Final Certified Closure Report**
Closure of RCRA Permitted Hazardous Waste Storage Facilities
Day & Zimmermann, Kansas LLC, Parsons, Kansas

Dear Mr. Kamal:

Tetra Tech, Inc. (Tetra Tech) on behalf of Day & Zimmermann, Kansas LLC (D&Z) is submitting a final certified closure report which addresses comments received from the Kansas Department of Health and Environment (KDHE) on June 5, 2014. The closure report has been certified to ensure that closure activities were completed in strict compliance with the requirements of KDHE approved closure plan and specifications, except where noted in the closure report as approved by KDHE.

If you have any questions, or need further clarification on the final certified closure report, please do not hesitate to contact me at (816) 412-1762.

Sincerely,

David H. Homer

David H. Homer, Ph.D.
Project Manager

cc: Richard Flanary, KDHE
Dean Cramer, D&Z
Jerry Galloway, D&Z
Steve Kosman, D&Z
Lisa Miller, D&Z
Tom Rudy, D&Z

415 Oak Street, Kansas City, MO 64106
Tel 816.412.1741 Fax 816.410.1748 www.tetratech.com

Richard Flanary

From: Herstowski, Ken <Herstowski.Ken@epa.gov>
Sent: Monday, June 29, 2015 8:10 AM
To: Richard Flanary
Subject: RE: D& Z LLCKS 5-27-15 Part B Draft Comments for Telephone Discussion

Richard

A few suggestions below:

PLEASE NOTE THAT REGION 7 HAS RELOCATED

Region 7 EPA relocated its office to Lenexa, KS.

Ken Herstowski
Project Manager
EPA Region 7
AWMD/WRAP/MIRP
11201 Renner Boulevard
Lenexa KS 66219

9135517631
herstowski.ken@epa.gov

From: Richard Flanary [mailto:RFlanary@kdheks.gov]
Sent: Wednesday, June 17, 2015 4:25 PM
To: Mostafa Kamal
Cc: Herstowski, Ken; Ryan Pfeiffer; Charles Bowers
Subject: D& Z LLCKS 5-27-15 Part B Draft Comments for Telephone Discussion

Here are my draft comments on the 5-27-15 revised Part B Submittals

Please let me know if you have any additional comments before I email them to Tetra Tech and D&ZKSLLC .

I'm out of the office until Monday.

Charley, all these documents are on the S drive where the HW Storage closure Report was located that you review recently.

Richard L. Flanary, PE, MS
Hazardous Waste Permits Section
Phone: 785-296-6562
Fax: 785-296-1592
email: rflanary@kdheks.gov

1) Part A Make sure the units are included on page 2 of 6 as they are missing on the electronic version. Will need a signed version with the final Part B submittal to be placed on public notice

2) Section B I assume all or much of the missing information in Table B-2 is provided in Section C tables and probably need to add MAXIMUM TOTAL DETONATIONS = *** 50,000 pounds

(assumes a maximum of 10 – 500 pound charges/day for 100 each days a year) to the table. If the misusing information in table B-2 does not apply please indicate with an NA.
[Herstowski, Ken] total annual quantities may need to be lowered based on the risk assessment.

3) Section C C-2a Under **Pre-Acceptance Procedures** remove potentially received from off-site sources.
Under Table C-4 Reject 105mm D003 TNT or Comp. B Pelletize and band 1900/2700 No OD I think the word is Palletize

4) Section D Under 1900 Area Igloos the sentence "These additional Igloos will be used only if munitions from off site are sent to D&Z as hazardous waste for demilitarization at the OD grounds"
needs to be revised to "These additional Igloos will be used only if munitions from off site are sent to D&Z for demilitarization that may require storage of any hazardous waste generated during the process prior to off-site treatment and disposal or thermal treatment at the OD grounds."

Under D-8-1d(2) Protection of Surface Water, Wetlands, and Soil Surfaces[40CFR§270.23(b),(c) and 264.601(b)] add details on management of storm water runoff required under NPDES Permit. (if sampling of discharge points from the OD Area is required after a storm water event for a period of time until either it must be continued or can be terminated would make a RCRA permit condition the results be recorded in the facilities operating record.

Appendix D-3 SOP 1 1900 Area Remove 1974/2708/2707/A018 as only for 1900 Area Igloo # 1979 I assume? Maybe 1979/2707/2708/2709 and 1900/2700Area ?

5) Section F Figure F-2 and Table F-1 Add a line for 2 Feet of soil cover and erosion problems weekly inspection to igloos.

Need to add an separate inspection form for the OD 2700 Area including inspection for erosion at the storm water runoff locations identified in their NPDES Storm Water Runoff Plan.

If a Form or electronic means could be added just for the days when the OD grounds is being operated, it could be helpful in documenting the NEW of each individual blow to assure the 50 pound along with the 500 pound per day operating limits are being adhered to. This would also provide documentation the maximum yearly quantity of 50,000 Pounds is not exceeded.
[Herstowski, Ken] total annual quantities may need to be lowered based on the risk assessment.

Appendix F-1 SOPs SOP 1,2 and 3 refers to Appendix "A" & "B". Appendix A with the maximum NEW for each storage area is listed. Appendix B is not listed, but appears to be SOP's contained in KN-0000-L-015-
LINE SERVICE TRANSPORTATION VEHICLES that details handling materials throughout the facility including explosives

The maximum NEW for some igloos appears to have been reduced in Appendix A due erosion of the 2 feet of earth cover. If they are repaired the NEW's could not be increased without a major permit modification.

10) Section G SPCC Plan Appendix XIII needs updated Hazardous Waste Facility Inspection Form from Section F.

11) Section I Table 2-1 needs to be revised to match Table C-2 in Section C
Table 2-2 needs to be revised to match Table B-2 in Section B
The Standby Trust Agreement needs to be completed and submitted.

12) Section J In Section J-1 replace the SWMU and AOC List with:

SWMU_	
9	1000 Area
10	1100 Area
17	Open Detonation Field currently in operation
17	Container Storage Areas 2707, 2708, and 2709 currently in operation
21	Closed Container Storage Areas 1813, 1914, 1915, 1916, 1917, 1958, 1961, 1974 and 1976.
21	Container Storage Areas 1816. 1934, 1935, 1936, 1942, 1967, 1969, 1970 and 1979 to begin operation upon permit issuance
24	Burn Pad 6 closed

AOC	
1	Water Tower 4
2	Mercury Fulminate Disposal Site
3	Old Ammunition Storage Area
4	Quarry Operation

The closure report for clean closure of the currently permitted 1813 Magazine and 1914, 1915, 1916,1917, 1958, 1961,1964 and 1976 Igloos will require minor changes as will be documented in a BWM conditional approval letter.

SWMU Group 21 (Container Storage Areas 2707, 2708, and 2709) **should be changed** to **SWMU Group 17** (Container Storage Areas 2707, 2708, and 2709) as they are in the OD Area
[Herstowski, Ken] I would not suggest this change – it would confuse researchers trying to find the information in the existing reports where they are referred to as SWMU 21

The **former UST's** closed out in the 1990's under KDHE with no further action in the **1000 and 1100 Areas** should be added the SWMU Group 9 (1000 Area) and SWMU Group 10 (1100 Area) descriptions.

The UST's not closed out which are beneath the concrete floor in Building 1105 should be added the SWMU Group 10 (1100 Area) description.

The recent discovery of the presence of Quarry should be **added** as an **AOC** and a **description provided and indicated on the SWMU & AOC MAP.** Any further investigations or remedial actions will be addressed under the corrective action portion off
the renewal permit.

In Section J-2 replace the SWMU List with:

SWMU_	
9	1000 Area
10	1100 Area
17	Open Detonation Field currently in operation
17	Container Storage Areas 2707, 2708, and 2709 currently in operation
21	Closed Container Storage Areas 1813, 1914, 1915, 1916, 1917, 1958, 1961, 1974 and 1976.
21	Container Storage Areas 1816. 1934, 1935, 1936, 1942, 1967, 1969, 1970 and 1979 to begin operation upon permit issuance
24	Burn Pad 6 closed

13) Section L In Section J-1 replace the SWMU and AOC List with:

Richard Flanary

From: Richard Flanary
Sent: Wednesday, June 17, 2015 4:11 PM
To: 'Homer, David'
Subject: D& Z LLCKS 5-27-15 Part B Draft Comments for Telephone Discussion

David, here are my draft comments FYI

I 'm sending these to Mostafa, Ryan and Ken for their input and will then send you the final version.

I'm out of the office until Monday but you can call my cell 785 844 0711 if you have questions.

I need to get the draft permit finalized so I can get out on public notice in July. Since Ryan is done with his sections of the permit except for my revisions as noted below, I assume only my comments plus any Mostafa or Ken may have will be it.

Richard

1) Part A Make sure the units are included on page 2 of 6 as they are missing on the electronic version. Will need a signed version with the final Part B submittal to be placed on public notice

2) Section B I assume all or much of the missing information in Table B-2 is provided in Section C tables and probably need to add MAXIMUM TOTAL DETONATIONS = *** 50,000 pounds
(assumes a maximum of 10 – 500 pound charges/day for 100 each days a year) to the table. If the misusing information in table B-2 does not apply please indicate with an NA.

3) Section C C-2a Under **Pre-Acceptance Procedures** remove potentially received from off-site sources.
Under Table C-4 Reject 105mm D003 TNT or Comp. B Pelletize and band 1900/2700 No OD I think the word is Palletize

4) Section D Under 1900 Area Igloos the sentence "These additional Igloos will be used only if munitions from off site are sent to D&Z as hazardous waste for demilitarization at the OD grounds"
needs to be revised to "These additional Igloos will be used only if munitions from off site are sent to D&Z for demilitarization that may require storage of any hazardous waste generated
during the process prior to off-site treatment and disposal or thermal treatment at the OD grounds."

Under D-8-1d(2) Protection of Surface Water, Wetlands, and Soil Surfaces[40CFR§270.23(b),(c) and 264.601(b)] add details on management of storm water runoff required under NPDES Permit. (if sampling of discharge points from the OD Area is
required after a storm water event for a period of time until either it must be continued or can be terminated would make a RCRA permit condition the results be recorded in the facilities operating record.

Appendix D-3 SOP 1 1900 Area Remove 1974/2708/2707/A018 as only for 1900 Area Igloo # 1979 I assume? Maybe 1979/2707/2708/2709 and 1900/2700Area ?

5) Section F Figure F-2 and Table F-1 Add a line for 2 Feet of soil cover and erosion problems weekly inspection to igloos.

Need to add an separate inspection form for the OD 2700 Area including inspection for erosion at the storm water runoff locations identified in their NPDES Storm Water Runoff Plan.

If a Form or electronic means could be added just for the days when the OD grounds is being operated, it could be helpful in documenting the NEW of each individual blow to assure the 50 pound along with the 500 pound per day operating limits are being adhered to. This would also provide documentation the maximum yearly quantity of 50,000 Pounds is not exceeded.

Appendix F-1 SOPs SOP 1,2 and 3 refers to Appendix "A" & "B". Appendix A with the maximum NEW for each storage area is listed. Appendix B is not listed, but appears to be SOP's contained in KN-0000-L-015-

LINE SERVICE TRANSPORTATION VEHICLES that details handling materials throughout the facility including explosives

The maximum NEW for some igloos appears to have been reduced in Appendix A due erosion of the 2 feet of earth cover. If they are repaired the NEW's could not be increased without a major permit modification.

10) Section G SPCC Plan Appendix XIII needs updated Hazardous Waste Facility Inspection Form from Section F.

11) Section I Table 2-1 needs to be revised to match Table C-2 in Section C
Table 2-2 needs to be revised to match Table B-2 in Section B
The Standby Trust Agreement needs to be completed and submitted.

12) Section J In Section J-1 replace the SWMU and AOC List with:

SWMU

9	1000 Area
10	1100 Area
17	Open Detonation Field currently in operation
17	Container Storage Areas 2707, 2708, and 2709 currently in operation
21	Closed Container Storage Areas 1813, 1914, 1915, 1916, 1917, 1958, 1961, 1974 and 1976.
21	Container Storage Areas 1816. 1934, 1935, 1936, 1942, 1967, 1969, 1970 and 1979 to begin operation upon permit issuance
24	Burn Pad 6 closed

AOC

1	Water Tower 4
2	Mercury Fulminate Disposal Site
3	Old Ammunition Storage Area
4	Quarry Operation

The closure report for clean closure of the currently permitted 1813 Magazine and 1914, 1915, 1916,1917, 1958, 1961,1964 and 1976 Igloos will require minor changes as will be documented in a BWM conditional approval letter.

SWMU Group 21 (Container Storage Areas 2707, 2708, and 2709) **should be changed** to **SWMU Group 17** (Container Storage Areas 2707, 2708, and 2709) as they are in the OD Area

The **former UST's** closed out in the 1990's under KDHE with no further action in the **1000 and 1100 Areas** should be added the SWMU Group 9 (1000 Area) and SWMU Group 10 (1100 Area) descriptions.

The UST's not closed out which are beneath the concrete floor in Building 1105 should be added the SWMU Group 10 (1100 Area) description.

The recent discovery of the presence of Quarry should be **added** as an **AOC** and a **description provided and indicated on the SWMU & AOC MAP.** Any further investigations or remedial actions will be addressed under the corrective action portion off
the renewal permit.

In Section J-2 replace the SWMU List with:

SWMU	
9	1000 Area
10	1100 Area
17	Open Detonation Field currently in operation
17	Container Storage Areas 2707, 2708, and 2709 currently in operation
21	Closed Container Storage Areas 1813, 1914, 1915, 1916, 1917, 1958, 1961, 1974 and 1976.
21	Container Storage Areas 1816. 1934, 1935, 1936, 1942, 1967, 1969, 1970 and 1979 to begin operation upon permit issuance
24	Burn Pad 6 closed

13) Section L In Section J-1 replace the SWMU and AOC List with:

Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson St., Suite 320
Topeka, KS 66612-1366

Phone: 785-296-1600
Fax: 785-296-1592 or 785-296-8909
bwmweb@kdheks.gov
www.kdheks.gov/waste

Susan Mosier, MD, Secretary | Department of Health & Environment | Sam Brownback, Governor

June 16, 2015

Mr. Jerry L. Galloway
Director, Maintenance, Environmental & Pilot Projects
Munitions & Government
Day & Zimmermann
Highway 82 West
Texarkana, TX 75505

RE: 2014 Annual Groundwater Monitoring Report, Rev. 00
Day & Zimmermann, Kansas LLC, Parsons Kansas
EPA RCRA ID No. KSR000511964

Dear Mr. Galloway,

The Kansas Department of Health and Environment (KDHE) has reviewed the above mentioned document for Day & Zimmermann, LLC (D&Z) prepared by Tetra Tech, Inc. (Tetra Tech). After review, KDHE has the following comments:

1. Section 3.1 – The text indicates MW 1-13 and MW 9-12 were observed to have occlusion of more than 10 percent of the screened interval (29 and 26 percent, respectively); however redevelopment was not recommended. Allowing excessive screen occlusion to persist effectively reduces the screened interval and calls into question the representativeness of samples collected from these wells. D&Z must redevelop all monitoring wells demonstrating well screen occlusion equal to or in excess of 10% of the well screen length prior to the next sampling event. Please describe all redevelopment activities in the 2015 Annual Groundwater Monitoring Report, due by March 1, 2016. No response to this comment is necessary.

2. Table 3-1
   a. Total well depths at several monitoring wells were not measured during the Spring 2014 sampling event. D&Z must collect total well depths from all monitoring wells at least once per year, as indicated in the KDHE approved Sampling and Analysis Plan (SAP). No response to this comment is necessary.
   b. Data provided in Table 3-1 indicates several monitoring wells exhibited total well depths in excess of 1 to 2 feet below the bottom of the screen. Unless these monitoring wells are equipped with sumps, these discrepancies are likely attributed to an error in measurement and/or calculation. Please revise Section 3.1 of the report to include an explanation for this apparent discrepancy and propose any corrective actions, as necessary, to prevent this issue from occurring during future sampling events. Please submit replacement pages for KDHE's copy of the report no later than July 17, 2015.

3. Section 6.0 – D&Z has recommended reducing or eliminating VOCs from the Long-Term Monitoring (LTM) program sampling at SMWU 9, reducing or eliminating metals from LTM program sampling at SWMU 10, and reducing or eliminating VOCs and metals from LTM program sampling at SWMU 10.

KDHE is in the process of issuing a permit which will set forth groundwater monitoring requirements for the D&Z facility; therefore, KDHE is not addressing the request for reduction in the current groundwater monitoring program at this time. Once the permit is issued, KDHE may consider changes to the groundwater monitoring system(s), if appropriate. No response to this comment is necessary.

If you have any questions regarding this letter, please do not hesitate to call me at (785) 291-3132.

Sincerely,

Ryan Pfeiffer
Environmental Scientist
Corrective Action & Geology Unit
Hazardous Waste Permitting Section

cc: David Homer – Tetra Tech
Jeremy Johnson – Mo/IA Remediation & Permitting Sect - EPA Region VII - RCRA Branch
Ken Herstowski – EPA Region VII - RCRA Branch
Victoria O'Brein – DEA/SEDO/Waste Programs
Bill Bider – BWM
Mostafa Kamal – BWM (electronic)
Richard Flanary – BWM (electronic)

Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson St., Suite 320
Topeka, KS 66612-1366

Kansas

Phone: 785-296-1600
Fax: 785-296-1592 or 785-296-8909
bwmweb@kdheks.gov
www.kdheks.gov/waste

Susan Mosier, MD, Secretary | Department of Health & Environment | Sam Brownback, Governor

June 4, 2015

Mr. Jerry L. Galloway
Director, Maintenance, Environmental & Pilot Projects
Munitions & Government
Day & Zimmermann
Highway 82 West
Texarkana, TX 75505

RE: Final Soil, Surface Water, and Sediment Sampling Work Plan
Outside Of Open Detonation Grounds Within The 2700 Area
Day & Zimmermann, Kansas LLC, Parsons Kansas
EPA ID # KSR000511964

Dear Mr. Galloway,

The Kansas Department of Health and Environment (KDHE) has reviewed the above referenced Work Plan for soil, surface water and sediment sampling outside of the Open Detonation Grounds within the 2700 Area, dated May 21, 2015, prepared by Tetra Tech, Inc. KDHE approves the referenced plan. Please provide EPA with a hard copy of the final version of they received by email. Please notify Charles Bowers when the soil, surface water, and sediment sampling work is scheduled as he will be providing oversight for the field activities

Should there be any further questions, please feel free to contact me at (785) 296 -6562. Your cooperation with KDHE is appreciated.

Sincerely,

Richard L. Flanary

Richard L. Flanary, PE, M.S.
Hazardous Waste Permits Section
Bureau of Waste Management

cc:

Ken Herstowski - EPA Region VII - RCRA Branch
Victoria O'Brein - DEA/SEDO/Waste Programs
Charles Bowers - Southeast District Office
David Homer - Tetra Tech
Bill Bider - BWM

TETRA TECH

May 21, 2015

Mr. Mostafa Kamal, Chief
Hazardous Waste Program
Bureau of Waste Management
Kansas Department of Health and Environment
Suite 320
1000 SW Jackson Street
Topeka, Kansas

Subject: **Final Soil, Surface Water, and Sediment Sampling Work Plan**
Open Detonation Unit, 2700 Area
Day & Zimmermann Kansas LLC, Parsons, Kansas

Dear Mr. Kamal,

Tetra Tech, Inc. (Tetra Tech) on behalf of Day & Zimmermann Kansas LLC (D&Z) is submitting a final work plan outlining proposed sampling intended to assess contaminant concentrations in the 2700 Area outside of the open detonation (OD) grounds fence line at the D&Z facility at Parsons, Kansas. The work plan has been revised to address comments received from the Kansas Department of Health and Environment (KDHE) on April 22, 2015.

If you have any questions, or need further clarification on the final work plan, please do not hesitate to contact me at (816) 412-1762.

Sincerely,

David H Homer

David H. Homer, Ph.D.
Program Manager

cc: Richard Flanary, KDHE
Dean Cramer, D&Z
Jerry Galloway, D&Z
Lisa Miller, D&Z
Steve Kosman, D&Z

Tetra Tech Inc.
415 Oak Street, Kansas City, MO 64106
Tel 816.412.1741 **Fax** 816.410.1748
www.tetratech.com

Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson, Suite 320

Kansas

Phone: 785-296-1600
Fax: 785-296-1592
bwmweb@kdheks.gov

Susan Mosier, MD, Interim Secretary | Department of Health & Environment | Sam Brownback, Governor

January 30, 2015

Mr. Jerry L. Galloway
Director, Maintenance, Environmental & Pilot Projects
Munitions & Government
Day & Zimmermann
Highway 82 West
Texarkana, TX 75505

RE: Conditional Approval
Soil Sampling Report, 1000 and 1100 Areas, Limited and Significant Explosive Buildings
and Draft Soil Remediation Work Plan, 1000 and 1100 Areas, Limited and Significant Buildings
Day & Zimmermann, Kansas LLC, Parsons Kansas
EPA ID # KSR000511964

Dear Mr. Galloway,

The Kansas Department of Health and Environment (KDHE) and EPA Region 7 have reviewed the above referenced Soil Sampling Report and Draft Soil Remediation Work Plan for the 1000 and 1100 Areas, both dated December 22, 2014 prepared by Tetra Tech, Inc.

KDHE and EPA Region 7 conditionally approve both of the above referenced plans provided Section 1.0 (Introduction) 2nd paragraph and 6.0 (Summary and Conclusions) of the Soil Sampling Report are revised to remove the last sentence of each paragraph. While these areas will meet KDHE's Risk-based Screening Levels for Kansas (RSK) for non-residential exposures they will need to be further remediated to RSKs for residential exposures for attaining "No Further Action" unless land use restrictions or other institutional controls are in place. Please include a Table of Kansas RSK's for non-residential exposures included in Table 1 of the Soil Sampling Report in the revised Soil Remediation Work Plan.

Please provide EPA with hard copies of the draft and final versions of these submittals as they did not receive the draft copies. Also, please notify Charles Bowers regarding the future soil remediation since he will be providing oversight of these remedial activities.

Please feel free to contact me at (785) 296 -6562 should there be any further questions. Your cooperation with KDHE is appreciated.

Sincerely,

Richard L. Flanary

Richard L. Flanary, PE, M.S.
Hazardous Waste Permits Section
Bureau of Waste Management

cc:

Don Lininger - Waste Remediation & Permitting (WRAP) Branch - EPA Region VII
Ken Herstowski - EPA Region VII - RCRA Branch
Victoria O'Brein - DEA/SEDO/Waste Programs
Charles Bowers - Southeast District Office
David –Homer - Tetra Tech
Bill Bider

TETRA TECH

December 23, 2014

Mr. Mostafa Kamal, Chief
Hazardous Waste Program
Bureau of Waste Management
Kansas Department of Health and Environment
Suite 320
1000 SW Jackson Street
Topeka, Kansas

Subject: **Soil Sampling Report, 1000 and 1100 Areas, Limited and Significant Explosive Buildings and Draft Soil Remediation Work Plan, 1000 and 1100 Areas, Limited and Significant Buildings, Day & Zimmermann, Kansas LLC, Parsons, Kansas**

Dear Mr. Kamal,

Tetra Tech, Inc. (Tetra Tech) on behalf of Day & Zimmermann, Kansas LLC (D&Z) is submitting the report on the results of the soil sampling that took place consistent with the approved work plan. The purpose of the soil sampling effort was to identify if releases had occurred outside the doors the buildings that managed explosives in the 1000 and 1100 Areas of the facility. This sampling activity was overseen by Mr. Charlie Bowers of Kansas Department of Health and Environment (KDHE).

The results identified a limited number of areas where soil concentrations exceed KDHE's Risk-based Screening Levels for Kansas (RSK) for non-residential exposures. D&Z recognizes that these areas need to be addressed, and requested that Tetra Tech prepare a work plan that describes how these soils will be remediated. This plan in included as an attachment to this report.

If you have any questions, or need further clarification on the report or work plan, please do not hesitate to contact me. We look forward to completing this remediation in a timely manner.

Sincerely,

David H Homer

David H. Homer, Ph.D.
Program Manager

cc: Richard Flanary, KDHE
Jerry Galloway, D&Z
Steve Kosman, D&Z
Adam Watkins, Tetra Tech

Tetra Tech Inc.
415 Oak Street, Kansas City, MO 64106
Tel 816.412.1741 **Fax** 816.410.1748
www.tetratech.com

SOIL SAMPLING REPORT
1000 AND 1100 AREAS, LIMITED AND SIGNIFICANT BUILDINGS

DAY & ZIMMERMANN KANSAS LLC
PARSONS, KANSAS

December 22, 2014

Prepared for
DAY & ZIMMERMANN KANSAS LLC

Day&Zimmermann
We do what we say.

Prepared by:

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106

Jamie Packard

From:	Mostafa Kamal
Sent:	Friday, October 17, 2014 8:54 AM
To:	Galloway, Jerry (Jerry.Galloway@dayzim.com); Kosman, Steve (Steve.Kosman@dayzim.com)
Cc:	Richard Flanary; 'Homer, David'; Jason Koontz; Brian Busby
Subject:	Financial Assurance for D&Z Kansas, LLC
Attachments:	DZ cost estimate Evaluation 10-17-14.pdf

Thank you for meeting with us on October 14th to provide KDHE with an update of your plans regarding the operations at the Parsons, Kansas facility. As indicated during our meeting, I am forwarding a summary copy the financial assurance calculations provided by Tetra Tech on behalf of D&Z. These numbers supersede our earlier estimate provided in KDHE's letter dated September 29, 2014. **Therefore, D&Z Kansas, LLC must secure adequate financial assurance instrument to cover the $11,602,965 present cost estimate. The approved instrument must be in place no later than January 1, 2015.**

Certain level of uncertainty continues to remain in the financial assurance cost estimate. We will make the necessary corrections/changes as we move closer toward finalizing the Part B permit application. If you have any questions, please feel free to contact me.

Mostafa Kamal, PE, CPM
Chief, Hazardous Waste Permits Section
Ph: 785-296-1609
Fax: 785-296-1592
Email: mkamal@kdheks.gov

Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson, Suite 320
Topeka, KS 66612-1366

Kansas
Department of Health & Environment

phone: 785-296-1600
fax: 785-296-1592
email: bwmweb@kdheks.gov
www.kdheks.gov/waste

Robert Moser, MD, Secretary.

Sam Brownback, Governor

October, 6 2014

Mr. Jerry L. Galloway
Director, Maintenance, Environmental & Pilot Projects
Munitions & Government
Day & Zimmermann
Highway 82 West
Texarkana, TX 75505

RE: Part B Hazardous Waste Facility Permit Application Review
Day & Zimmermann Kansas LLC
23102 Rush Road
Parsons, KS 67357
EPA ID # KSR000511964

Dear Mr. Galloway,

The Kansas Department of Health and Environment (KDHE) has completed its review of your Hazardous Waste Facility Part B Renewal Application dated October 17, 2013 and have the following comments.

1. The Part A application (please use the KDHE application form on the Bureau of Waste Management Website) in
   Section A must be updated and signed by the facility's owner/operator authorized agent.

2. In Section B, Facility Description:

   a. The facility is currently closing Magazine 1813 and Igloos 1914, 1915, 1916, 1917, 1958, 1961, 1974, and 1976. If clean closure is received prior to the new permit issuance, they should be included in Section J as Solid Waste Management Units that have been clean closed.

   b. It must be stated the facility will accept only off-site munitions for demilitarization (DEMIL) and that some solid reactive wastes resulting from this process will be thermally treated in the open detonation unit. Clarification of the types of off-site facilities that may manifest solid reactive hazardous wastes to the facility must be provided, if waste munitions for demil are to be manifested as hazardous wastes when sent to the facility. Currently only hazardous waste code D003 for off- site waste is requested in the Part B application. Other hazardous waste codes for off-site waste in combination with D003 may need to be added to avoid a major permit modification in the future. Permitting a building(s) for demil of reactive hazardous waste seems advisable.

c. The legal description of the property as detailed in Enclosure 1 and Enclosure 2 must be included.

d. Figures B-3, B-4 and B-5 must only include the new igloos to be permitted as Magazine 1813 and Igloos 1914, 1915, 1916, 1917, 1958, 1961, 1974, and 1976 are in the process of being clean closed.

e. Figure 10 must be updated for the latest meteorological years available.

f. Figure 11 must be updated and digitized to include the permanent monitoring well for Burn Pad 6 and possibly the ones installed during corrective measures undertaken during closure of the Pad as detailed in Enclosure 3. Enclosure 4 is a scanned version of a digitized Site-Wide Monitoring Well Location Map so hopefully the original version can be found to allow a larger scale map of monitoring wells at the facility to be produced.

g. Table B-2 needs revisions/clarifications. In the second line of the Table's "Type of Charge" it appears 59,900 M55 detonators with 0.000181 pounds each of explosives (as given in Standard Operating Procedure G in Appendix D- 3) would weigh 10.85 pounds which when added to 43 pounds of Comp A-5 exceeds the 50 pound explosive charge limit assuming this remains the permitted value after the updated risk assessment is completed as detailed in comment 5. Likewise for line 5 of the Table as 210 pounds of Cyclotol wet sumpage (*not explained in the table foot notes) and 8 pounds of Comp A would exceed the 50 pound limit. Likewise for line7 of the Table as 320 grenades with 0.063040 pounds each of explosives (as given in Standard Operating Procedure G in Appendix D- 3) would weigh 20.18 pounds with 35 pounds of M-10 propellant and 8 pounds of Comp A would exceed the 50 pound limit. Likewise for line 8 of the Table as 380 grenades with 0.063040 pounds each of explosives (as given in Standard Operating Procedure G in Appendix D- 3) would weigh 23.96 pounds with 40 pounds of Cyclotol wet sumpage and 8 pounds of Comp A would exceed the 50 pound limit.

Also in Table B-2 some of the components combined for the various blows (i.e. lead cups, cord cutter, support collars ect.) appear to not have any documentation of the amount of explosives they contain as they are not mentioned in Table C-3B located in Section C or Standard Operating Procedure G located in Section D, Appendix D-3 of the Part B Renewal Application.

Lead Azide is misspelled in Table B-2.

Based on the current Risk Assessment located in Section D, Appendix D-3, the maximum yearly amount of wastes to be thermally treated by Scenario 1and 2 is 102,600 pounds each and for Scenario 3 is 14,000 pounds at 1,000 pounds (50 pounds X 20 blows) per day the maximum number of days of operation would be 119.2. The maximum number of blows per year is 2,384 (20 X 119.2) if the revised risk assessment does not change the current values.

3. In Section D, remove all references to Magazine 1813 and Igloos 1914, 1915, 1916, 1917, 1958, 1961, 1974, and 1976 as they will no longer be permitted.

4. In Section D, Appendix D-3 Standard Operating Procedures - Open Detonation:

   a. Add to page 6 of the Operation Index in Operation A "Operation 24, "Prep for the Destr of 60mm HE Bomb Bodies"

b. Include AFMC Form 3514, *Noise Complaint* in Operation E to document any noise complaints received in the operating record.

c. Replace or eliminate Igloos 1974 and A018 in Operation 1 as these units are no longer associated with hazardous waste storage activities.

d. Operation numbers 3, 6, 8, 10, 11, 20 and 22 have total explosive weights in excess of fifty pounds which are above the fifty pound maximum limit set by the original Human Health and Ecological Risk Assessment included in Attachment D-3. Of particular concern is Operation 6 with the M280 Warhead net explosive weight listed as 81 pounds.

e. In reference to Comment 2g, a form must be developed to document that each of the daily maximum of 20 charges do not exceed the 50 pounds of Net Explosive Weight (NEW). These daily operation forms must be maintained in the operating record.

f. In reference to Comment 2b, a section should be added detailing design details and operating procedures for process buildings used for demil.

5. Enclosure 5 is EPA's Contractor review comments on the original Human Health and Ecological Risk Assessment (HHERA) performed in 2003-2004 for the OB/OD Area. The document must be updated to reflect current guidance documents and other more current site information. This information is needed before the energetic section of the draft permit can be finalized which will include references to the procedures in the Part B application which may need to be revised based on the results from the revised HHERA including a new scenario for thermally treating Insensitive Munitions Explosive (IMX) that will replace all the current ones eventually.

6. Enclosure 6 is KDHE's review comments for Section E –Groundwater Monitoring that must be addressed. To assist in answering Comment 7 for Subpart J, Enclosure 7 contains the draft permit attachment for all the SWMU's and AOC's located at the facility for your use.

7. Table 1-2 in the Site-Wide Groundwater Corrective Measures Decision Implementation Sampling and Analysis Plan Part 1-Field Sampling Plan must be updated referencing the most recent groundwater cleanup goals based on the Risk-Based Standards for Kansas (residential scenario), KDHE, October 2010 edition.

8. In Section F, a separate inspection form for the open detonation area (including the 2700 area Igloos) and process building(s) must be developed.

9. In Section G the maps must be updated with the new permitted igloo locations rather than the ones being closed (see comment 2d above). In Section I, remove all references to the closure of Magazine 1813 and Igloos 1914, 1915, 1916, 1917, 1958, 1961, 1974, and 1976 and include them in Section J as Solid Waste Management Units since they are in the process of being clean closed. Only include the closure costs for the new storage locations that are identical to those to be permitted.

10. The closure plans and cost estimates must be updated to include the process building(s) in Section I

11. In Section J include a discussion of all the SWMU's and AOC's and provide a map with their locations on the property in accordance with Comment 6's Enclosure 7. The location map will become a permit attachment.

12. In Section L the Part B certification statement must be signed by the facility's owner/operator authorized agent.

Please respond to these comments within sixty (60) days of receipt of this letter. Please feel free to contact me at (785) 296 -6562 should there be any further questions. Your cooperation with KDHE is appreciated.

Sincerely,

Richard L. Flanary

Richard L. Flanary, PE, M.S.
Hazardous Waste Permits Section
Bureau of Waste Management

Enclosures:
1. Legal Descriptions
2. Parcel Map
3. Burn Pad 5&6 Monitoring Well locations
4. Site-Wide Monitoring Well Locations
5. EPA Open Detonation Area Risk Assessment Review Comments
6. KDHE Groundwater Monitoring Review Comments
7. SWMU's and AOC's Description
8. SWMUs and AOC's Location

cc:

Don Lininger – Waste Remediation & Permitting (WRAP) Branch - EPA Region VII
Ken Herstowski - WRAP Branch - EPA Region VII
Victoria O'Brein -DEA/SEDO/Waste Programs
Charles Bowers - Southeast District Office
David Homer - Tetra Tech
Bill Bider

Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson, Suite 320
Topeka, KS 66612-1366

Robert Moser, MD, Secretary

Kansas
Department of Health & Environment

phone: 785-296-1600
fax: 785-296-1592
email: bwmweb@kdheks.gov
www.kdheks.gov/waste

Sam Brownback, Governor

September 29, 2014

Mr. Jerry L. Galloway
Director, Maintenance, Environmental & Pilot Projects
Munitions & Government
Day & Zimmermann
Highway 82 West
Texarkana, TX 75505

RE: Closure Cost Estimate - Financial Assurance
Day & Zimmermann Kansas LLC - Parsons
EPA ID # KSR000511964

Dear Mr. Galloway,

The Kansas Department of Health and Environment (KDHE) has completed its review of the closure cost estimates submitted for your Hazardous Waste Facility Application dated October 17, 2013 as detailed below:

Container Storage Areas	1800 Area $729,419.14, 1900 Area $954,311.17 and 2700 Area $69,795.17	$1,753,526
Open Detonation Area	Inside Fence $3,305,387, Outside Fence $2,757,190, Groundwater Monitoring $520,001.46	$7,642,520
1000 and 1100 Area AST's	Removal of aboveground storage tanks	$ 110,248
1000 Area	$211,270 Sumps and Troughs, $122,279.12 Groundwater monitoring	$ 333,550
1100 Area	$236,596 Sumps and Troughs, $1,188,895.62 Groundwater monitoring	$1,425,492
Total Financial Assurance	Entire Facility	$11,264,336

The cost estimates are approved. Please submit your financial assurance documents within sixty (60) days of receipt of this letter. Please feel free to contact me at (785) 296 -6562 should there be any further questions. Your cooperation with KDHE is appreciated.

Sincerely,

Richard L. Flanary

Richard L. Flanary, PE, M.S.
Hazardous Waste Permits Section
Bureau of Waste Management

cc: Don Lininger – Waste Remediation & Permitting (WRAP) Branch - EPA Region VII
Ken Herstowski - WRAP Branch - EPA Region VII
Victoria O'Brein -DEA/SEDO/Waste Programs
Charles Bowers - Southeast District Office
Brian Busby
David Homer - Tetra Tech
Bill Bider

TETRA TECH

September 23, 2014

Mr. Don Lininger, Branch Chief
Waste Remediation & Permitting Branch (WRAP)
Air and Waste Management Division (AWMD)
U.S. Environmental Protection Agency
11201 Renner Boulevard
Lenexa, Kansas 6621903

Subject: Spring 2014 Semi-annual Groundwater Monitoring Report, Rev. 00
Long Term Groundwater Monitoring
Day &Zimmermann, LLC, Parsons, Kansas

Dear Mr. Lininger:

On behalf of Day & Zimmermann Kansas LLC (D&Z), Tetra Tech, Inc. (Tetra Tech) is pleased to submit revision 00 of the 2014 Semi-annual Groundwater Monitoring Report for the long term groundwater monitoring program. This report incorporates groundwater data collected by D&Z in spring 2014 at Solid Waste Management Units 9, 10, and 17.

If you should have any questions regarding this report, please feel free to contact me at (816) 412-1762.

Sincerely,

David H Homer

David Homer
Project Manager

cc: Kenneth Herstowski, EPA
Mostafa Kamal, KDHE
Richard Flanary, KDHE
Jerry Galloway, D&Z
Dean Cramer, D&Z
Jesse Kidwell, Tetra Tech

Tetra Tech, Inc.
415 Oak Street, Kansas City, MO 64106
Tel 816.412.1741 Fax 816.410.1748 www.tetratech.com

DAY & ZIMMERMAN KANSAS, LLC
(KSR000511964)
(formerly DAY & ZIMMERMAN KANSAS DIVISION)
A Waste Compliance Inspection Report

Inspection Info and Participants	Answer	Violation
Inspection Type HW-CEI		
Inspection Reason Routine		
Complaint Code (enter the BEFS complaint number if applicable)		
Inspection Starting Date 06/11/2014		
Inspection Starting Time 9:00 AM		
Dates of Inspection for multi-day inspections (i.e. April 1 to 3, 2013 or 4/1-3/2013)		
Has the company declared any information/process as trade secrets KSA 65-3447? (If yes, explain below under comments.)	No	
Inspector(s) Wes Page		
Inspector Completing Report Wes Page		
Inspection Participants (No need to list inspector completing report as they are listed above)		

Name / Title / Organization	Intro Meeting	Walk Through	Records Review	Exit Briefing
Dean Cramer/Project Engineer/DZI Kansas, LLC	X	X	X	X

Site Activities	Answer	Violation
Operating Hours / Days 6:30 am - 5:00 pm Monday -Thursday		
District office where facility is located SE		
Employee Count 125		

CAPE℠

9 May 2014

Richard Flanery
Kansas Department of Health and Environment
Hazardous Waste Permits Section
1000 SW Jackson Street, Suite 320
Topeka, Kansas 66612

Contract: **Burn Pad 5, 6 and Trenches Closure Work**
Kansas Army Ammunition Plant, Kansas
Contract No.: W912DQ-09-D-3016
Delivery Order No.: 0004

RE: **Final Burn Pad 5 Closure Report**

Dear Mr. Flanery:

Enclosed are two hard copies and two electronic copies of the *Final Burn Pad 5 Closure Report,* supporting the Burn Pad 5, 6 and Trenches Closure Work, for your files.

This document incorporates review comments from both U. S. Army Corp of Engineers, Kansas City District and the Kansas Department of Health and Environment (KDHE).

Please contact me at dahlborn@cape-inc.com or Kathy Baker (U.S. Army Corps of Engineers – Kansas City District) at Kathy.T.Baker@usace.army.mil if you have any questions.

Sincerely,
CAPE

W. David Ahlborn
Project Manager

cc: Kathy Baker, USACE (three copies)
Ken Herstowski, EPA (three copies)
Charley Bowers, KDHE-BWM (one copy)
Rose Zeiler, Army-BRAC (one copy)
Ann Charles, GPDA (one copy)
Steve Kosman, DZI (one copy)

Enclosure

1565 Scenic Avenue Suite A▲ Costa Mesa, California 92626
(714) 599-9071 ▲ Fax (714) 599-9087

Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson, Suite 320
Topeka, KS 66612-1366

Kansas
Department of Health & Environment

phone: 785-296-1600
fax: 785-296-1592
email: bwmweb@kdheks.gov
www.kdheks.gov/waste

Robert Moser, MD, Secretary

Sam Brownback, Governor

May 5, 2014

Kathy Baker, PMP
Project Manager,
U.S. Army Corps of Engineers KCD PM-ED
601 East 12th Street
Kansas City, Missouri 64106

Re: Burn Pad 5 Draft Closure Report Response to Comments Approval
Great Plains Redevelopment Authority (formerly KsAAP)
EPA ID No. KS0213820467

Dear Ms Baker,

We received the Army's March 25, 2014 email with attachments responding to our comments provided in the letter dated January 23, 2014 on the draft Burn Pad 5 Closure Report. The Army's reply appears acceptable and the Bureau of Waste management (BWM) requests one hard copy and one electronic copy of the final report be sent to BWM, EPA Region 7, BER (Bureau of Environmental Remediation) and the Great Plains Redevelopment Authority (GPDA).

Charles Bowers from BWM stopped by Burn Pad 5 to check the grass on April 25, 2014. The grass has sprouted and is several inches tall. The area between the rows where it was drilled still needs to be covered, but with a good wet and warm spring, the grass should be well established by this summer. When the remaining groundwater quarterly sampling events are completed and the written report is received and appended to the final closure report, a decision on the need for future sampling of the new monitoring wells will be determined.

Should you have any questions, please feel free to contact me at (785) 296 - 6562. Your continued cooperation with KDHE is appreciated.

Sincerely,

Richard L. Flanary

Richard L. Flanary, PE
Professional Environmental Engineer
Hazardous Waste Permits Section

cc: Ken Herstowski - USEPA Region 7/AWMD/RCAP
Rose Zeiler - US Army
Webster W.L. "Hank" Procter - US Army
Ann Charles - GPDA
Larry Hastings - GPDA
W. David Ahlborn - CAPE
Charles Bowers –KDHE/SEDO/Waste Programs
Kelly Peterson - BER
William Bider - BWM

Richard Flanary

From: Richard Flanary
Sent: Tuesday, September 30, 2014 1:47 PM
To: Jamie Packard
Subject: KSR000511964 Day & Zimmermann Kansas LLC DOC TYPE Groundwater Monitoring SUBJECT Site Wide GW Monitoring Report 2013
Attachments: 2013_Annual_Rev00.pdf

From: Homer, David [mailto:David.Homer@tetratech.com]
Sent: Monday, April 07, 2014 7:41 PM
To: 'Herstowski, Ken' (Herstowski.Ken@epa.gov); Richard Flanary; Johnson.jeremy@Epa.gov; Mostafa Kamal
Cc: Kosman, Steve (Steve.Kosman@dayzim.com); Galloway, Jerry (Jerry.Galloway@dayzim.com); Kidwell, Jessica
Subject: D&Z 2013 Annual Groundwater Monitoring Report

Gentlemen,

Please find attached the above referenced report. Please let me know if you have any questions.

David

David Homer, PhD | Senior Environmental Scientist
Direct: 816.412.1762| Main: 816.412.1741| Cell: 913.645.0453 | Personal Fax: 816.410.1748
david.homer@tetratech.com

Tetra Tech | Kansas City Operations
415 Oak Street | Kansas City, MO 64106| www.tetratech.com
Complex World, Clear Solutions™

2013 ANNUAL
GROUNDWATER MONITORING REPORT

LONG TERM GROUNDWATER MONITORING
DAY & ZIMMERMANN KANSAS LLC
PARSONS, KANSAS

Revision 00

April 2014

Prepared for
DAY & ZIMMERMANN KANSAS LLC

Day&Zimmermann

We do what we say.®

Prepared by:

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106

Richard Flanary

From: Baker, Kathy T NWK <Kathy.T.Baker@usace.army.mil>
Sent: Tuesday, March 25, 2014 9:36 AM
To: Richard Flanary; 'Herstowski.Ken@epamail.epa.gov'; Zeiler, Rose Ms CIV USA OSA; David Ahlborn; Baker, Kathy T NWK; Young, Travis S NWK; Bales, Francis E NWK; Charles Bowers
Subject: KSAAP RTCs to Burn Pad 5 Closure Report (UNCLASSIFIED)
Attachments: BP 5 Closure Report Comments-KDHE, 23 JAN 2014.pdf; July 13, 2011 Burnpad 5 sampling; KSAAP MEC Samples Collected July 2011.pdf; New Burn Pad 5 sampling figure.pdf; Revised Draft BP5 Closure Report KSAPP March 2014 - Final.pdf

Classification: UNCLASSIFIED
Caveats: NONE

All,

Attached are the RTCs to comments from KDHE-BWM on the Burn Pad 5 Closure Report. Also, attached is the marked up report so you can see how the changes will be made. Other attachments will help with your review of the RTCs. Please send your approval of these responses at your earliest convenience.

Thank you,

Kathy Baker, PMP
PM-ED
601 E 12 th St., Suite 463
Kansas City, MO 64106
office: 816-389-3906
cell: 816-392-1071

Classification: UNCLASSIFIED
Caveats: NONE

Curtis State Office Building
1000 SW Jackson St., Suite 540
Topeka, KS 66612-1367

Kansas

Phone: 785-296-0461
Fax: 785-368-6388
www.kdheks.gov

Robert Moser, MD, Secretary — Department of Health & Environment — Sam Brownback, Governor

February 20, 2014

Mr. Steve Kosman
Senior Manager, Engineering
Day & Zimmermann Kansas LLC
23102 Rush Road
Parsons, KS 67357

RE: Approval - 1000 & 1100 Area
Sump/Trough Removal and Building Decontamination Work Plans
Kansas Army Ammunition Plant, Parsons Kansas
EPA ID # KSR000511964

Dear Mr. Kosman,

The Kansas Department of Health and Environment (KDHE) have reviewed the Revision 1 Sump/Trough Removal and Building Decontamination Work Plan, 1000 Area and the Revision 1 Sump/Trough Removal and Building Decontamination Work Plan, 1100 Area, both dated February 2014 prepared by Tetra Tech, Inc.

KDHE approves both the above referenced plans. Please notify Charles Bowers when the work is scheduled as he will be providing oversight of these remedial activities.

Please feel free to contact me at (785) 296 -6562 should there be any further questions. Your cooperation with KDHE is appreciated.

Sincerely,

Richard L. Flanary

Richard L. Flanary, PE, M.S.
Hazardous Waste Permits Section
Bureau of Waste Management

cc:

Jeremy Johnson – Mo/IA Remediation & Permitting Sect - EPA Region VII - RCRA Branch
Ken Herstowski - EPA Region VII - RCRA Branch
April Dixon - Acting -DEA/SEDO/Waste Programs
Charles Bowers - Southeast District Office
David –Homer - Tetra Tech
Bill Bider

TETRA TECH

February 13, 2014

Mr. Jeremy Johnson, Chief
Missouri/Iowa Remediation and Permitting Section
Air and Hazardous Waste Division.
U.S Environmental Protection Agency
11201 Renner Boulevard
Lenexa, Kansas 6621903

Subject: Sump/Trough Removal and Building Decontamination Work Plan, 1000 Area at the Day &Zimmermann, Inc., Parsons, Kansas

Dear Mr. Johnson:

On behalf of Day & Zimmermann Kansas LLC (D&Z) Tetra Tech, Inc. (Tetra Tech) is pleased to submit the revised draft Sump/Trough Removal and Building Decontamination Work Plan for the 1000 Area at the D&Z facility in Parsons, Kansas.

These revisions are based on conversations with Richard Flanary at Kansas Department of Health and Environment and resulted in the inclusion of a new appendix that provides figures that show the areas of soil removal and the groundwater potentiometric surface maps and the chemicals of concern.

If you should have any questions regarding this work plan, please feel free to contact me at (816) 412-1762.

Sincerely,

David H Homer

David Homer,
Project Manager

cc: Kenneth Herstowski, EPA
Mostafa Kamal, KDHE
Richard Flanary, KDHE
Steve Kosman D&Z
Dean Cramer, D&Z
Keith Brown, Tetra Tech

Tetra Tech, Inc.
415 Oak Street, Kansas City, MO 64106
Tel 816.412.1741 Fax 816.410.1748 www.tetratech.com

Draft

SUMP/TROUGH REMOVAL AND BUILDING DECONTAMINATION WORK PLAN FOR 1100 AREA DAY & ZIMMERMANN KANSAS LLC PARSONS, KANSAS

REVISION 01

Prepared by

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106

February 2014

TETRA TECH

February 13, 2014

Mr. Jeremy Johnson, Chief
Missouri/Iowa Remediation and Permitting Section
Air and Hazardous Waste Division.
U.S Environmental Protection Agency
11201 Renner Boulevard
Lenexa, Kansas 6621903

Subject: Revised Sump/Trough Removal and Building Decontamination Work Plan, 1000 Area at the Day &Zimmermann, Inc., Parsons, Kansas

Dear Mr. Johnson:

On behalf of Day & Zimmermann Kansas LLC (D&Z) Tetra Tech, Inc. (Tetra Tech) is pleased to submit the a revised draft Sump/Trough Removal and Building Decontamination Work Plan for the Day & Zimmermann, Inc. (D&Z) 1000 Area at the former Kansas Army Ammunition Plant (KSAAP)D&Z facility in Parsons, Kansas.

These revisions are based on conversations with Richard Flanary at Kansas Department of Health and Environment and resulted in the inclusion of a new appendix that provides figures that show the areas of soil removal and the groundwater potentiometric surface maps and the chemicals of concern.

If you should have any questions regarding this work plan, please feel free to contact me at (816) 412-1762.

Sincerely,

David H Homer

David Homer,
Project Manager

cc: Kenneth Herstowski, EPA
Mostafa Kamal, KDHE
Richard Flanary, KDHE
Steve Kosman D&Z
Dean Cramer, D&Z
Keith Brown, Tetra Tech

Tetra Tech, Inc.
415 Oak Street, Kansas City, MO 64106
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Draft

SUMP/TROUGH REMOVAL AND BUILDING DECONTAMINATION WORK PLAN FOR 1000 AREA DAY & ZIMMERMANN KANSAS LLC PARSONS, KANSAS

Revision 01

Prepared by

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106

February 2014

Bureau of Waste Management
1000 SW Jackson St., STE 320
Topeka, KS 66612-1366

Kansas

Phone: 785-296-6562
Fax: 785-296-1592
rflanary@kdheks.gov
www.kdheks.gov

Robert Moser, MD, Secretary | Department of Health & Environment | Sam Brownback, Governor

January 23, 2014

Kathy Baker, PMP
Project Manager,
U.S. Army Corps of Engineers KCD PM-ED
601 East 12th Street
Kansas City, Missouri 64106

Re: Burn Pad 5 Closure Report Comments
Great Plains Redevelopment Authority (formerly KsAAP)
Facility EPA ID No. KS0213820467

Dear Ms Baker,

We received an October 24, 2013 email from Mr. David Ahlborn, Project Manager of CAPE Environmental Management, Inc. with an attached letter dated October 23, 2010, transmitting the draft Burn Pad 5 Closure Report for review. Based on our review we have the following comments:

1. PE Certification Letter for Closure Report - A signed original must be submitted with the final revised report.
2. Page 1-1 (Section 1) Line 13 - Replace "permitted unit" with "interim status unit".
3. Page 2-2, (Section 2.1) - Remove paragraph lines 18-27.
4. Page 2-2 (Section 2.2) Line 29 - Add a sentence that Burn Pad 5 was allowed to operate as an "interim status unit" from 1985 until 2007 when burning reactive hazardous waste operations were prohibited by the Kansas Department of Health and Environment.
5. Page 3-1 (Section 3.1) Line 24 - It should be revised to read "was held by CAPE to discuss" not "was by CAPE held to discuss".
6. Page 4-2 (Section 4.2.4),Line 12- At the start of the second sentence replace "A figure" with " Figure 1, Burn Pad 5 Clearance Depth dated 11/02/2010 " to clarify the location of the areas of the burn pad ARA excavated to bedrock or to a 6 inch depth below ground surface (bgs) during Soil Screening for MPPEH/MEC.
7. Page 4-3 (Section 4.2.4) Line 9- At the end of the first sentence replace "Figure 5 " with "Figure 5 – MEC Quality Assurance Grid Map in Appendix A " to provide a reference to the grid locations of the of the burn pad during Soil Screening for MPPEH/MEC by ARA and CAPE.

8. Page 4-4 (Section 4.2.6) Line 2 - At the end of the sentence provide a schedule to complete Re-vegetation activities including notifying KDHE so an inspection of the re-vegetative cover can be made and approved.
9. Page 4-4 (Section 4.2.7) Line 7 - At the start of the second sentence replace "Figure 4 " with "Figure 4 – Confirmation Sampling and Monitoring Well Locations
10. Page 4-5 (Section 4.3.1) Line 11 and Attachment 2 in Appendix H - The locations of the four composite extended list soil samples collected by ARA should be presented on a new map in Appendix H or included on Figure 1, Burn Pad 5 Clearance Depth dated 11/02/2010 in Appendix G.
11. Page 4-5 (Section 4.3.1) Line 20 and missing Attachment 4 in Appendix H - On July 13th, 2011(email enclosed) samples were collected at Burn Pad 5 Grids 4, 9, 10, 11, 12, 13, 14, 16, 20, 23, 27, 28, 34, and 42 (Note that ARA's Grid 41 is Grid 42 as presented on closure report's correctly numbered Figure 3 BURN PAD 5 SAMPLING LOCATIONS). The samples were numbered R30SSS through R43SSS. Grids 23, 34, and 42 were subsequently re-sampled by CAPE and the results presented in the closure report. However, analytical results for grids 4, 9, 10, 11, 12, 13, 14, 16, 20, 27, and 28 are not included in the report in Appendix H. The grid numbering discrepancy between ARA and CAPE is documented in the enclosed BurnPad 5 Analytical sampling Event for 20 MAR 2013 email.
12. Page 4-7 & 9 (Table 1) - Note 1 incorrectly indicates the ARA analytical data is in Appendix J. It is in Appendix H's Attachment 3.
13. Page 4-11 (Table 2) - The 14 mg/kg RDX concentration for sample BP5-G53-0 was actually measured in sample BP5-G153-0 the duplicate for the sample presented. The sample BP5-G53-0 had a 2.9 mg/kg RDX concentration.
14. Page 4-11 (Section 4.3.2) Line 33 - Bromodichloromethane is misspelled (the second "o" is missing).
15. Page 4-11 (Section 4.3.2) Line 37 - After the first sentence add a sentence to indicate the three new monitoring wells will be included in the Great Plains Development Authority's (GDPA's) Site Wide Groundwater Monitoring Network to further evaluate if groundwater contamination is present from past operations or a result of laboratory contamination from the initial sampling event.
16. Page 4-12 (Section 4.3.4) Line 21- At the end of the first sentence include the July 13, 2011 ARA sampling event.
17. Page 6-1 (Section 6.1) Line 27 and Appendix C - The credentials for Health and Safety Manager, Mr. Glen Mayekawa (CIH) is not present in Appendix C.
18. Page 7-2 (Section 7.2) Line 25 - Add a sentence to indicate the three new monitoring wells will be included in the Great Plains Development Authority's (GDPA's) Site Wide Groundwater Monitoring Network to further evaluate if groundwater contamination is present from past operations or as a result of laboratory contamination from the initial sampling event.
19. Page 8-1 (Section 8.0) Lines 1-31 - Remove entire section.
20. Appendix H (Attachments' 2 and 3), The Quality Assurance Report and analytical laboratory reports for soil samples collected by ARA must be included.

Should you have any questions, please feel free to contact me at (785) 296 - 6562. Your continued cooperation with KDHE is appreciated.

Sincerely,

Richard L. Flanary

Richard L. Flanary, PE
Professional Environmental Engineer
Hazardous Waste Permits Section

Enclosures

Cc: Ken Herstowski –USEPA
Rose Zeiler – US Army
Webster W.L. "Hank" Procter – US Army
Ann Charles (GPDA)
Larry Hastings (GDPA)
W. David Ahlborn (CAPE)
Charles Bowers –SEDO/Waste Programs
Kelly Peterson - BER
William Bider - BWM

CAPE℠

25 November 2013

Richard Flanery
Kansas Department of Health and Environment
Hazardous Waste Permits Section
1000 SW Jackson Street, Suite 320
Topeka, Kansas 66612

Contract: **Burn Pad 5, 6 and Trenches Closure Work**
Kansas Army Ammunition Plant, Kansas
Contract No.: W912DQ-09-D-3016
Delivery Order No.: 0004

RE: **Draft Burn Pad 6 Corrective Measures Report**

Dear Mr. Flanery:

Enclosed are one hard copy and one electronic copy of the *Draft Burn Pad 6 Corrective Measures Report,* supporting the Burn Pad 5, 6 and Trenches Closure Work, for your review and comment.

Please provide your comments to Kathy Baker (U.S. Army Corps of Engineers – Kansas City District) at Kathy.T.Baker@usace.army.mil. Additionally, please reference the page number and line number when submitting your comments.

Please contact me if you have any questions.

Sincerely,
CAPE

W. David Ahlborn
Project Manager

cc: Kathy Baker, USACE (two copies)
Ken Herstowski, EPA (three copies)
Charley Bowers, KDHE-BWM (one copy)
Rose Zeiler, Army-BRAC (one copy)
Ann Charles, GPDA (one copy)
Steve Kosman, DZI (one copy)

Enclosure

1565 Scenic Avenue Suite A▲ Costa Mesa, California 92626
(714) 599-9071 ▲ Fax (714) 599-9087

Curtis State Office Building
1000 SW Jackson St., Suite 540
Topeka, KS 66612-1367

Kansas
Department of Health & Environment

Phone: 785-296-0461
Fax: 785-368-6388
www.kdheks.gov

Robert Moser, MD, Secretary

Sam Brownback, Governor

November 20, 2013

Mr. Steve Kosman
Senior Manager, Engineering
Day & Zimmermann Kansas LLC
23102 Rush Road
Parsons, KS 67357

RE: Class 1 RCRA Permit Modification
Closure Plan Approval - Storage Facilities
Day and Zimmerman Kansas - Parsons Kansas
EPA ID # KSR000511964

Dear Mr. Kosman,

The Kansas Department of Health and Environment (KDHE) acknowledge the receipt of the facility's closure plan revision 01 dated October 2013, to begin closure of the following storage units: Magazine 1813 and Igloos 1914, 1915, 1916, 1917, 1918, 1961, 1974, and 1976. KDHE has reviewed this information and concurs the permit modification meets the definition for a Class 1a RCRA Permit modification in accordance with KAR 28-31-270 and 40 CFR 270.42, requiring the approval of the Secretary of KDHE. The modification is approved. To assure compliance with the facility's RCRA Permit Condition I.B.1., please complete the requirements specified in 40 CFR 270.42(a) for a Class 1a RCRA Permit modifications.

For any questions, please feel free to call me at (785) 296-6562. Your continued cooperation with KDHE is appreciated.

Sincerely,

Richard L Flanary

Richard L. Flanary, PE, M.S.
Hazardous Waste Permits Section
Bureau of Waste Management

cc: David Stutt - DEA/SEDO/Waste Programs
Ken Herstowski - EPA Region 7/AWMD/RCAP
Bill Bider - BWM

TETRA TECH

November 13, 2013

Mr. Jeremy Johnson, Chief
Missouri/Iowa Remediation and Permitting Section
Air and Hazardous Waste Division.
U.S Environmental Protection Agency
11201 Renner Boulevard
Lenexa, Kansas 6621903

Subject: Sump/Trough Removal and Building Decontamination Work Plan, 1000 Area at the Day &Zimmermann, Inc., Parsons, Kansas

Dear Mr. Johnson:

On behalf of Day & Zimmermann Kansas LLC (D&Z) Tetra Tech, Inc. (Tetra Tech) is pleased to submit the draft Sump/Trough Removal and Building Decontamination Work Plan for the 1000 Area at the D&Z facility in Parsons, Kansas.

The overall objectives of this work plan are to: (1) remove the inactive sumps within the 1000 Area, including any outdoor troughs associated with said sumps, and if warranted, remediate soil beneath the removed sumps and troughs if found to contain explosives and metals contamination above site-specific action levels for nonresidential land use; and (2) determine if soils outside of specific building doors and emergency exit slides contain metals and explosives contamination above site-specific action levels for nonresidential land use.

If you should have any questions regarding this work plan, please feel free to contact me at (816) 412-1762.

Sincerely,

David H Homer

David Homer,
Project Manager

cc: Kenneth Herstowski, EPA
Mostafa Kamal, KDHE
Richard Flanary, KDHE
Steve Kosman D&Z
Dean Cramer, D&Z
Keith Brown, Tetra Tech

Tetra Tech, Inc.
415 Oak Street, Kansas City, MO 64106
Tel 816.412.1741 Fax 816.410.1748 www.tetratech.com

Draft

SUMP/TROUGH REMOVAL AND BUILDING DECONTAMINATION WORK PLAN FOR 1100 AREA DAY & ZIMMERMANN KANSAS LLC PARSONS, KANSAS

Prepared by

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106

November 2013

TETRA TECH

November 13, 2013

Mr. Jeremy Johnson, Chief
Missouri/Iowa Remediation and Permitting Section
Air and Hazardous Waste Division.
U.S Environmental Protection Agency
11201 Renner Boulevard
Lenexa, Kansas 6621903

Subject: Sump/Trough Removal and Building Decontamination Work Plan, 1000 Area at the Day &Zimmermann, Inc., Parsons, Kansas

Dear Mr. Johnson:

On behalf of Day & Zimmermann Kansas LLC (D&Z) Tetra Tech, Inc. (Tetra Tech) is pleased to submit the draft Sump/Trough Removal and Building Decontamination Work Plan for the Day & Zimmermann, Inc. (D&Z) 1000 Area at the former Kansas Army Ammunition Plant (KSAAP)D&Z facility in Parsons, Kansas.

The overall objectives of this work plan are to: (1) remove the sumps in the 1100 Area, including any outdoor troughs associated with said sumps, and if warranted, remediate soil beneath the removed sumps and troughs if found to contain explosives and metals contamination above site-specific action levels for nonresidential land use; and (2) determine if the soils outside of specific building doors and emergency exit slides are contaminated with metals and explosive contamination above site-specific action levels for nonresidential land use.

If you should have any questions regarding this work plan, please feel free to contact me at (816) 412-1762.

Sincerely,

David H Homer

David Homer,
Project Manager

cc: Kenneth Herstowski, EPA
Mostafa Kamal, KDHE
Richard Flanary, KDHE
Steve Kosman D&Z
Dean Cramer, D&Z
Keith Brown, Tetra Tech

Tetra Tech, Inc.
415 Oak Street, Kansas City, MO 64106
Tel 816.412.1741 Fax 816.410.1748 www.tetratech.com

Draft

SUMP/TROUGH REMOVAL AND BUILDING DECONTAMINATION WORK PLAN FOR 1000 AREA DAY & ZIMMERMANN KANSAS LLC PARSONS, KANSAS

Prepared by

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106

November 2013

CAPE™

23 October 2013

Richard Flanery
Kansas Department of Health and Environment
Hazardous Waste Permits Section
1000 SW Jackson Street, Suite 320
Topeka, Kansas 66612

Contract: **Burn Pad 5, 6 and Trenches Closure Work**
Kansas Army Ammunition Plant, Kansas
Contract No.: W912DQ-09-D-3016
Delivery Order No.: 0004

RE: **Draft Burn Pad 5 Closure Report**

Dear Mr. Flanery:

Enclosed are two hard copies and two electronic copies of the *Draft Burn Pad 5 Closure Report,* supporting the Burn Pad 5, 6 and Trenches Closure Work, for your review and comment.

Please provide your comments to Kathy Baker (U.S. Army Corps of Engineers – Kansas City District) at Kathy.T.Baker@usace.army.mil. Additionally, please reference the page number and line number when submitting your comments.

Please contact me if you have any questions.

Sincerely,
CAPE

W. David Ahlborn
Project Manager

cc: Kathy Baker, USACE (two copies)
Ken Herstowski, EPA (three copies)
Charley Bowers, KDHE-BWM (one copy)
Rose Zeiler, Army-BRAC (one copy)
Ann Charles, GPDA (one copy)
Steve Kosman, DZI (one copy)

Enclosure

1565 Scenic Avenue Suite A▲ Costa Mesa, California 92626
(714) 599-9071 ▲ Fax (714) 599-9087

Day&Zimmermann

We do what we say.

RECEIVED

OCT 22 2013

BUREAU OF WASTE MANAGEMENT

October 17, 2013

Mr. Mostafa Kamal, P.E., CPM
Chief, Hazardous Waste Permits Section
Bureau of Waste Management
Kansas Department of Health and Environment
Curtis State Office Building
1000 SW Jackson, Suite 320
Topeka, Kansas 66612-1366

Subject: **Permit Application for Hazardous Waste Management Facility**
Day & Zimmermann Kansas LLC
23102 Rush Road
Parsons, Kansas 67357
KSR000511964

Dear Mr. Kamal,

This permit application is submitted for the operation of a hazardous waste container storage facility and an open detonation grounds at the Day & Zimmermann Kansas LLC (D&Z) operations at 23102 Rush Road, Parsons, Kansas. D&Z is submitting one copy of the complete application package, which includes:

- The Permit Application for the management of hazardous waste with its required attachments. The following sections have been included:
    - Section A – Part A
    - Section B – Facility Description.
    - Section C – Waste Characteristics. This includes the Applicant Compliance Information form (DEP- APP-002) as an appendix.
    - Section D – Process Information – Containers (D-1)and Open Detonation Unit (D-8). This includes the revised risk assessment for open detonation unit as an attachment.
    - Section E – Groundwater Monitoring. This includes the groundwater monitoring plan and quality assurance project plan as attachments.
    - Section F – Procedures to Prevent Hazards
    - Section G – Contingency Plan
    - Section H – Personnel Training
    - Section I – Closure and Post Closure. This includes closure plans and cost estimates for the hazardous waste storage units and the open detonation grounds as attachments.
    - Section J – Solid Waste Management Units
    - Section K – Other Federal Laws
    - Section L – Certification
    - Attachment O – Subpart CC Air Emissions

Subject: Permit Application for Hazardous Waste Management Facility
Day & Zimmermann Kansas LLC
23102 Rush Road
Parsons, Kansas 67357
KSR000511964

D&Z acknowledges that the following materials are still incomplete.

- Financial assurance documentation is required as part of Section I. Because the final assurance amount depends on the project closure costs, D&Z will submit documentation upon approval of the technical adequacy of the permit application and its associated closure plans.

If you have any questions or require additional information, please contact me at (620) 421-7476.

Sincerely,

Steve Kosman

Steve Kosman
Senior Manager, Engineering

Enclosure

cc Richard Flanary, KDHE (letter only)
Ken Herstowski, U.S. Environmental Protection Agency

Richard Flanary

From: Homer, David <David.Homer@tetratech.com>
Sent: Wednesday, October 02, 2013 3:12 PM
To: Mostafa Kamal; Richard Flanary
Cc: Ken Herstowski (Herstowski.Ken@epamail.epa.gov); Kosman, Steve (Steve.Kosman@dayzim.com); Galloway, Jerry (Jerry.Galloway@dayzim.com)
Subject: Closure Plan for the 1800 and 1900 Hazardous Waste Storage Areas
Attachments: Hazardous Waste Management Units Closure Plan.pdf; Closure Plan Submittal CVL.pdf; DZ QAPP.pdf

Mr. Kamal and Mr. Flanary,

Attached are the closure plan cover letter, closure plan and quality assurance project plan for the closure of the hazardous waste storage units in the 1800 and 1900 Areas. If you have any questions please let me know. If you need a hard copy of these documents please let us know.

Thanks,
David

David Homer, PhD | Senior Environmental Scientist
Direct: 816.412.1762| Main: 816.412.1741| Cell: 913.645.0453 | Personal Fax: 816.410.1748
david.homer@tetratech.com

Tetra Tech | Kansas City Operations
415 Oak Street | Kansas City, MO 64106| www.tetratech.com
Complex World, Clear Solutions™

CLOSURE PLAN
CLOSURE OF RCRA PERMITTED HAZARDOUS WASTE STORAGE FACILITIES

Revision 00

SEPTEMBER 2013

Prepared for
DAY & ZIMMERMANN KANSAS LLC

Day&Zimmermann
We do what we say.®

Prepared by:

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106

Richard Flanary

From: Richard Flanary
Sent: Thursday, September 26, 2013 10:25 AM
To: 'David.Homer@tetratech.com'
Cc: Mostafa Kamal; 'Ken Herstowski (Herstowski.Ken@epamail.epa.gov)'; 'Cheryl Kuhn'
Subject: Review Comments on Preliminary Review Copy of SUMP AND TROUGH REMOVAL WORK PLAN FOR 1000 AND 1100 AREAS at DAY & ZIMMERMANN KANSAS LLC EPA ID KSR000511964

David

We have reviewed the Preliminary Review Copy for the SUMP AND TROUGH REMOVAL WORK PLAN FOR 1000 AND 1100 AREAS at DAY & ZIMMERMANN KANSAS LLC (former KANSAS ARMY AMMUNITION PLANT), PARSONS, KANSAS dated August 2013.

Our review is based on the previously approved FINALPROJECT PLANS 100, 200, 300, 500, 700, 800, 900, AND 3000 AREA UNDER THE SUMP/TROUGHS SOIL CHARACTERIZATION, KANSAS ARMY AMMUNITION PLANT, PARSONS, KANSAS dated May 17, 2011; Quality Assurance Plan The Sump/Troughs Soil Characterization Kansas Army Ammunition Plant Parsons, Kansas dated July 2011 and FINAL WORK PLAN ADDENDUM FOR UNDER THE SUMP-TROUGHS SOILCHARACTERIZATION FOR PRODUCTION AND NON-PRODUCTION AREAS KANSAS ARMY AMMUNITION PLANT, PARSONS, KS dated May 22,2012.

Under Section 4.1 Soil Excavation and Table 2 in Appendix B, sludge, sediment and soil must be characterized for RCRA metals, explosives, PCBs, cyanide, ignitibility, presence of free liquids (i.e., paint filter test), and pH as detailed in Section.3.8 of the May 17. 2011 Field Sampling Plan to determine proper disposal options for investigation derived and remedial action wastes. Also the proposed disposal facilities for the various waste streams and estimated quantities need to be identified as detailed in Section 3.8 of the May 17. 2011 Field Sampling Plan.

Under Section 4.1 Confirmation Sampling, soil samples must be analyzed for Metals, SVOCs, VOCs, explosives and PCBs as detailed in Section.3.1, Table 3.1 and Table A.1 in Appendix A of the May 17. 2011 Field Sampling Plan.

Under Section 4.1 Backfilling Excavated Areas, in accordance with Section 3.7 of the May 17. 2011 Field Sampling Plan, backfill material must be obtained from an off-site source. The off-site borrow soil must be analyzed for metals, VOCs, SVOCs, and explosives at a frequency of one sample per every 2,000 cubic yards. If shallow groundwater accumulates in the base of the sumps, gravel must be used to backfill the excavations up to the water table elevation before soil is placed on top of the gravel to ground surface level.

In accordance with Section 3.9 of the May 17. 2011 Field Sampling Plan, a State of Kansas- licensed surveying firm must survey the corners of the sumps and center line of trough structures before demolition activities begin. The locations of sump sidewall and composite floor samples must be measured using surveyed corners and off-set stakes as a reference. Trough soil samples must be collected from the surveyed locations and the sample depth measured in. The surveyed locations must be accurate to 0.1 foot. Elevations surveyed will be to the National Geodetic Vertical datum (1988) and will be accurate to within 0.01 foot for all sampling locations. The surveyed control information for all data collection points must be recorded and displayed in tabular format. The table will provide northing (Y)

and easting (X) coordinates, and the measuring point elevation such as ground surface adjacent to a sump or trough.

EPA currently is responsible for RCRA Corrective Action at this facility until KDHE issues a new RCRA Permit which will include RCRA Corrective Action going forward.
EPA approval of this work plan is also required before the work can begin.
Please contact Charley Bowers, (620) 431-2390 or email him the proposed work schedule, so he can provide oversight as needed.

Feel free to contact me if there are any questions.

Richard L. Flanary, PE, MS
Hazardous Waste Permits Section
Phone: 785-296-6562
Fax: 785-296-1592
email: rflanary@kdheks.gov

Richard Flanary

From: Richard Flanary
Sent: Monday, August 26, 2013 2:11 PM
To: 'Homer, David'
Cc: Ken Herstowski (Herstowski.Ken@epamail.epa.gov); Mostafa Kamal; Kosman, Steve (Steve.Kosman@dayzim.com)
Subject: D&Z Kansas LLC Class 2 Permit Modification for Closing and Opening New Storage Units EPA ID KSR000511964
Attachments: 20130826095208510.pdf

We have reviewed the Preliminary Review Copy of the Closure of RCRA Permitted Hazardous Waste Storage Facilities Revision 00 dated July 2013.
It appears to meet all the requirements previously approved in the Army GDPA Closure Plan except for the following information:

1. More detailed information in Tables 4-1 through 4-22 (attached) as a supplement to the Preliminary Review Copy Table 2.

2. Also the schedule in Section 8 should be revised to include the opening of new units in conjunction with the closing of existing units.

Since it appears D&Z Kansas LLC wishes to begin closure activities of existing units and open new units to replace them ASAP, a class 2 permit mod to the recently transferred RCRA permit dated July 11, 2013 will need to be submitted.

This can be accomplished by submitting a revised Part A application with the above mentioned revised closure plan which should .

1. On page 6 of the Part A, each storage unit with its permitted capacity must be identified separately. Each replacement storage unit (8 proposed) must be identified separately on page 6 as well.

2. We need a document to cover the technical specs of the replacement storage areas. For convenience D&Z can cover all twelve units in one document including a schedule for closing the existing units and opening the new replacement units (Can be Included with Closure Plan and referenced in the Part A).

3. We need a document to cover the technical specs of the replacement storage areas. For convenience D&Z can cover all twelve units in one document including a schedule for closing the existing units and opening the new replacement units .

As requested, here is the latest Kansas Army Ammunition Plant Facility Mailing List. You can inform us of any changes and email it back to us under D&Z Kansas LLC as your facility and GPDA will now require separate facility mailing lists after the current permit is transferred tentatively on June 30, 2013.

As we discussed over the phone recently, once the existing permit is transferred, D&Z will be required to complete a class 2 permit mod by submitting a revised Part A and other documentation to effect closure of the current storage areas and construction of the new replacement ones before a new RCRA Facility Permit is issued in 2014 or beyond. As we discussed the revised Part A needs to include the following:

4. Each storage unit with its permitted capacity must be identified separately on page 6 of Part A.
5. Each replacement storage unit (8 proposed) must be identified separately on page 6 as well.
6. We need a document to cover the technical specs of the replacement storage areas. For convenience D&Z can cover all twelve units in one document including a schedule for closing the existing units and opening the new replacement units.
7. We need an updated closure plan for the units being closed and opened based on applicable portions of the previously approved Army GPDA Closure Plans.

Let me know if you have any questions.

Richard L. Flanary, PE, MS
Hazardous Waste Permits Section
Phone: 785-296-6562
Fax: 785-296-1592
email: rflanary@kdheks.gov

Richard Flanary

From: Richard Flanary
Sent: Tuesday, September 30, 2014 10:02 AM
To: Jamie Packard
Subject: KSR000511964 Day & Zimmermann Kansas LLC DOC TYPE Corrective Action SUBJECT 1000 AND 1100 AREA SUMP AND TROUGH REMOVAL WORK PLAN
Attachments: Sump Removal 1000 and 1100 Areas Work Plan.pdf

From: Homer, David [mailto:David.Homer@tetratech.com]
Sent: Wednesday, August 14, 2013 11:24 AM
To: Richard Flanary; Ken Herstowski (Herstowski.Ken@epamail.epa.gov)
Cc: Mostafa Kamal; Kosman, Steve (Steve.Kosman@dayzim.com)
Subject: DZI Plans

Gentlemen,
Here are electronic copies of the plans distributed at our meeting last week. Any comments would be appreciated.

Regards,
David

David Homer, PhD | Senior Environmental Scientist
Direct: 816.412.1762| Main: 816.412.1741| Cell: 913.645.0453 | Personal Fax: 816.410.1748
david.homer@tetratech.com

Tetra Tech | Kansas City Operations
415 Oak Street | Kansas City, MO 64106| www.tetratech.com
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Preliminary Review Copy

SUMP AND TROUGH REMOVAL WORK PLAN
FOR 1000 AND 1100 AREAS
DAY & ZIMMERMANN KANSAS LLC
KANSAS ARMY AMMUNITION PLANT
PARSONS, KANSAS

Prepared by

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106

August 2013

Preliminary Review Copy

CLOSURE PLAN
CLOSURE OF RCRA PERMITTED HAZARDOUS WASTE STORAGE FACILITIES

Revision 00

AUGUST 2013

Prepared for
DAY & ZIMMERMANN KANSAS LLC

Day&Zimmermann
We do what we say.

Prepared by:

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
11201 Renner Boulevard
Lenexa, Kansas 66219

JUL 11 2013

Mr. Steve Kosman
Day & Zimmerman Kansas LLC
23102 Rush Road
Parsons, Kansas 66357-8403

RE: Class 1 Permit Modification Request
Kansas Army Ammunition Plant/Day & Zimmerman Kansas Division
Parsons, Kansas
RCRA ID# KSR000511964

Dear Mr. Kosman:

The U.S. Environmental Protection Agency issued a Resource Conservation and Recovery Act (RCRA) hazardous waste management permit to Kansas Army Ammunition Plant (KSAA), RCRA ID# KS0213820467 on November 7, 1989. By method of permit modification, the KSAAP permit was split on August 27, 2012, resulting in a permit for a hazardous waste management facility of approximately 4,000 acres with the United States Department of Defense – Army as owner and Day & Zimmerman Kansas Division as operator and having RCRA ID# KSR000511964.

Day & Zimmerman Kansas Division submitted a Notification of Regulated Waste Activity dated April 24, 2013, to transfer ownership of the hazardous waste management permit for the approximate 4,000 acre facility from the Army to Day & Zimmerman Kansas LLC (DZK). As a result, DZK will be both owner and operator on the hazardous waste management permit.

Based upon our review of Title 40 Code of Federal Regulations §270.42 and other available information, your permit modification request is hereby approved with permit modifications. The modifications were included in the draft permit made available for public comment and no comments were provided regarding the attached modifications. Therefore, the modifications are not reviewable and the modifications and transfer of ownership for the purposes of the permit is effective JUL 11 2013, 2013. DZK shall provide notice to all persons on the facility mailing list of the permit modifications no later than 90 days after the date of this letter.

Please contact Ken Herstowski, of my staff, at (913) 551-7631 if you have any questions about this letter. Thank you for your cooperation in this matter.

Sincerely,

Becky Weber
Director
Air and Waste Management Division

Enclosure

cc: Mostafa Kamal, KDHE

Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson, Suite 320
Topeka, KS 66612-1366

Kansas
Department of Health & Environment

phone 785-296-1600
fax 785-296 1592
email bwmweb@kdheks gov
www kdheks gov/waste

Robert Moser, MD, Secretary.

San Brownback, Governor

July 11, 2013

Steve Kosman, Director
Engineering Programs & Projects
Day & Zimmerman Kansas, LLC
23102 Rush Rd
Parsons, KS 67357

RE: Final Decision – Hazardous Waste Treatment and Storage Permit Transfer
Class 1a – Change of Ownership for DZK Footprint
Interim Status Transfer – Open Detonation Area
EPA ID No. KSR000511964

Dear Mr. Kosman

This letter is to notify you that the Kansas Department of Health and Environment (KDHE) has made the final decision to modify the referenced Hazardous Waste Treatment and Storage Part I Permit issued to the U S Department of the Army and Day & Zimmerman Kansas Division. A copy of the final modified Hazardous Waste Management Part I Permit issued to Day & Zimmerman Kansas, LLC (DZK) is enclosed for your use In addition, with the transmittal of this letter, KDHE is approving the interim status transfer of ownership and operational control of the Open Detonation facility on the same footprint to Day & Zimmerman Kansas, LLC While the permit transfer is completed in accordance with 40 CFR 270 40, the interim status transfer is approved under the authority of 40 CFR 270 72

The facility is required to submit updated closure cost estimate for all permitted and interim status hazardous waste units within 90 days of issuance of this permit in accordance with permit condition I I 1 Adequate financial assurance must be provided within 180 days of issuance of the permit Department of the Army will continue to be responsible for all RCRA closure at this facility unless adequate financial assurance is received from DZK and approved by KDHE

If you have any questions or require additional information, please contact me at (785) 296-1609 or Richard Flanary at (785) 296 - 6562

Sincerely,

M. Kamal

Mostafa Kamal, PE, CPM
Chief, Hazardous Waste Permits Section
Bureau of Waste Management

Enclosures
a. Part I RCRA Permit
b Parcel Map

Cc Steve Kosman - DZK
Rose Zeiler – Army/BRAC
David Stutt - DEA/SEDO/Waste Programs
Ken Herstowski - EPA Region 7/AWMD/WRAP
Bill Bider – BWM (w/out enclosures)

DAY & ZIMMERMAN KANSAS, LLC
(KSR000511964)
(formerly DAY & ZIMMERMAN KANSAS DIVISION)
A Waste Compliance Inspection Report

Inspection Info and Participants	Answer	Violation
Inspection Type HW-CEI		
Inspection Reason Routine		
Complaint Code (enter the BEFS complaint number if applicable)		
Inspection Starting Date 06/11/2014		
Inspection Starting Time 9:00 AM		
Dates of Inspection for multi-day inspections (i.e. April 1 to 3, 2013 or 4/1-3/2013)		
Has the company declared any information/process as trade secrets KSA 65-3447? (If yes, explain below under comments.)	No	
Inspector(s) Wes Page		
Inspector Completing Report Wes Page		
Inspection Participants (No need to list inspector completing report as they are listed above)		

Name / Title / Organization	Intro Meeting	Walk Through	Records Review	Exit Briefing
Dean Cramer/Project Engineer/DZI Kansas, LLC	X	X	X	X

Site Activities	Answer	Violation
Operating Hours / Days 6:30 am - 5:00 pm Monday -Thursday		
District office where facility is located SE		
Employee Count 125		

Southeast District Office
1500 West Seventh Street
Chanute, KS 66720

Kansas

Phone: 620-431-2390
Fax: 620-431-1211
www.kdheks.gov

Robert Moser, MD, Secretary | Department of Health & Environment | Sam Brownback, Governor

December 31, 2012

Approval No: **03-13-099101A**
Expiration Date: **December 31, 2013**

Mr. Steve Kosman
Day & Zimmerman, Inc.
Kansas Army Ammunition Plant
23102 Rush Road
Parsons, KS 67357

RE: Open Burn Exemption Request
Day & Zimmerman, Inc., Kansas Army Ammunition Plant
23102 Rush Road, Parsons, Labette County, KS

Dear Mr. Kosman:

I am writing to acknowledge receipt of your request for an exemption to Kansas Administrative Regulation (K.A.R.) 28-19-645, *Open Burning Prohibited*, for the open burning of trees/brush located NE parking area of 1000 Area near Parsons, Labette County, Kansas, for fire training purposes.

1. This approval is issued to Kansas Army Ammunition Plant for the open burning of **trees/brush only** for the purpose of fire training at the specified location. No other materials may be disposed at this site by burning or other means without written permission from the Department.

2. All open burning activities shall be subject to the conditions stated in K.A.R. 28-19-647(e) and Department policies, copies of which are enclosed.

3. Prior to burning, each scheduled burn shall be reported to the appropriate representative of the local fire authority and shall follow all recommendations and requirements of that department.

4. **This approval expires December 31, 2013.** Any burning activity subject to the Kansas Open burning Regulations conducted after this expiration date will require written approval from the Department.

5. Pursuant to K.A.R. 28-19-647(e)(9), the Department may revoke any open burn approval with thirty (30) days notice.

6. If at any time the local fire authority rescinds approval of this open burn activity, this KDHE Open Burn Approval shall also be rescinded.

7. In granting this approval, the Department assumes no liability for personal injury or property damage. Should any questions or problems arise as a result of this activity, you will be contacted

Please find enclosed copies of the Kansas Open Burning Regulations (K.A.R. 28-19-645 through 28-19-648), Open Burning At KDHE Approved Tree And Brush Site Policy and Open Burning Conditions Guidance Document.

Your cooperation with the air quality program is appreciated. If you have any questions regarding this matter please contact me at 620/431-2390, e-mail dcole@kdheks.gov .

Sincerely,

Douglas M. Cole
Environmental Scientist
Bureau of Environmental Field Services

DC:pc

Enclosures

cc: Russ Brichacek, BOA, Topeka
SEDO File

Day&Zimmermann

We do what we say.℠

MUNITIONS & GOVERNMENT
KANSAS DIVISION

November 14, 2012
EE:DH12-0015.doc

RECEIVED
NOV 21 2012
K.D.H.E.
SOUTHEAST DISTRICT

Kansas Department of Health and Environment
Southeast District Office
Bureau of Environmental Field Services
1500 West Seventh
Chanute, Kansas 66720-2570

Attention: Mr. Doug Cole, CHMM

Dear Mr. Cole:

Subject: Request for Approval of Open Burning of Brush for Auxiliary Fire Fighter Training at the Day & Zimmermann Kansas Division Facility (Formerly a Portion of the Kansas Army Ammunition Plant)

Day & Zimmermann Kansas Division requests an exemption of the open burn prohibition for the purpose of burning a brush pile for auxiliary firefighter training at our facility, a portion of the former Kansas Army Ammunition Plant. This activity will be accomplished in the same manner as similar training events performed in previous years; however, a different location will be utilized for this burn. An open area directly east of the northeast parking lot in the 1000 Area will be the new location, a controlled site within the boundary of the D&Z footprint. Since this area is still under the ownership and control of the U.S. Army, no contact is required with the county commissioners for their approval of this activity.

Enclosed is a completed Application for Approval, Open Burn Operations, Kansas Administrative Regulations 28-19-647 for your review and approval.

If you have any questions concerning this request, our point of contact is Dean Cramer, telephone 620-421-7532 or email dean.cramer@dayzim.com.

Respectfully,

STEVE KOSMAN
Director of Engineering,
Programs & Projects

SWK/CDC/CJS/dmh

Attachments a/s

cf: Dean Cramer
Judy Vitt

Phone: 620-421-7400 **23102 Rush Road, Parsons, KS 67357-8403** **Fax: 620-421-7300**

Bureau of Environmental Remediation
Curtis State Office Building
1000 SW Jackson St., Suite 410
Topeka, KS 66612-1367

Phone: 785-291-3249
Fax: 785-296-4823
jharris@kdheks.gov
www.kdheks.gov

Robert Moser, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

SITE ACTION CONCURRENCE

Assessment and Restoration Section

Site Name: KSAAP Old Ammunition Storage Area **ISL Number:** C3-050-72533-2

NAME	TITLE	SIGNATURE	DATE
Jamie Schwartz	Project Manger		9/6/12
Jorge Jacobs	Unit Manager		9/6/2012
Bob Jurgens	Section Chief		9/11/12
Gary Blackburn	Bureau Director		9/13/12

ACTION: Site Status Update to Resolved

JUSTIFICATION:

The initial Site Inspection missed a portion of the former munitions storage area, an additional Site Inspection was conducted to ensure there were not data gaps. In the Spring of 2011 a team of unexploded ordnance personnel conducted a magnetometer assisted visual survey, covering 100% of the 27-acre site. No munitions debris or munitions and explosives of concern were identified during the survey. Additionally, four surface soil samples were collected to determine if explosives or metals contamination was present in the soil. Explosives were not detected and all metals concentrations were below action levels. KDHE/BER provided approval of the Site Inspection report in June 2011.

The US Army Corps of Engineers (USACE) submitted a No Further Action (NFA) request letter on August 25, 2011. KDHE/BER provided concurrence with the NFA request on September 9, 2011. There are no additional outstanding issues at this site, thus the status will be changed to resolved.

Bureau of Environmental Remediation
Curtis State Office Building
1000 SW Jackson St., Suite 410
Topeka, KS 66612-1367

Robert Moser, MD, Secretary

Kansas
Department of Health and Environment

phone: 785-291-3089
fax: 785-296-4823
aallen@kdheks.gov
www.kdheks.gov

Sam Brownback, Governor

December 27, 2011

SCANNED
DEC 29 2011

Ms. Rose Zeiler, Ph.D.
BRAC Environmental Coordinator
Kansas Army Ammunition Plant
727 S. Brooklyn Rd.
P.O. Box 220
Ratcliff, AR 72951

Subject: *Final Addendum to the Field Sampling Plan, Quality Assurance Project Plan, Work Plan and Explosive Safety Submission, Closure of Burn Pad 5, Burn Pad 6 and Burn Pad 6 Trenches, Kansas Army Ammunition Plant, Parsons, Kansas*, dated November 2011

Dear Ms. Zeiler:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed the referenced document (Project Plan Addendum), received on November 17, 2011. The Project Plan Addendum (PPA) was prepared by CAPE, on behalf of the Army. The PPA is for the Solid Waste Management Unit (SWMU) Group 24. The PPA proposes several changes from the Army's previous basis documents. KDHE/BER provides the following technical review comments for the Open Burning Pad 6 and the related waste disposal trenches.

As KDHE/BER understands the PPA, chapters 1 through 7 are supplements to the Army's 8 basis documents that are listed on Page 1 in the PPA (see attachment); revisions to the 8 basis documents are provided Tabs 1 through 4, and in Appendices A through E of the PPA. Therefore, KDHE/BER recommends the electronic copies of the 8 basis documents be attached to this PPA to allow for a more workable and comprehensive document to direct the field work.

General Comments

1. The Army's Work Plan, Quality Assurance Project Plan, and Field Sampling Plan originally specified pre-excavation systematic gridded surface soil sampling of Burn Pad 6 on a 30 foot by 30 foot. The Army has proposed a reduced sampling frequency in the PPA from the previous Field Sampling Plan (page 5-6, Section 5.2.1.2 Burn Pad 6), dated April 2010. KDHE/BER requests the Army revert to the systematic gridded soil sampling in the Field Sampling Plan in order to obtain representative surface soil samples; and believes the use of the original sampling approach would likely only cause minor adjustments if Munitions and Explosives of Concern/Material Potentially Presenting an Explosive Hazard (MEC/MPPEH) avoidance techniques or sampling from the excavation bucket were used. However, if the Department of Defense Explosive Safety Board (DDESB) or other explosives experts prohibit the in-situ surface soil sampling or feel it compromises the MEC/MPPEH activities then KDHE/BER requests the environmental sampling at a like frequency of one sample per 16 cubic yards of excavated soil. Also see related specific comments # 20 and # 22 below.

2. In consideration of a conceptual site model (CSM), KDHE/BER requests the Army consider adding traditional sampling biased to the face of the berm exposed to Burn Pad 6, prior to the Army's bulk sampling at a frequency of one sample every 100 cubic yards. The additional sampling is recommended at an interval of 0 to 0.5 feet if the berm was constructed with non-impacted soil.

3. KDHE/BER suggests the Army plan Land Use Controls/Institutional Controls to prevent inappropriate future long-term use of the SWMU Group 24 property for potential undiscovered MEC/MPPEH and non-dig metallic anomalies.

4. The Army uses the term "scan", but it is not defined in the PPA. If "scan" used in the PPA refers to a geophysical scan for ferrous metal objects then it should be stated in the PPA.

5. The title of the PPA is designated as Final. A draft/draft final version of the PPA was not submitted for KDHE/BER review as is customarily done.

6. KDHE/BER requests the figures that illustrate where the Army plans to locate the soil samples; and recommends a references section be added to the PPA. Also see KDHE/BER letters dated March 21, 2011, March 22, 2011, and September 9, 2011.

Specific Comments

7. Cover Page. The title of the PPA and the text within the PPA should reflect the site is located in SWMU-Group 24.

8. Page iv and v. The list on these pages should add any missing abbreviations and acronyms (e.g., PCDD/PCDF) that are used in the text of the PPA.

9. Page 2.2, Section 2.2. KDHE/BER recommends the Army add Data Quality Objectives to assure the MEC/MPPEH clearance, and the environmental investigation and remediation of potential contamination are consistent with the CSM.

10. Page 5, Section 5.2, Paragraph 2. The soil sampling depth interval is missing, and should be added to the PPA. KDHE/BER expects the surface soil samples be collected from 0 to 0.5 feet unless the potential contamination would be more concentrated at an alternate depth.

11. Page 5, Section 5.2, Paragraph 3. The volatile organic compound (VOC) sample analysis is missing a depth interval. VOC analysis soil samples are commonly collected at greater depths than other COCs because they are prone to lose their volatiles in the near surface soils. KDHE/BER suggests the samples for VOC analysis at Burn Pad 6 be collected at a greater depth to minimize the impacts of volatilization on the potentially contaminated soil samples.

    The last sentence of the paragraph reads that for the dioxin analysis all the congeners will be reported. In addition to the reporting of the individual congener values, KDHE/BER requests that PPA also clarify that the toxicity equivalency values will be reported and used for the soil cleanup. The toxicity equivalency should be determined by use of the conventional toxicity-equivalence-factors.

Dioxin analysis is not discussed in the PPA for the berms. KDHE/BER requests the berm soil sampling for dioxin analysis sampling be included from 0 to 0.5 feet from the face of the berm every 30 linear feet, unless the CSM shows an alternate sampling approach would be more effective in detecting potential soil contamination. Also see comment # 2.

12. Page 5, Section 5.2, Paragraph 4. The excavation sidewall samples should be independent of the Burn Pad 6 floor aliquot samples to verify if the lateral extent of contamination has been addressed. One excavation sidewall sample is expected every 30 linear feet or fraction thereof as previously indicated in the Field Sampling Plan (April, 2010). Also, the Army should propose a depth interval for the side wall samples consist with a CSM.

13. Page 5, Section 5.3. KDHE/BER requests the contaminated soil excavation lifts for Burn Pad 6 be specified as from 0 to 0.5 feet in consideration of the CSM for burning of waste materials on the ground surface.

    The PPA appears inconsistent for the size of the munitions debris, discarded military munitions, or other metal objects that will be assessed and removed. The minimum size the Army plans to remove is stated as 20 millimeter and the size of a D-cell battery. D-cell batteries are roughly 60 millimeters by 30 millimeters which is larger than 20 millimeters. Also, the Army's Work Plan (Page 5-19, Section 5.7) dated April 2010, reported the minimum size munitions item the survey will be designed to detect is a 20 mm projectile. If the Army elects to use 20 millimeter as the mandatory cut-off size as specified in the Work Plan, then KDHE/BER suggests the Army consider the small sized "industry sized objects" (a.k.a. ISO) for the geophysical calibration and performance validation tests.

14. Page 7, Section 6.2. For the waste disposal trenches associated with Burn Pad 6, KDHE/BER requests the addition of traditional 0 to 0.5 foot interval surface soil sampling; subsurface soil samples on one foot depth intervals; and one excavation sidewall soil sample per 30 linear feet or fraction thereof. The traditional soil sampling is requested to obtain representative soil samples. It appears this environmental sampling could likely be achieved with little disruption using "mag, flag, and dig" techniques, other available MEC/MPPEH avoidance techniques, or sampling from the excavation bucket. Also, see the KDHE/BER letter dated March 22, 2011. However, if the DDESB or other Army explosives experts disagree and prohibit the in-situ surface soil sampling, then KDHE/BER requests sampling of the bulked lift-excavated soil at a like frequency of one environmental sample per 16 cubic yards of excavated soil.

15. Page 7, Section 7.1. It is noted that Figure 1 is under Tab 4.

16. Page 7, Section 7.1, Paragraph 4. This section of the PPA seemingly plans to the use hollow stem augers (HSAs) to drill through competent bedrock to install the monitoring wells. The Army has previously verbally reported that bedrock is shallow near the Burn Pads. The Monitoring Well Design, Installation, and Documentation at Hazardous, Toxic, and Radioactive Waste Sites (USACE, 1998) that is cited in this section states HSAs cannot be used in rock formations. Furthermore the Volume 1 Work Plan (April, 2010) specified that the use of air rotary as the drill methods following auger refusal. It does not appear practical to use HSAs alone as the drill method to install the wells in competent bedrock. An inadequate drill method will not be allowed as a basis for the lack of collecting representative groundwater samples. KDHE/BER disapproves the drill method changes in the PPA from those methods previously described in the Work Plan, unless the Army provides reasonable justification for change.

This paragraph states that the actual monitoring well screen interval will be determined in the field depending on the depth of groundwater. For monitoring wells at the potential source area such as within Burn Pad 6, KDHE/BER requests the well screens intersect the top of static groundwater level, unless adequate justification is provided for alternate screen intervals. KDHE/BER requests the PPA include the expected depth to groundwater and the rational for the proposed screen intervals.

17. Tab 1, Page 10, Introduction Section. The term "well development" should be changed to "well installation".

18. Tab 1, Page 10, Section 5.2.1.2. The abbreviations for PCDD/PCDF are not defined in the PPA, and should be spelled out.

19. Tab 1, Page 11, Section 6.5. KDHE/BER requests that copies of the field analytical records and the field notes be included in the completion report.

20. Tab 2, Page 16; QAPP Worksheet # 10; Problems Definition; Burn Pad 6 and Trenches. This section of the PPA discusses the soil sampling and analysis for samples that will be collected "both pre-excavation and post excavation", and KDHE/BER concurs. The pre-excavation and post-excavation sampling is consistent with the Field Sampling Plan dated April, 2010. KDHE/BER agrees on the need for pre-excavation soil sampling to obtain representative soil samples, and believes the Army can likely achieve the pre-excavation surface soil sampling with little disruption to the MEC/MPPEH activities. Also see general comment #1.

21. Tab 2, Page 19; QAPP Worksheet # 11; Who will use the data?. This line lists the Army and their contractor, and KDHE/BER as those who will be using data for Burn Pad 6. KDHE/BER will not use the data per se; instead KDHE/BER is performing regulatory oversight similar to EPA who is not specified. If this is correct, then KDHE/BER should be removed from the list.

22. Tab 2, Page 19; QAPP Worksheet # 11; How much data are needed?. KDHE/BER agrees with the stated plan on this page for pre-excavation surface soil sampling. The pre-excavation soil sampling was previously specified in the Field Sampling Plan. KDHE/BER believes the pre-excavation soil sampling is needed to obtain representative soil samples. Also see comment # 1 and # 20.

23. Tab 2, Page 19; QAPP Worksheet # 11; What type of data is needed? The Army in this PPA is proposing to reduce the soil sample frequency for well drilling soil samples from every 2 feet to every 4 feet. The rational for the proposed reduction in the sampling is not provided, and KDHE/BER disapproves the proposal.

24. Tab 2, Page 28; QAPP Worksheet # 12. See comment # 11 regarding dioxin analysis.

25. Tab 3, Section 5.10; and Tab 4, Figure 1. The figure shows the locations for the "2011 proposed wells". It appears that the "2011 proposed wells" will be used to investigate potential groundwater contamination emanating from the disposal pits (a.k.a. anomaly areas that are shown in green). KDHE/BER requests that the Army consider placing the "2011 proposed wells" as close as practical to the disposal pits; and after the installations verify the monitoring wells are downgradient and within the potential path of groundwater contamination flow.

26. Tab 4, Section Final ESS Section 6.1, Paragraph 3. See comment # 13.

27. Appendix D. The soil cleanup concentrations for 2,3,7,8 TCDD dioxin are omitted and should be added to the table.

KDHE/BER believes the above comments on soil sampling are needed for representative sampling. If the Army elects not to edit the PPA, KDHE/BER believes the comments on soil sampling in this letter can likely be implemented in the field without significant interruption for the project schedule. If you have any questions please call me at (785) 291-3089.

Sincerely,

Ashley Allen, LG
Project Coordinator
Assessment & Restoration Section

Attachment: (1 page) list of Army's basis documents from the PPA

cc: Ashley Allen → KAAP, SWMU-Group 24, Burn Pads 5 and 6 (C3-050-71395-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Ken Herstowski, EPA R7
Don Dailey, KSAAP-Parsons
Eric Cloud/Kathy Baker, USACE

Attachment

Re: Final Addendum to the Field Sampling Plan, Quality Assurance Project Plan, Work Plan and Explosive Safety Submission, Closure of Burn Pad 5, Burn Pad 6 and Burn Pad 6 Trenches, Kansas Army Ammunition Plant, Parsons, Kansas, dated November 2011

Basis documents cited on page 1 of the Project Plan Addendum:

Final Closure Plan for Open Burn Pad 5, Kansas Army Ammunition Plant, Parsons, Kansas, April 2010

Final (Volume 2A-Sampling and Analysis Plan- Field Sampling Plan) Closure of Explosive Waste Incinerator, Burn Pads 5 and 6 and Pistol Range Kansas Army Ammunition Plant, Parsons, Kansas, April 2010

Final (Volume 2A-Sampling and Analysis Plan- Quality Assurance Project Plan) Closure of Explosive Waste Incinerator, Burn Pads 5 and 6 and Pistol Range Kansas Army Ammunition Plant, Parsons, Kansas, April 2010

Final (Volume 1-Work Plan) Closure of Explosive Waste Incinerator, Burn Pads 5 and 6 and Pistol Range Kansas Army Ammunition Plant, Parsons, Kansas, April 2010

Addendum to the Final April 2010, Volume 1, Work Plan for the Investigation of Magnetic Anomalies at Burn Pad 6, April 2010

Final (Volume 5-Explosive Safety Submission) Explosive Waste Incinerator and Burn Pad 5 Explosive Safety Submission Kansas Army Ammunition Plant, Parsons, Kansas, September 2009

Final (Volume 5-Explosive Safety Submission Amendment 1) Explosive Waste Incinerator and Burn Pad 5 Explosive Safety Submission Kansas Army Ammunition Plant, Parsons, Kansas, December 2009

Certificate of Risk Acceptance for Burn Pads 5 and 6, August 2011

CAPE℠

16 November 2011

Ms. Kathy Baker PMED/USACE
Corp of Engineers, Kansas City District
601 E. 12th Street
Kansas City, MO 64106

Contract: Closure of Burn Pad 5, Burn Pad 6 and Burn Pad 6 Trenches
Kansas Army Ammunition Plant, Kansas
Contract No.: W912DQ-09-D-3016
Delivery Order No.: 0004

RE: Addendum to Field Sampling Plan, Quality Assurance Project Plan, Work Plan and Explosive Safety Submission

Dear Ms. Baker:

Enclosed is the *Addendum to Field Sampling Plan, Quality Assurance Project Plan, Work Plan and Explosive Safety Submission* for the above referenced project at the Kansas Army Ammunition Plant, Kansas. Two hard copies and two CD copies are enclosed. Please let me know if there are any questions..

Sincerely,
CAPE

Brian Weith, PG,
Senior Project Manager

cc:	Ken Herstowski (EPA)	3 hardcopy reports; 3 CD copies
	Mostafa Kamal (KDHE- BWM)	2 hardcopy reports; 2 CD copies
	Jamie Schwartz (KDHE- BER)	2 hardcopy reports; 2 CD copies
	Rose Zeiler (Army- BRAC)	1 hardcopy report; 1 CD copy
	Don Dailey (KSAAP)	2 hardcopy reports; 2 CD copies

Enclosure

1565 Scenic Avenue Suite A▲ Costa Mesa, California 92626
(714) 599-9071 ▲ Fax (714) 599-9087

Bureau of Environmental Remediation
Curtis State Office Building
1000 SW Jackson St., Suite 410
Topeka, KS 66612-1367

Robert Moser, MD, Secretary

Kansas
Department of Health and Environment

phone: 785-291-3089
fax: 785-296-4823
aallen@kdheks.gov
www.kdheks.gov

Sam Brownback, Governor

September 9, 2011

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Department of Army letter, request for No Further Action for the Old Ammunition Storage Area, Kansas Army Ammunition Plant, Parsons, Kansas, dated August 25, 2011

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed the above reference letter, submitted by the Army via e-mail on August 25, 2011. In the letter, the Army reports that site investigations conducted at the Old Ammunition Storage Area (OASA) found no evidence of munitions debris (MD) or munitions and explosives of concern (MEC), and the Army requests No Further Action for the OASA. The Army's letter projects that the land parcel containing the OASA will transfer to the Day and Zimmerman for future industrial land use. KDHE/BER is aware of a series of geophysical investigations through the most recent in 2011; and in 2011 the Army reported completion of 100 percent area coverage of the OASE and found no evidence of MD or MEC. KDHE/BER is not aware of remaining technical issues for the OASE, and provides concurrence.

If you have any questions please call me at (785) 291-3089.

Sincerely,

Ashley Allen, LG
Environmental Scientist
Superfund Unit/Assessment & Restoration Section

cc: Ashley Allen→ KAAP, Old Ammunition Storage Area (C3-050-72533-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Rose Zeiler, KSAAP BRAC Environmental Coordinator
Don Dailey, KSAAP Commander's Representative
Kathy Baker, USACE Project Manager, PMP
Eric Cloud, USACE Project Manager, HTRW

DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
635 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2894

REPLY TO
ATTENTION OF

August 25, 2011

Environmental Programs Branch

Jamie Schwartz
Kansas Department of Health and Environment Bureau of Remediation
Curtis State Office Bldg
1000 SW Jackson St., Suite 410
Topeka, Kansas 66612

Dear Ms. Schwartz,

The U.S. Army is requesting your concurrence on the declaration of No Further Action for the Old Ammunition Storage Area. Site investigations conducted at this site have found no evidence of munitions debris (MD) or munitions of explosive concern (MEC). The analytical results of soil samples collected at the site were below screening criteria for explosives and metals. The parcel containing the Old Ammunition Storage Area is included in the parcel projected to transfer to Day and Zimmerman for their continued industrial use. We request a letter of concurrence to the No Further Action finding at your earliest convenience.

Sincerely,

Kathy Baker

Kathy Baker
Project Manager

Bureau of Environmental Remediation
Curtis State Office Building
1000 SW Jackson St., Suite 410
Topeka, KS 66612-1367

Robert Moser, MD, Secretary

Kansas
Department of Health and Environment

phone: 785-291-3
fax: 785-296-4
aallen@kdheks.
www.kdheks.

Sam Brownback, Gover

April 20, 2011

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Army's request for plugging MW-7-12 and MW-19-5 in the 1100 Area, SWMU Group 1 Kansas Army Ammunition Plant, Parsons, Kansas

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) h reviewed a request for plugging the above referenced monitoring wells. The Army provided the request a rational for plugging the monitoring wells in correspondence dated January 31, 2011, and March 30, 2011. T 1100 Area contains known RDX and tetrachloroethene (a.k.a. PCE) groundwater contamination. The Army h evaluated that the monitoring wells relative to the known groundwater contaminant plumes and reported t well are no longer necessary. KDHE/BER generally concurs with the monitoring well removal/plugging MW-7-12 and MW-19-5, but anticipates installation of wells to identify the PCE source area discussed in t KDHE/BER letter dated November 12, 2011.

If you have any questions please call me at (785) 291-3089.

Sincerely,

Ashley Allen, L.G.
Environmental Scientist
Superfund Unit/Assessment & Restoration Section

cc: Ashley Allen → KAAP, SWMU-Group 10, 1100 Area (C3-050-71409-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Eric Cloud/Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP-Parsons

Bureau of Environmental Remediation
Curtis State Office Building
1000 SW Jackson St., Suite 410
Topeka, KS 66612-1367

Robert Moser, MD, Secretary

Kansas
Department of Health and Environment

phone: 785-291-3089
fax: 785-296-4823
aallen@kdheks.gov
www.kdheks.gov

Sam Brownback, Governor

April 19, 2011

RECEIVED
APR 20 2011
BUREAU OF WASTE MANAGEMENT

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Army request for plugging MW 3-13, MW 7-13, and MW 11-13 in 1100 Area, SWMU Group 10, Kansas Army Ammunition Plant, Parsons, Kansas

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed a request for plugging the above referenced monitoring wells. Page 6 of the *Technical Memorandum 1100 Area PCE Investigation Quarterly Groundwater Sampling Summary and Recommendations* (Report), dated March 2011, and received on April 13, 2011, proposes the plugging of the monitoring wells. The Army requested an accelerated review and approval for the well pluggings by April 20, 2011. KDHE/BER conditionally approves the plugging of the well with the following comments.

Comments

1. To address the Army's request for plugging MW 3-13, MW 7-13, and MW 11-13, KDHE/BER performed a limited review of Figures 3 and 4, and the raw data in Appendices A and C of the Report. The Report indicates MW 3-13 and MW 7-13 as shallow monitoring wells, and MW 11-13 as a deep monitoring well. Based on a limited review of the raw sample data disseminated in the appendices, it appears the wells have been sampled for multiple events and the chlorinated solvent and explosive compound contaminants of concern in the 1100 Area, have not historically been detected in that MW 3-13, MW 7-13, and MW 11-13, and the wells are outside of the contaminant plumes. KDHE/BER concurs with the plugging of wells (a.k.a. well abandonment).

2. This approval applies only to the plugging of the wells, and KDHE/BER plans a routine regulatory review for the remainder of the Report at a later date.

If you have any questions please call me at (785) 291-3089.

Sincerely,

Ashley Allen, L.G.
Project Coordinator
Superfund Unit/Assessment & Restoration Section

cc: Ashley Allen → KAAP, SWMU-Group 10, 1100 Area (C3-050-71409-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Eric Cloud/Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP

Richard Flanary

From: Richard Flanary
Sent: Tuesday, April 19, 2011 11:00 AM
To: 'sforman@arainc.net'
Cc: 'Baker, Kathy T NWK'; 'Zeiler, Rose Ms CIV USA OSA'; 'Dailey, Don'; 'Cloud, Eric D NWK'; Herstowski.Ken@epamail.epa.gov; Ashley Allen; Mostafa Kamal; Akhter Hossain; Jamie Schwartz; Charles Bowers
Subject: KAAP Addendum to April 2010 Volume 1 Work Plan for the Investigation of Magnetic Anomalies at Burn Pad 6 Approval EPA ID No. KS0213820467
Attachments: BP6 Mag Anom Add 041811comp.pdf

Ms. Forman,

We have reviewed ARA's attached April 18, 2011 letter transmitting the Addendum to the Work plan for Burn Pad 6. The Bureau of Waste Management is only responsible for closure of Burn Pad 5 which is a RCRA Interim Status Unit. We defer approvals concerning the closure of Burn Pad 6 which is a Solid Waste Management Unit (SWMU) undergoing RCRA Corrective Action to The Bureau of Environmental Remediation and EPA.

Sincerely,

Richard L. Flanary, PE, M.S.
Hazardous Waste Permits Section
Phone: 785-296-6562
Fax: 785-296-1592

From: sforman@arainc.net [mailto:sforman@arainc.net]
Sent: Monday, April 18, 2011 1:59 PM
To: 'Zeiler, Rose Ms CIV USA OSA'; 'Baker, Kathy T NWK'; 'Cloud, Eric D NWK'; 'Dailey, Don'; Herstowski.Ken@epamail.epa.gov; Ashley Allen; Mostafa Kamal; Richard Flanary; Akhter Hossain; Jamie Schwartz
Subject: mag anom invest addendum

Please see the attached addendum for your approval by April 22. Thanks.
Sarah
Kathy-please let me know if I've missed anyone.

ARA
ENGINEERING ~ SCIENCES

April 18, 2011

Ms. Kathy Baker
U.S. Army Corps of Engineers, Kansas City
District (USACE)
601 E. 12th Street
Kansas City, MO 64106

RE: Addendum to Work Plan for Burn Pad 6 - Excavation of Magnetic Anomalies-Revised
Kansas Army Ammunition Plant
Parsons, Kansas

Dear Ms. Baker:

The attached addendum to the April 2010 work plan covers the investigation/excavation and sampling of disposal anomalies around Burn Pad 5 and Burn Pad 6. These locations were selected based upon the results of the geophysical survey of Burn Pads 5 and 6 which occurred In December 10-11, 2009 and February 8-10, 2010. There are 12 associated smaller anomalies located at Burn Pad 6 and two small anomalies located at Burn Pad 5. Details are discussed in the attached addendum.

If you have any questions or concerns, please feel free to contact me at the office at (443) 609-4043, or by email at sforman@arainc.net.

Sincerely,

Sarah R. Forman

Sarah R. Forman, P.G.
Project Manager
ARA Inc.
7520 Main Street, Ste. 103
Sykesville, MD 21784

Attachments: Addendum to Work Plan
Figure 1 Pit Locations for Investigation
Appendix A Burial & Storage Pad Site Locations
Appendix B June 2010 Geophysical Report
Response to Comments

CC: John Coughlin, ARA Inc.

Richard Flanary

From: Richard Flanary
Sent: Friday, April 15, 2011 10:19 AM
To: BWM ImageNow
Subject: FW: KSAAP Burn Pad 5 Confirmatory Extended Sampling List Approval EPA ID No. KS0213820467
Attachments: BP5 ExtAnaResLtr022311compressed.pdf

Ms. Baker,

We have reviewed ARA's attached February 23, 2011 letter transmitting the Validated Extended List Soil Sampling Results for Burn Pad 5. Based on this information the Extended Analyte List Samples in the Hits Summary Table is approved.

Sincerely,

Richard L. Flanary, PE, M.S.
Hazardous Waste Permits Section
Phone: 785-296-6562
Fax: 785-296-1592

-----Original Message-----
From: Baker, Kathy T NWK [mailto:Kathy.T.Baker@usace.army.mil]
Sent: Thursday, April 14, 2011 9:45 AM
To: Baker, Kathy T NWK; sforman@arainc.net; Herstowski.Ken@epamail.epa.gov; Jamie Schwartz; Akhter Hossain; Mostafa Kamal; Richard Flanary
Cc: Zeiler, Rose ; Cloud, Eric D NWK; Charles Bowers
Subject: RE: KSAAP Burn Pad 5 Confirmatory Sampling List (UNCLASSIFIED)

All,

We are ready to begin confirmatory sampling at Burn Pad 5. We need approval of the analyte list by Friday, April 15th. Please send concurrence by e-mail ASAP.

Thank you,

Kathy Baker
Project Manager, HTRW
U.S. Army Corps of Engineers
816-389-3906
cell: 816-392-1071
fax: 816-389-2023

Classification: UNCLASSIFIED
Caveats: NONE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

MAR 01 2011

RECEIVED
MAR 03 2011
BUREAU OF WASTE MANAGEMENT

Commander
Kansas Army Ammunition Plant
Attn: Mr. Don Dailey
23018 Rooks Rd.
Parsons, Kansas 67357-8403

RE: Review Comments
Final Old Ammunition Storage Area Site Inspection - Field Sampling Plan Addendum
Kansas Army Ammunition Plant
Parsons, Kansas
RCRA ID# KS0213820467

Dear Mr. Dailey:

The Environmental Protection Agency (EPA) Region 7 has reviewed the document titled "Final Old Ammunition Storage Area Site Inspection - Field Sampling Plan Addendum, Kansas Army Ammunition Plant," dated February 2011. EPA approves the work plan for implementation.

Please contact me at (913) 551-7631 if you have any questions.

Sincerely,

Kenneth Herstowski

Kenneth Herstowski
Air and Waste Management Division

cc: Jamie Schwartz, KDHE/BER
Mostafa Kamal, KDHE/BWM
Rose Zeiler, KSAAP
Kathy Baker, USACE

Bureau of Environmental Remediation
Curtis State Office Building
1000 SW Jackson St., Suite 410
Topeka, KS 66612-1367

Robert Moser, MD, Secretary

Kansas
Department of Health and Environment

phone: 785-291-3245
fax: 785-296-4823
jlschwartz@kdheks.gov
www.kdheks.gov

Sam Brownback, Governor

February 28, 2011

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: ***Draft Final Old Ammunition Storage Area Site Inspection Field Sampling Plan Addendum*, Kansas Army Ammunition Plant, Parsons, Kansas, dated November 2010**

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has completed its review of the above reference document, received on November 16, 2010. At this time KDHE/BER approves the Work Plan with the following information noted regarding the use of a hand-held magnetometer for this investigation.

In the December 22, 2010 correspondence, KDHE/BER requested the addition of electromagnetic induction (EMI) surveying of the former areas which contained gravel pads that reportedly staged the munitions. On 2/3/11, KDHE/BER responded to the Army's response to comments requesting for the Army to provide case histories for use of the proposed make and model of Schonstedt hand-held magnetometer under similar field conditions to detect munitions and explosives of concern. The Army responded on 2/28/11, indicating several sites which have used this technology successfully in past investigations and will use the hand-held magnetometer during this investigation.

If you have any questions please call me at (785) 291-3245.

Sincerely,

Jamie Schwartz
Project Manager
Superfund Unit/Assessment & Restoration Section

Ashley Allen, L.G.
Project Coordinator
Superfund Unit/Assessment & Restoration Section

cc: Ashley Allen→ KAAP, Old Ammunition Storage Area (C3-050-72533-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP

Richard Flanary

From: Richard Flanary
Sent: Thursday, February 24, 2011 3:21 PM
To: 'Baker, Kathy T NWK'
Cc: Zeiler, Rose ; Cloud, Eric D NWK; Charles Bowers; sforman@arainc.net; Herstowski.Ken@epamail.epa.gov; Jamie Schwartz; Akhter Hossain; Mostafa Kamal
Subject: RE: KSAAP Burn Pad 5 Confirmatory Sampling List (UNCLASSIFIED)

Kathy,

The Contaminants of Concern, List of Analytes Based on the Extended List Samples Results is approved.

Please note that Arsenic; 2,3,7,8-TCDD; 2,4,6-Trinitrotoluene and RDX residual soil concentrations remaining at Burn Pad 5 after soil removal are above the Residential Soil to Groundwater RSK values required to be met to attain clean closure. This assumes groundwater monitoring well installation and sampling yields no groundwater contamination issues that would preclude Burn Pad 5 from being clean closed.

Sincerely,

Richard L. Flanary, PE, M.S.
Hazardous Waste Permits Section
Phone: 785-296-6562
Fax: 785-296-1592
email: rflanary@kdheks.gov

From: Baker, Kathy T NWK [mailto:Kathy.T.Baker@usace.army.mil]
Sent: Wednesday, February 23, 2011 3:33 PM
To: sforman@arainc.net; Herstowski.Ken@epamail.epa.gov; Jamie Schwartz; Akhter Hossain; Mostafa Kamal; Richard Flanary
Cc: Zeiler, Rose ; Baker, Kathy T NWK; Cloud, Eric D NWK; Charles Bowers
Subject: KSAAP Burn Pad 5 Confirmatory Sampling List (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

All,

Please see the attached. This is the list of analytes that will be utilized in the confirmatory sampling at Burn Pad 5. This list includes the short list analytes plus any detections from the 5 extended analyte list samples collected. We need to move forward on stockpile characterization at Burn Pad 5 so your quick review and approval of the attached is appreciated.

Please let me know if you have any concerns or questions.

Thank you,

Kathy Baker
Project Manager, HTRW
U.S. Army Corps of Engineers
816-389-3906

cell: 816-392-1071
fax: 816-389-2023

Classification: UNCLASSIFIED
Caveats: NONE

ARA
ENGINEERING SCIENCES

February 23, 2011

US Army Corps of Engineers, Kansas City District
Attention: Ms. Kathy Baker
601 E. 12th Street
Kansas City, MO 64106

Re: Extended Analyte List Soil Sampling Results for Burn Pads 5-Validated
Kansas Army Ammunition Plant (KSAAP)
Parsons, KS

Dear Ms. Baker:

During operations at the Kansas Army Ammunition Plant, Burn Pad 5, composite soil samples were collected from the cleared pad (four soil samples) and one from the actual cleared stock piled pad soils to evaluate the most contaminated areas on the burn pad. Results will be used to compile the analyte list for the remaining confirmation samples for Burn Pad 5. Five extended analyte list soil samples were collected on December 21, 2010 and sent to CT Laboratories for analysis.

The attached Hits Summary Table presents only detected analytes, which was used to compile the attached Table of COCs for Burn Pad 5 Soil Samples. The Trip Blank shown in the Hits table was only analyzed for VOCs, thus the use of "N/A" for the remaining tabulated analytes. The COCs List shows which analytes are on the short analyte list and which are on the extended analyte list for easy reference. Results are presented in further detail in Attachment A, which presents the Validation Review Summary and tables of all analytical results.

The Attachment A Tables of the Extended List VOCs, SVOCs, pesticides, PCBs, herbicides, explosives, wet chemistry, metals, and dioxin present the results for all analytes, including those not detected. These Tables also present data qualifiers and reason codes resulting from the data validation effort.

Should you have any question, or need any additional information, please do not hesitate to contact me at 443-609-4043.

Sincerely,

Sarah R. Forman, P.G.
Project Manager
ARA Inc.
7520 Main Street, Ste. 103

Bureau of Air
Curtis State Office Building
1000 SW Jackson, Suite 310
Topeka, KS 66612-1366

Phone: 785-296-1544
Fax: 785-296-7455
rbrichac@kdheks.gov
www.kdheks.gov/bar

Kansas

Robert Moser, MD, Acting Secretary

Department of Health & Environment

Sam Brownback, Governor

January 21, 2011

Steve Kosman
Day and Zimmermann, Inc.
23018 Rooks Road
Parsons, Kansas 67357-8403

RE: Request for Limited Exceptions from K.A.R. 28-19-645, Open Burning Prohibition for specific open burning activities by Day and Zimmermann, Inc. owner and operator of the Kansas Army Ammunition Plant (KSAAP) Source ID No. 0990010, during calendar year 2011

Dear Mr. Kosman:

On January 13, 2011, the Kansas Department of Health and Environment (KDHE) received the Day and Zimmermann, Inc. (DZI) request for an extension to the Calendar Year 2010 exception to K.A.R. 28-19-645 for open burning activities at the DZI facility to perform flashing operations of explosive-contaminated production equipment. DZI's 2010 exception allowed the flashing operations be conducted in the Open Detonation (OD) Area within the DZI Kansas LLC footprint for calendar year 2010. Production equipment approved in the exception to be flashed was explosive contaminated and posed a threat to human health and safety if not flashed prior to recycling.

In a telephone conversation with Mr. Dean Cramer, on January 20, 2011, DZI's Mr. Cramer was informed the department does not grant extensions to previous annual exceptions but the department can issue a new exception for calendar year 2011 based upon the January 13, 2011 extension request with requirements and limitations contained in the 2010 exception.

Exception to the open burning prohibitions can be granted by KDHE under specific limitation and conditions, in accordance with the provisions of K.A.R. 28-19-647, *Exception to prohibition on open burning*. Under K.A.R. 28-19-647(f), KDHE may issue an approval for open burning operations that does not meet the conditions set forth in subsection (f) upon clear demonstration that the proposed burning:

(1) is necessary and in the public interest

(2) can be conducted in a manner that will not result in emissions which may be injurious to human health, animal or plant life, or property, or may unreasonably interfere with the enjoyment of life or property; and

(3) will be conducted in accordance with such conditions as KDHE deems necessary.

KDHE hereby conditionally grants approval for open burning exceptions in accordance with requirements contained of K.A.R. 28-19-647(b), (c), (d), and (e) and with the following additional requirements in accordance with K.A.R. 28-19-647(f) as follows:

1. **Flashing of Explosive Contaminated Equipment**– Explosive contaminated equipment will conducted in the OD area as proposed in the January 13 2011 letter, and by the DZI Safety Department. These flashing operations will use a small amount of clean scrap wood, sufficient to create enough heat to consume the explosive contaminants and render the equipment safe for handling and recycling. No other materials, explosive contaminated or not, are approved for open burning or flashing, including but not limited to asbestos-containing materials, wet or dry sumpage wastes, fuse assemblies, or support collar assemblies. In addition, explosive contaminated equipment with paints, sealants or coatings containing polychlorinated biphenyls (PCBs) in concentrations equal to or greater than 50 parts per million (ppm) shall not be flashed or burned under this exception.

2. DZI will provide KDHE with monthly reports to document the flashing activities conducted each month, including a brief description of the type of equipment flashed and location. The reports are due 30 days after the end of each month when flashing operations have been conducted by DZI.

3. KDHE may revoke this open burning approval at any time where KDHE deems appropriate and justified, without the 30 day notice as contain in K.A.R. 28-19-647(e)(9).

4. This open burning approval expires on December 31, 2011. Open burning activities after this date will require another exception approval to be issued by KDHE.

If you have any additional questions or concerns related to the approval or applicable state or federal regulations, please contact me at (785) 296-1544 or by email at rbrichac@kdheks.gov.

Sincerely,

Russ Brichacek

Russ Brichacek
Environmental Scientist
Air Compliance & Enforcement Section

RB:csm
c: Doug Cole - SEDO
Mostafa Kamal – BWM
Ashley Allen - BER
File

KANSAS

Mark Parkinson, Governor
John W. Mitchell, Acting Secretary

DEPARTMENT OF HEALTH
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Division of Environment

January 7, 2011

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: ***Burn Pad 6 – Letter Work Plan for Excavation of Magnetic Anomalies*, Kansas Army Ammunition Plant, Parsons, Kansas, dated November 9, 2010**

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed the referenced document (letter), received on November 15, 2010. KDHE/BER understands that this letter is a separate scope of work from the *Closure of Explosive Waste Incinerator, Pistol Range, and Burn Pads 5 and 6 Work Plan,* submitted in April 2010. The letter does not appear to be adequate to substitute for a customary work plan for this level of work. KDHE/BER suggests submission of a customary work plan that discusses in detail Munitions and Explosives of Concern clearance as well as characterization, delineation, and remediation of potentially contaminated soil and groundwater at this site. The customary work plan should include, but is not limited to, detailed site history, previous investigations, data quality objectives, sampling and analysis plan, etc.

If you have any questions please call me at (785) 291-3245.

Sincerely,

Jamie Schwartz
Project Manager
Superfund Unit/Assessment & Restoration Section

cc: Ashley Allen → Open Burning Pads 5-6 (C3-050-71395-1)
Mostafa Kamal, KDHE/BWM
Charles Bowers, KDHE/SEDO
Renee Brown, KDHE/SEDO
Eric Cloud, USACE
Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP

DIVISION OF ENVIRONMENT
Bureau of Environmental Remediation
Curtis State Office Building, 1000 SW Jackson St., Suite 410, Topeka, KS 66612-1367
Voice: 785-291-3245 Fax: 785-296-4823 Email: jlschwartz@kdheks.gov

KANSAS

DEPARTMENT OF HEALTH
AND ENVIRONMENT

Division of Environment

Mark Parkinson, Governor
John W. Mitchell, Acting Secretary

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December 22, 2010

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: ***Draft Final Old Ammunition Storage Area Site Inspection Field Sampling Plan Addendum*, Kansas Army Ammunition Plant, Parsons, Kansas, dated November 2010**

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed the referenced document (Field Sampling Plan Addendum), received on November 16, 2010. KDHE/BER provides the following comments.

General Comments:

1. In general, KDHE/BER understands that electromagnetic induction (EMI) is the preferred instrument when assessing small, shallow targets while a magnetometer is better equipped for large, deep targets (ITRC – *Geophysical Prove-Outs for Munitions Response Projects,* 2004). KDHE/BER requests the addition of EMI surveying of the former areas which contained gravel pads that reportedly staged the munitions.

2. KDHE/BER requests that a series of historical aerial photography pertinent to the activities at the Old Ammunition Storage Area be submitted in order to provide a historical, aerial representation of the activities at this site.

Specific Comments:

3. Page 3-1, Section 3.2.1: The title of this section includes vegetation clearance; however, there is no mention of what vegetation clearance will be conducted as part of the field

DIVISION OF ENVIRONMENT
Bureau of Environmental Remediation
Curtis State Office Building, 1000 SW Jackson St., Suite 410, Topeka, KS 66612-1367
Voice: 785-291-3245 Fax: 785-296-4823 Email: jlschwartz@kdheks.gov

investigation. KDHE/BER requests that this section indicate what field clearance will occur during the field investigation activities.

4. Page 3-2, Section 3.2.2: This section states that 100% of the 27-acre site will undergo a geophysical survey using a hand-held detector. KDHE/BER understands this to include the gravel pad areas located within the turnaround drives, visible in Figure 4-1.

   The surface assessment indicates that a hand-held detector will be used to identify possible Munitions and Explosives of Concern (MEC). It is not stated what type of hand-held detector will be used. Please revise this section to include the type of detection equipment to be used during the surface assessment.

   Additionally, KDHE/BER requests an attempt to locate the former gravel pads during the visual survey. These gravel pads were reportedly located within the turnaround drive areas and were used as munitions storage pads.

5. Figures: There is not a figure which indicates the proposed sampling pattern for the surface assessment. KDHE/BER suggests that a figure indicating the proposed sampling pattern for the surface assessment be included.

6. Figure 4-1: The figure shows a historical aerial photograph in which the former ammunition storage areas can be seen. KDHE/BER requests that the date of the aerial photography be included on this figure for reference.

7. Attachment 2: This attachment indicates that the Standard Operating Procedures (SOPs) are located in the original Field Sampling Plan (FSP), dated 2007. KDHE/BER suggests that all SOPs pertaining to the current scope of work be included with the FSP Addendum.

   SOP number 16 lists the procedures for identifying MEC during the surface assessment. There is no mention of the instrument calibration and performance verification procedures and frequency to be conducted during the surface assessment. KDHE/BER requests that this information be reviewed and included in the SOP.

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Bureau of Environmental Remediation
Curtis State Office Building, 1000 SW Jackson St., Suite 410, Topeka, KS 66612-1367
Voice: 785-291-3245 Fax: 785-296-4823 Email: jlschwartz@kdheks.gov

If you have any questions please call me at (785) 291-3245.

Sincerely,

Jamie Schwartz
Project Manager
Superfund Unit/Assessment & Restoration Section

Ashley Allen, L.G.
Project Coordinator
Superfund Unit/Assessment & Restoration Section

cc: Bob Jurgens → Old Ammunition Storage Area (C3-050-72533-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Brooks Evens, USACE
Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP

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December 6, 2010

Kathy Baker
Project Manager, HTRW
U.S. Army Corps of Engineers PM-ED
601 East 12th Street
Kansas City, Missouri 64106

Re: Burn Pad 5 Closure Plan Sampling & Analysis Plan Modification Approval
Kansas Army Ammunition Plant Parsons
EPA ID No. KS0213820467

Dear Ms Baker

We received a November 4, 2010 email from Ms. Sarah Forman, ARA Project Manager, transmitting a letter dated November 2, 2010, requesting changes to the Sampling and Analysis Plan contained in the approved Burn Pad 5 Closure Plan.

The Kansas Department of Health and Environment (KDHE) is concerned that the approved Closure Plan is not being followed. Sampling of soil for the extended analytes list after sifting does not follow the requirements of the approved Closure Plan. These samples were to be collected before the soil was mixed/sifted in order to identify all of the underlying hazardous constituents necessary for verification of closure.

We understand the army's concerns for collecting samples in-situ with respect to the presence of unexploded ordinance (UXO); however, it should not have been difficult or particularly dangerous to collect soil samples [from the excavator bucket, etc.] during the continuation of the excavations.

Therefore, we are approving sampling of the ash layer, soils from locations A1 through A3 and the residuum soil from location A4 for the extended list and expect that all verification sampling for the short list of soils or residuum soil will occur at each of the locations depicted in Figure 5-1 of the approved Closure Plan. Any bedrock contamination detected above the approved clean closure values will require further removal, disposal or post closure care.

Should there be a technical question regarding the Closure Plan, please contact Richard Flanary at (785) 296-6562. For any other questions, please feel free to call me at (785) 296-1609.

Sincerely,

M. Kamal

Mostafa Kamal, PE, CPM
Chief, Hazardous Waste Permits Section
Bureau of Waste Management

cc Rose Zeiler – Army/BRAC
Ken Herstowski - EPA Region 7/AWMD/RCAP
Jamie Schwartz – KDHE/BER
Sarah Forman - ARA
Charles Bowers – SEDO/Waste Programs
William Bider - BWM

KANSAS

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November 30, 2010

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Final Work Plan, Water Towers Corrective Measures Design Investigation/Removal Action, Kansas Army Ammunition Plant, Parsons, Kansas, dated November 2010

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has competed its review of the above reference document, received on November 23, 2010. No comments were generated from KDHE/BER's review. At this time KDHE/BER approves the Work Plan.

If you have any questions please call me at (785) 291-3245.

Sincerely,

Jamie Schwartz
Environmental Scientist and Project Manager
Superfund Unit/Assessment & Restoration Section

cc: Ashley Allen→Bob Jurgens→ Water Tower 1 (C3-050-71421-1), Water Tower 2 (C3-050-71422-1), Water Tower 3 (C3-050-71419-1), Water Tower 4 (C3-050-71420-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP

KANSAS

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Division of Environment

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John W. Mitchell, Acting Secretary

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November 12, 2010

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Request for Identification of Source Area of Chlorinated Solvent Plume in the 1100 Area, Kansas Army Ammunition Plant, Parsons, Kansas

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has concerns about the source area of tetrachloroethene (PCE) and trichloroethene (TCE) plumes that exist in the 1100 Area. The source has been discussed in the *Technical Memorandum (Tech Memo), 1100 Area PCE Investigation, Monitoring Well Installation and Groundwater Sampling*, dated January 2010, and during the July 14, 2010 and October 26, 2010 Quarterly Corrective Action Meetings. The Army has verbally indicated the small building and the railroad track areas as potential source areas for the PCE and TCE groundwater contamination; however, the source continues to remain unidentified. KDHE/BER requests the source areas be identified for remediation to prevent on going and future groundwater contamination.

If available, KDHE/BER also requests that the building number of the small storage building located between buildings 1102 and 1104 be determined for future reference in all documents regarding this site.

DIVISION OF ENVIRONMENT
Bureau of Environmental Remediation
Curtis State Office Building, 1000 SW Jackson St., Suite 410, Topeka, KS 66612-1367
Voice: 785-291-3245 Fax: 785-296-4823 Email: jlschwartz@kdheks.gov

If you have any questions please call me at (785) 291-3245.

Sincerely,

Jamie Schwartz
Project Manager
Superfund Unit/Assessment & Restoration Section

Ashley Allen, L.G.
Environmental Scientist
Assessment & Restoration Section

cc: Bob Jurgens → Kansas Army Ammunition Plant (C3-050-00021-1), 1100 Area (C3-050-71409-1)
Ashley Allen, KDHE/BER
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Eric Cloud, USACE
Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP

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Bureau of Environmental Remediation
Curtis State Office Building, 1000 SW Jackson St., Suite 410, Topeka, KS 66612-1367
Voice: 785-291-3245 Fax: 785-296-4823 Email: jlschwartz@kdheks.gov

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November 12, 2010

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Request for Identification of Source Area of 1,1-Dichloroethene Plume in the 1000 Area, Kansas Army Ammunition Plant, Parsons, Kansas

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed historical documents indicating the presence of 1,1-Dichloroethene (DCE) in one groundwater monitoring well in the 1000 Area. The contaminant has been present at concentrations above the clean-up goal during three groundwater monitoring events; therefore, the source of contamination needs to be identified. As discussed during the October 26, 2010 Quarterly Corrective Action Meeting, the United States Army Corps of Engineers (USACE) will conduct research to determine a source of the 1,1-DCE contamination. KDHE/BER requests the source area be identified for remediation to prevent on going and future groundwater contamination.

If you have any questions please call me at (785) 291-3245.

Sincerely,

Jamie Schwartz
Project Manager
Superfund Unit/Assessment & Restoration Section

Ashley Allen, L.G.
Environmental Scientist
Superfund Unit/Assessment & Restoration Section

DIVISION OF ENVIRONMENT
Bureau of Environmental Remediation
Curtis State Office Building, 1000 SW Jackson St., Suite 410, Topeka, KS 66612-1367
Voice: 785-291-3245 Fax: 785-296-4823 Email: jlschwartz@kdheks.gov

cc: Bob Jurgens → Kansas Army Ammunition Plant (C3-050-00021-1), 1000 Area (C3-050-71408-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Eric Cloud, USACE
Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP

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Bureau of Environmental Remediation
Curtis State Office Building, 1000 SW Jackson St., Suite 410, Topeka, KS 66612-1367
Voice: 785-291-3245 Fax: 785-296-4823 Email: jlschwartz@kdheks.gov

ARA
ENGINEERING SCIENCES

November 9, 2010

Ms. Kathy Baker
U.S. Army Corps of Engineers, Kansas City
District (USACE)
601 E. 12th Street
Kansas City, MO 64106

RE: Burn Pad 6 – Work Plan for Excavation of Magnetic Anomalies
Kansas Army Ammunition Plant
Parsons, Kansas

Dear Ms. Baker:

This work plan covers the investigation/excavation and sampling of disposal pits around Burn Pad 5 and Burn Pad 6. These locations were selected based upon the results of the geophysical survey of Burn Pads 5 and 6 which occurred In December 10-11, 2009 and February 8-10, 2010. There are 12 associated smaller pits located at Burn Pad 6 and two small pits located at Burn Pad 5. These pits are presented on Figure 1.

Geophysical mapping data was collected via an EM61-MK2, with a hand-pulled MK2 bottom coil array used for areas inaccessible to the vehicle towed array. This equipment allows the detection of ferrous (steel) and non-ferrous (aluminum, copper, brass) metals. Data was collected in a grid pattern. Significant quantities of metal fragments were located on the ground surface and mixed within the surface soils at Burn Pad 6. Additionally, manmade objects consisting of metal were located within the site. Two geophysical test plots were conducted in December 2009 and one in February 2010. Seeded items were used for these geophysical test plots. Additional in situ targets were also located and documented (see attached geophysical report for details). The geophysical investigation totaled 15.7 acres in the 2009-2010 surveys, including Burn Pads 5 and 6 and the associated total 14 smaller pits. Not all pits associated with Burn Pad 6 were located within 100 feet of the Burn Pad.

The two pits associated with Burn Pad 5, identified from the Geophysical Survey, were excavated in September 2010, as part of the excavation and MPPEH clearance and disposal activities at Burn Pad 5. Excavated soils were segregated and covered with plastic awaiting sampling and analysis for disposal, in accordance with the RCRA Closure Plan. Metallic debris was encountered, although no ordnance was found to be present in these pits. The 12 pits associated with Burn Pad 6, identified from the Geophysical Survey, will be investigated per this letter work plan. It is proposed that these pits be excavated and cleared for anomalies meeting characteristics of a "MPPEH-like anomaly". Depths and locations of anomalies will be recorded daily. The clearance depth(s) will be based on the depth(s) at which hand-held magnetometers (Schonstedt) indicate that metallic contacts are no longer detected.

Excavated soils will be placed on plastic sheeting and covered, awaiting sampling and analysis. Excavated soils will be sampled at a rate of one sample/100 cubic yards to characterize for reuse as backfill. If the soil contains waste that cannot be separated from the soil, it will be disposed of offsite. Confirmation

soil samples will be collected from each excavation base at a rate of one/900 square feet of excavation (or part thereof) and from every 30 linear feet of excavation wall (or part thereof) around the entire excavation, in accordance with the approved work plan. If excavations extend to bedrock (two to four feet below ground surface), no excavation base confirmation soil sample will be collected. Samples from the stockpiled soils from the pits and confirmation samples will be analyzed for explosives, TAL metals, PCBs, TCL SVOCS, TCL VOCs, and 2,3,7,8-TCDD.

Excavated soils and excavation confirmation samples will be screened first against the corrective measures decision values for pertinent analytes, screened second against EPA industrial regional screening levels, and screened third against KDHE Tier 2 Non-Residential Soil values. If excavation base or wall confirmation soil samples exceed the comparison criteria, additional excavation will be undertaken, followed by additional confirmation sampling iteratively until comparison criteria are achieved. Excavated soils below comparison criteria will be reused as backfill. Excavated soils exceeding comparison criteria will be disposed of in a properly permitted landfill, based on waste characteristics. Soils which receive concurrence from KDHE as suitable for disposal in a Construction and Demolition landfill will be disposed of at the Chanute Landfill located in Chanute, Kansas. Soils which receive concurrence from KDHE as suitable for disposal in a Subtitle D landfill will be transported to the City of Chanute Landfill located in Chanute, Kansas. Should results indicate that the soils are not suitable for disposal in a Construction and Demolition landfill or in a Subtitle D landfill, the soils will be disposed of in a Subtitle C landfill (either the Heritage Landfill in Indianapolis, Indiana or the Wayne Landfill in Belleville, Michigan). If soils are disposed of in a Kansas-permitted landfill, a disposal permit will be obtained from KDHE-BWM prior to transport and disposal activities. Upon regulatory concurrence, a notification of shipment will be provided to the disposal facility. This notification will identify the waste stream to be shipped, total volume of material anticipated for shipment and the first delivery date. Notifications of waste management activities at the site will be made in accordance with the requirements of applicable local, State, and Federal regulations. Documentation will be maintained.

If you have any questions or concerns, please feel free to contact me at the office at (443) 609-4043, or by email at sforman@arainc.net.

Sincerely,

Sarah R. Forman

Sarah R. Forman, P.G.
Project Manager
ARA Inc.
7520 Main Street, Ste. 103
Sykesville, MD 21784

Attachments: Figure 1 Pit Locations for Investigation
CC: John Coughlin, ARA Inc.

ARA
ENGINEERING SCIENCES 8(a) Woman Owned

November 2, 2010

US Army Corps of Engineers, Kansas City District
Attention: Ms. Kathy Baker
601 E. 12th Street
Kansas City, MO 64106

Subject: Burn Pad 5 MPPEH Clearance
Kansas Army Ammunition Plant
Parsons, KS

Dear Ms. Baker:

Prior to the implementation of closure activities at Burn Pad 5, ARA Inc. (ARA) must clear the pad and berm soils of Material Potentially Presenting and Explosive Hazard (MPPEH). Given the high metallic content of the pad soils at the surface and variable depths across the pad, ARA determined that the soils could not be hand cleared using a Schonstedt (hand-held magnetometer), and that the soils would require sifting to ensure the removal of MPPEH items. The surface soils at Pad 5 had a distinctive black color and ashy texture , these characteristics coupled with the magnetometer response, were used to guide the clearance process to get to soils which are free of MPPEH. During the course of this clearance, ARA had to excavate the pad soils to bedrock across nearly half of the pad area and to a depth of 6" below the surface across the remaining pad area. In total, approximately 1,500 cubic yards of soil were removed from the pad area. This material has been stockpiled within the foot print of the pad and will be sifted and stockpiled within the pad area for waste characterization then disposal. Soil excavated outside the pre-determined limits will be sampled for re-use. Figure 1 attached to this letter presents Burn Pad 5, the pre-delineated soil removal areas based on the Army's prior RFI activities (which will not be kept separate from the remaining soil), the original locations of the five extended analyte list samples, as well as the depth (to bedrock and to 6-inches).

The Closure Plan calls for sampling of the soils in a two-stage process with the first stage involving the collection and analysis of five Extended Analyte List samples. The intent of the Extended Analyte List samples is to determine the Pre-Remedial Action (Pre-RA) Characterization and Confirmation Sample Analytical List (short list plus any COCs detected in the five extended list samples). The stakeholders all agreed that two of these initial samples would be collected from locations on Burn Pad 5 where the highest levels of contamination had been detected during the previously conducted RCRA Facility Investigation activities. The remaining three samples would be collected at locations specified by KDHE-BWM. In the second stage of the Pre-RA Characterization, a soil sample was to be collected from each 30 foot

soil samples will be collected from each excavation base at a rate of one/900 square feet of excavation (or part thereof) and from every 30 linear feet of excavation wall (or part thereof) around the entire excavation, in accordance with the approved work plan. If excavations extend to bedrock (two to four feet below ground surface), no excavation base confirmation soil sample will be collected. Samples from the stockpiled soils from the pits and confirmation samples will be analyzed for explosives, TAL metals, PCBs, TCL SVOCS, TCL VOCs, and 2,3,7,8-TCDD.

Excavated soils and excavation confirmation samples will be screened first against the corrective measures decision values for pertinent analytes, screened second against EPA industrial regional screening levels, and screened third against KDHE Tier 2 Non-Residential Soil values. If excavation base or wall confirmation soil samples exceed the comparison criteria, additional excavation will be undertaken, followed by additional confirmation sampling iteratively until comparison criteria are achieved. Excavated soils below comparison criteria will be reused as backfill. Excavated soils exceeding comparison criteria will be disposed of in a properly permitted landfill, based on waste characteristics. Soils which receive concurrence from KDHE as suitable for disposal in a Construction and Demolition landfill will be disposed of at the Chanute Landfill located in Chanute, Kansas. Soils which receive concurrence from KDHE as suitable for disposal in a Subtitle D landfill will be transported to the City of Chanute Landfill located in Chanute, Kansas. Should results indicate that the soils are not suitable for disposal in a Construction and Demolition landfill or in a Subtitle D landfill, the soils will be disposed of in a Subtitle C landfill (either the Heritage Landfill in Indianapolis, Indiana or the Wayne Landfill in Belleville, Michigan). If soils are disposed of in a Kansas-permitted landfill, a disposal permit will be obtained from KDHE-BWM prior to transport and disposal activities. Upon regulatory concurrence, a notification of shipment will be provided to the disposal facility. This notification will identify the waste stream to be shipped, total volume of material anticipated for shipment and the first delivery date. Notifications of waste management activities at the site will be made in accordance with the requirements of applicable local, State, and Federal regulations. Documentation will be maintained.

If you have any questions or concerns, please feel free to contact me at the office at (443) 609-4043, or by email at sforman@arainc.net.

Sincerely,

Sarah R. Forman, P.G.
Project Manager
ARA Inc.
7520 Main Street, Ste. 103
Sykesville, MD 21784

Attachments: Figure 1 Pit Locations for Investigation
CC: John Coughlin, ARA Inc.

ARA
ENGINEERING & SCIENCES

Letter of Transmittal

Date: October 21, 2010

To: Mr. Mostafa Kamal
Kansas Dept. of Health and Environment
Curtis State Office Building
1000 SW Jackson Street
Topeka, KS 66612

From: Mr. John Coughlin
ARA Inc.
7520 Main Street
Suite 103
Sykesville, MD 21784

RE: KSAAP

Mr. Mostafa Kamal:

ARA is pleased to provide you with the following information for the Closure of the Explosive Waste Incinerator, Pistol Range, and Burn Pads 5 and 6 for the Kansas Army Ammunition Plant.

- 2 hard copies of the Work Plan replacement pages w/changes highlighted (Volume 1)
- 2 hard copies of the Work Plan replacement pages w/o changes highlighted (Volume 1) for inclusion into the bound version you already have.
- 2 hard copies of the Sampling and Analysis Plan - Field Sampling Plan replacement pages w/ changes highlighted (Volume 2A)
- 2 hard copies of the Sampling and Analysis Plan - Field Sampling Plan replacement pages w/o changes highlighted (Volume 2A) for inclusion into the bound version you already have.
- 2 hard copies of the Explosive Waste Incinerator Closure Plan replacement pages w/ changes highlighted.
- 2 hard copies of the Explosive Waste Incinerator Closure Plan replacement pages w/o changes highlighted for inclusion into the bound copy you already have.

Please distribute one copy to Akhter and one copy to Richard. If you have any questions or comments regarding this transmittal please feel free to contact me.

Best Regards:

John Coughlin
Director, Engineering and Sciences

Comment No.	Commenter	Page	Document	Specific Comment	ARA Response
1	KDHE-BER	4-20	Work Plan (EWI Comment)	KDHE/BER notes that the proposed investigation and sampling for the aboveground storage tank at the Explosive Waste Incinerator should be consistent with the requirements for the AST Construction Work Plan which were communicated by KDHE and EPA in correspondence on November 25, 2009 and by KDHE/BER in correspondence on May 18, 2010. These procedures include, but are not limited to, the removal of the containment at all AST locations where the tank is not being transferred, a visual inspection beneath the containment for potential contamination, and groundwater sampling at all AST exhibiting signs of a release.	The Work Plan and relevant section of the Closure Plan will be amended to indicate that the containment walls and the containment pad slab will be demolished and the soil beneath will be inspected for signs of release. Should signs of releases be observed a soil sample will be collected from under the pad and analyzed for TPH-DRO and TPH-GRO. If TPH-DRO or GRO are detected at concentrations exceeding the KDHE Residential Soil to Groundwater Pathway level, a ground water sample will be collected via a hydropunch sample or other open borehole method. The groundwater sample will be analyzed for TPH-DRO and TPH-GRO. No staining was observed on the inside of the containment area around the AST. Additionally, the tank still contained approximately 3" of diesel fuel when ARA began work at the EWI site. Previously an underground storage tank was located at the AST site. The UST was closed in 1992 with KDHE onsite. The site received a closed status from KDHE at the time of the UST removal. The fuel tank history of the site will be included in the Corrective Measures Implementation Report prepared at the conclusion of the field activities.
2	KDHE/BER	5-23	Work Plan (Burn Pad 6 Comment)	As requested by KDHE/BER on a letter dated May 18, 2010 the Work Plan now incorporates a description of disposal of berm soils from Burn Pad 6. However, the text, under the heading Berm Soils, was seemingly copied word for word from Section 5.9.1 and incorrectly references Burn Pad 5 and Residential Soil to Groundwater levels applicable to Burn Pad 5. Please revise this section as needed and provide replacement pages.	Section will be revised and replacement pages submitted.

3	KDHE/BER	Fig 5-2	Work Plan (Burn Pad 6 Comment)	On its May 18, 2010 letter (Work Plan Comment No. 2) KDHE/BER referenced the magnetic anomalies in the area surrounding Burn Pad 6, and requested that the Pre-Remedial Action characterization encompass the magnetic anomalies. This revision of the work plan provides for MPPEH survey, clearance and disposal out to 100-feet from all sides of the burn pads. In addition, as requested by KDHE/BER, the work plan specifies that the area of pre-remedial action characterization will be expanded as needed to delineate contaminated soils. However Figure 5-2 indicates that some of the pits are beyond 100 feet from Burn Pad 6. The lack of investigation at all of these previously identified magnetic anomalies represents a potential data gap. KDHE/BER requests an intrusive inspection (e.g. trenching or test pitting) followed by a visual inspection under the supervision of a licensed geologist for the purpose of distinguishing between native soil and any backfill representing potential disposal areas. If evidences of potential contamination or backfill is encountered, representative subsurface soil samples sampling should be conducted for the appropriate suite of contaminants.	The responsibility of all future investigation and corrective measures associated with the identified anomalies surrounding Burn Pad 6 will be transferred to DZI to complete upon permanent closure of their facility sometime in the future. KDHE's comments and suggestions will be forwarded to DZI for their consideration when developing plans for their footprint.
4	KDHE/BER	1-5	Work Plan (Burn Pad 6 Comment)	Although not originally commented on by KDHE, it is noted that this section references KDHE Residential Soil Pathway levels as applicable to Burn Pad 6. However other sections of the planning documents Non-Residential Soil Pathway levels for Burn Pad 6.	This section will be revised to reference Non-Residential Soil Pathway levels. Replacement pages with these changes will be submitted for inclusion into the document.
5	KDHE/BER	5-6	Field Sampling Plan (Burn Pad 6 Comment)	This section still references the now discarded random sampling approach originally proposed for the pre-remedial action characterization of Burn Pad 6. Please revise this section to incorporate the revisions made to the Work Plan following input from KDHE and EPA, and provide replacement pages.	Replacement pages with these modifications will be submitted for inclusion in the document.

KANSAS

DEPARTMENT OF HEALTH
AND ENVIRONMENT

Division of Environment

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

October 21, 2010

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Draft-Final Work Plan, *Water Towers Corrective Measures Design Investigation/Removal Action*, ~~Kansas Army Ammunition Plant, Parsons,~~ Kansas, dated October 2010

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed the referenced document, received on October 7, 2010. KDHE/BER submits the following comments.

General Comment:

In a letter dated May 18, 2010, KDHE/BER suggested that the Army verify 10 percent of the highest historic sample results that were collected from 0 to 12 inches. The Army's current plan, to sample the uppermost soil, appears to more closely fit a conceptual site model for lead based paint soil contamination. Please consider re-sampling 10 percent of locations with the highest lead results at each water tower using the current sampling plan protocol to ensure that the lead concentrations are below the residential value of 400 milligrams per kilogram (mg/kg).

Work Plan:

1. **Page 8, Section 4.3:** This section states that the delineation sample locations for Water Tower 1 can be found on Figure 5. Water Tower 1 is Figure 4.

2. **Page 10, Section 4.6, Thrid Bullet:** The laboratory method for polychlorinated biphenyls (PCBs) is not listed, please include the appropriate method.

3. **Figure 4:** It is not clearly indicated on this figure which areas will be used for delineation sampling, as the delineation samples and confirmation samples use the same symbol. Please revise the figure so there is a discernible difference between the two sample areas.

4. **All Figures:** The footprint of the water tower is not visible on each figure. Please revise all figures so that the footprint is visible.

Sampling and Analysis Plan, Field Sampling Plan:

1. **Page 2, Section 2.3, Third Bullet:** The laboratory method for PCBs is not listed, please include the appropriate method.

   This section states that common fill and topsoil will be obtained from an off-site source. Please clarify if the off-site source is outside of the KSAAP boundaries.

2. **Page 5:** The sampling procedures indicate that disposable non-latex gloves will be changed between sampling locations; however, there is no mention of decontamination of sampling equipment between each sample location. Please review this section and provide updates as necessary.

3. **Figure 2:** It is not clearly indicated on this figure which areas will be used for delineation sampling, as the delineation samples and confirmation samples use the same symbol. Please revise the figure so there is a discernible difference between the two sample areas.

Sampling and Analysis Plan, Quality Assurance Project Plan (QAPP):

1. The KDHE Project Manager is listed as Charles Bowers throughout the QAPP. Please revise all sections so that the KDHE Project Manager is Jamie Schwartz.

2. **Page 2:** The regulatory program line is blank. Please indicate the regulatory program which this project follows.

   Please include the United States Environmental Protection Agency (USEPA) as an approval entity.

3. **Page 18:** This section states that the confirmatory soil sampling – clean backfill will be sampled for PBCs. Please change this to PCBs.

4. **Page 20-30, Worksheet #15:** The footnotes indicate that the 2009 Region IX Residential and Industrial PRGs are used for the project action levels for worksheet #15. The EPA PRGs were updated in May 2010 and are now known as the Regional Screening Levels (RSLs). Please update the worksheet to reflect any revised numbers.

   Worksheet #15 does not include the KDHE Tier 2 Risk-Based Screening Levels. Sample data from the clean backfill material will be screened against the Tier 2 values to determine any necessary Environmental Use Controls (EUCs) and they should be included in the reporting

process. The Tier 2 values were recently updated and are available on the KDHE website at http://www.kdheks.gov/remedial/rsk_manual_page.htm.

5. **Page 33, 2nd Row, Rationale for Sampling Location Column:** This section does not indicate the difference in confirmation samples at Water Tower 1. This should be revised so it is evident that confirmation sampling at Water Tower 1 will be below 400 mg/kg in the excavation areas outside the fenced area.

Contractor Quality Control Plan:

1. **Page 6, Second Paragraph:** This paragraph references the CWP Closure Work Plan, Appendix C. It appears that this reference should be for the Water Towers Work Plan, Appendix D. Please review this reference and make necessary changes.

If you have any questions please call me at (785) 291-3245.

Sincerely,

Jamie Schwartz
Environmental Scientist & Project Manager
Superfund Unit/Assessment & Restoration Section

cc: Ashley Allen→Bob Jurgens→ Kansas Army Ammunition Plant Water Tower 1 (C3-050-71421-1), Water Tower 2 (C3-050-71422-1), Water Tower 3 (C3-050-71419-1), and Water Tower 4 (C3-050-71420-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP

ENVIRONMENTAL GROUP DISCUSSION MEETING

10/13/2010

9am-12pm

KDHE Prairie Conference Room
Topeka, KS

Meeting called by:	**D&Z Kansas**	**Type of meeting:**	**Discussions on D&Z Footprint Transfer Prior to GPDA**

Attendees: **D&Z:** Sally Boulanger, Steve Kosman, Carolyn Smalley, Jessie Merrigan (Lathrop & Gage)

KDHE: Mostafa Kamal, Brad Roberts, Gary Blackburn, Nancy Ulrich, Pat Casey

EPA: Ken Herstowski

AGENDA ITEMS

Topic

- ✓ RCRA –
  - Discuss the transfer of D&Z Footprint before GPDA portion
    - D&Z would most likely remain on permit for remainder of facility until transfer to GPDA
  - Discuss possible clean-up by D&Z in advance of closure
  - Impact and requirements for Financial Responsibility
- ✓ Consent Order –
  - Discuss impact, if any, on the delay of the Consent Order for D&Z transfer
- ✓ Non-RCRA Items (Pesticides, Lead Based Paint, ACM)
  - Issues and concerns for D&Z after transfer
    - Short term
    - Long term
- ✓ Best method(s) to proceed forward

OTHER INFORMATION

Resources: None required

Special notes:

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
INSTALLATIONS AND ENVIRONMENT
110 ARMY PENTAGON
WASHINGTON, DC 20310-0110

AUG 27 2010

The Honorable Mark Parkinson
Governor of the State of Kansas
Office of the Governor
Capitol, 300 SW 10th Ave., Ste. 212S
Topeka, KS 66612-1590

Dear Governor Parkinson:

It is my pleasure to provide for your review and approval the attached Covenant Deferral Request Package to facilitate the Early Transfer of certain portions of the former Kansas Army Ammunition Plant (KSAAP) located in Parsons, Kansas to the Great Plains Development Authority (GPDA).

The 14,337-acre KSAAP officially closed on December 31, 2008. Since that time, several portions of KSAAP have been transferred to the GPDA and the State of Kansas. The Department of the Army intends to Early Transfer an additional 6,612 (approximate) industrial acres (the "Economic Development Conveyance (EDC) Parcel") to the GPDA. A large portion of the EDC Parcel was either not contaminated or has been remediated. The GPDA and Army have agreed to defer the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Covenant on the entire EDC Parcel with the exception of a small site, which is identified as Former Underground Storage Tank (UST) at Building 221, at which only petroleum had been released. This site is excluded because the Army is not authorized to grant a CERCLA Covenant for property on which only petroleum was released and a hazardous substance was not stored for one year or more.

This letter is the Army's formal request for your approval to defer the CERCLA Covenant on all of the approximately 6,612-acre EDC Parcel described in the attached deed, with the exception of Former UST at Building 221.

The Army also intends to transfer approximately 4,112 acres to Day & Zimmerman, Inc. (D&Z) (the D&Z Parcel) for continued use as a munitions production facility. Because D&Z is a Potentially Responsible Party under CERCLA, it is not eligible to receive a CERCLA Covenant; therefore, a Covenant Deferral is not required for transfer of the D&Z Parcel. However, Army also requests your concurrence with the transfer of the D&Z Parcel.

Your approval to defer the CERCLA Covenant on the EDC Parcel will not in any way defer the progress of the Army's remedial action, modify any cleanup obligations or rights of the federal government, or allow the EDC Parcel to be used in a manner inconsistent with the protection of human health and the environment. Your approval will allow the EDC Parcel's immediate reuse, providing significant employment opportunities-- GPDA estimates this transfer will allow for the creation of as many as 2,000 jobs--for Labette County.

Under CERCLA, Section 120(h)(3)(C), you must determine that the EDC Parcel is suitable for transfer by making the findings set out in the statute at 42 U.S.C. § 9620(h)(3)(C). These provisions require you to determine that:

a. The property is suitable for transfer for the use intended by the transferee and that the intended use is consistent with the protection of human health and the environment;

b. The final deed or other agreement governing the transfer between the United States and the transferee will contain the response action assurances required by CERCLA §120(h)(3)(C)(ii);

c. The Army has provided public notice and a 30-day public comment period; and

d. The transfer of the property will not substantially delay necessary environmental response actions on the property.

As reflected in the attached draft, the final transfer deed shall provide the required response action assurances that use of the EDC Parcel will be restricted to both protect human health and the environment and ensure future response actions and oversight activities will not be disrupted; that all necessary response actions will be taken pursuant to an identified work completion schedule, as approved by the appropriate regulatory agency, subject to the Army obtaining all necessary Congressional authorizations and appropriations; and that the Army will submit annual budget requests to the federal Office of Management and Budget to obtain adequate funding for completion of those actions.

To assist you in making your determination, the enclosed Finding of Suitability for Early Transfer (FOSET) sets out the Army's finding that the EDC Parcel is suitable for its intended use for agricultural production, railroad car storage and railroad car maintenance because this use is consistent with its past use as an industrial or commercial property. Given this reuse, the Army found that the EDC Parcel may be safely transferred with appropriate restrictions. The Army is currently evaluating GPDA's request to install instrumentation towers to determine the EDC Parcel's suitability for use as a wind farm. With regard the D&Z Parcel, D&Z will continue to use it for its current use as a munitions manufacturing facility. The Army made the FOSET available to the public during the required 30-day public comment period, which began on 3 February 2010 and ended on 5 March 2010. The Army received comments from one commenter during the public comment period and comments from a second commenter after the public comment period closed, and subsequently signed the FOSET.

Because both the Army and the GPDA will be subject to the Resource Conservation and Recovery Act (RCRA) permit, a change in the ownership of these parcels will not increase the potential risk to human health and environmental because the RCRA permit restricts any development of contaminated areas until the U.S. Environmental Protection Agency (EPA) and the Kansas Department of Health and the Environment (KDHE) determine that these areas no longer present an unacceptable risk. To provide additional protection, contaminated areas will be enrolled in the Kansas Environmental Use Control Program after transfer. As described below, land-use restrictions inserted into the deed will also require safe and consistent reuses. As indicated above, the Army will plan, program, and budget the requisite funding to clean up contaminated areas under the RCRA permit. During any clean up of these areas, the Army will ensure there is no additional threat to human health and the environment.

An important part of Army's response action is coordination of its response actions with redevelopment efforts. Besides the cleanup and long-term care requirements, Army will also be responsible for any required decontamination of explosives (e.g., TNT) from buildings. The Army will plan, program, and budget the requisite funding to complete these efforts. To foster coordination of remediation and redevelopment, Army has awarded an Environmental Services Cooperative Agreement (ESCA) to the GPDA for the first phase of explosive-building decontamination, and may award future phases such as the management of long-term care responsibilities to the GPDA.

An important part of the GPDA's response actions is the negotiation of a Consent Order with KDHE to addresses non-RCRA materials, namely applied pesticides, asbestos in the soil, and lead-based paint in the soil, of concern to KDHE. The Army cannot fund response action for these because it does not believe there is a legal requirement for their cleanup, nor does it possess a statutory authority to do so. The GPDA has agreed to take certain actions to address these materials at the locations where buildings on the GPDA footprint that will be demolished as a part of explosives decontamination. The Consent Order also provides a mechanism for addressing these materials at other locations on the EDC Parcel as those areas are developed.

On the Army's behalf, I request your approval to defer the CERCLA Covenant on the EDC Parcel and your concurrence of the transfer of the D&Z Parcel. I have enclosed a draft approval letter your consideration.

Thank you in advance for your attention to this matter. If I or my staff may be of any further assistance in this matter, please let me know. Your staff may contact Mr. Webster Procter, Army Base Realignment and Closure (BRAC) Division, at (703) 602-2962, or
Mr. J. C. King of my staff at (703) 697-5564.

Sincerely,

Addison D. Davis, IV
Deputy Assistant Secretary of the Army
(Environment, Safety and Occupational Health)

Enclosures:
1. Finding of Suitability for Early Transfer
2. Draft Transfer Deed - GPDA
3. Draft Transfer Deed - D&Z
4. Draft Approval Letter

cc: Roderick L. Bremby, Secretary, KDHE
John Mitchell, Director, Division of Environment, KDHE
Gary Blackburn, Bureau of Environmental Remediation, KDHE

Day&Zimmermann
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MUNITIONS & GOVERNMENT
KANSAS OPERATIONS

August 2, 2010
EE:DH10-0049.doc

Kansas Department of Health and Environment
Bureau of Waste Management
Hazardous Waste Permits Section
1000 SW Jackson
Topeka, Kansas 66612

Attention: Mr. Akhter Hossain

Dear Mr. Hossain:

Subject: Retraction of Previous Request for Extension of Hazardous Waste Storage Limit for High Temp and Low Temp Gas Coolers at the Kansas Army Ammunition Plant (KSAAP)

Reference: Day & Zimmermann (Mr. Kosman) letter dated July 20, 2010; subject: Request for Extension of Hazardous Waste Storage Limit for High Temp and Low Temp Gas Coolers at the Kansas Army Ammunition Plant (KSAAP)

Day & Zimmermann, caretaker of the KSAAP, hereby requests a retraction of our previous request for an extension of the hazardous waste (HW) storage limits for the high temp and low temp gas coolers. A determination was made by the Army to have both gas coolers moved back to the Explosive Waste Incinerator (EWI) site for treatment in accordance with the existing closure plan. The gas coolers were removed from HW permitted storage, Building 1813, on Tuesday, July 27th and taken to the EWI for processing.

If you have questions concerning this subject, our point of contact is Dean Cramer, telephone 620-421-7532, or email dean.cramer@dzikansas.com.

Respectfully,

STEVE KOSMAN
Director of Engineering,
Programs & Projects

SWK/CJS/CDC/dmh

cf: Don Dailey (ACO)
Dean Cramer

Phone: 620-421-7400 23018 Rooks Road, Parsons, KS 67357-8403 Fax: 620-421-7440

Day&Zimmermann
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MUNITIONS & GOVERNMENT
KANSAS OPERATIONS

RECEIVED
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BUREAU OF WASTE MANAGEMENT

July 20, 2010
EE DH10-0047.docx

Kansas Department of Health and Environment
Bureau of Waste Management
Hazardous Waste Permits Section
1000 SW Jackson
Topeka, KS 66612

Attention: Mr. Akhter Hossain

Dear Mr. Hossain:

Subject: Request for Extension of Hazardous Waste Storage Limit for High Temp and Low Temp Gas Coolers at the [redacted] Army Ammunition Plant (KSAAP)

Day & Zimmermann, caretaker of the KSAAP, currently has two hazardous waste units in storage at KSAAP which are nearing the end of the permitted one-year storage timeframe limit (8/3/10). The two units (a high temp gas cooler and a low temp gas cooler) were components of the air pollution control system of the explosive waste incinerator (EWI), which is presently being decontaminated and destroyed by the Army Corps of Engineers subcontractor, ARA Incorporated.

The Army and Day & Zimmermann have a difference of opinion as to the ownership of the gas coolers, and the subsequent method and cost of the treatment. Therefore, we must request an extension of storage time for these two gas coolers to December 31, 2010, to allow for sufficient time for the problem to be resolved. Your prompt response to this request will be appreciated. If you have any questions concerning this request, our point of contact is Dean Cramer, telephone 620-421-7532 or email dean.cramer@dzikansas.com.

Respectfully,

Steve Kosman

STEVE KOSMAN
Director of Engineering,
Programs & Projects

SWK/CJS/CDC/dmh

cf: Don Dailey (ACO)
Dean Cramer

Phone: 620-421-7400 **23018 Rooks Road, Parsons, KS 67357-8403** **Fax: 620-421-7440**

KANSAS
DEPARTMENT OF HEALTH
AND ENVIRONMENT

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

June 28, 2010

Kathy Baker
Project Manager, HTRW
U.S. Army Corps of Engineers PM-ED
601 East 12th Street
Kansas City, Missouri 64106

Re: Burn Pad 5 Closure Plan Approval
Kansas Army Ammunition Plant
EPA ID No. KS0213820467

Dear Ms. Baker:

We received a letter of transmittal dated April 29, 2010 with two copies of the Final Closure Plan for the Open Burn Pad 5 and two copies each of the Final Work Plan (Volume 1), Final Sampling and Analysis – Field Sampling Plan (Volume 2A) and Final Quality Assurance Project Plan (Volume 2B), all entitled "Closure of Explosive Waste Incinerator, Pistol Range, and Burn Pad 5 and 6" and all dated April 2010. These documents were revised per our request of April 2, 2010 comment letter and responded to all of our comments dated March 29 and 30, 2010.

The approval of the Burn Pad 5 Closure Plan required a 30-day public comment period in accordance with 40 CFR 265 requirements. The public comment period began on May 24th and ended June 25, 2010. No comments were received. Therefore, the Burn Pad 5 Closure Plan is approved.

This approval covers only the sections associated with Burn Pad 5 and does not cover sections of the Work, Sampling and Analysis - Field Sampling and Quality Assurance Project Plan Approvals for the Explosive Waste Incinerator, Pistol Range or Burn Pad 6.

Should you have any technical questions, please contact Richard Flanary at (785) 296-6562. For any other questions, please feel free to contact me at (785) 296-1609.

Sincerely,

M. Kamal

Mostafa Kamal, PE, CPM
Chief, Hazardous Waste Permits Section
Bureau of Waste Management

cc: Ken Herstowski - AWMD/RCAP - EPA Region VII
David Stutt - DEA/SEDO/Waste Programs
Bill Bider – BWM
Jorge Jacobs –BER
Brad L. Koltak -ARA

KANSAS

DEPARTMENT OF HEALTH
AND ENVIRONMENT

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

June 3, 2010

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Old Ammunition Storage Area No Further Action Report at Kansas Army Ammunition Plant, Parsons, Kansas, dated April 23, 2010

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed the above referenced document, received on April 26, 2010.

The Army, in correspondence dated January 20, 2010, addressed KDHE/BER's October 21, 2010 comments on the *Final Site Investigation Report, Kansas Army Ammunition Plant, Parsons, Kansas, dated September 2009.* However, KDHE/BER does not have record of receiving the Army's response to comments for KDHE/BER's January 14, 2010 comment letter concerning the November 2009 version of the Old Ammunition Storage Area No Further Action Report. It also does not appear that subject document (NFA Report) has addressed all of KDHE/BER's previous concerns from the January 14, 2010 correspondence. Below KDHE/BER reiterates and clarifies Comment #3 provided in the January 14th letter.

Based on a comparison of Figures 3 and 6 in the NFA Report, it appears that the southern-most storage area was south of the area covered by the previous geophysical investigation. KDHE/BER recommends that this remaining southern area be investigated for potential munitions and explosives of concern (MEC) and potential unexploded ordnance (UXO). If the appropriate geophysical investigation is not conducted, KDHE/BER requests institutional controls adequate to address concerns for potential remaining UXO until a comprehensive investigation is performed.

If you have any questions please call me at (785) 291-3245.

BUREAU OF ENVIRONMENTAL REMEDIATION
CURTIS STATE OFFICE BUILDING, 1000 SW JACKSON ST., STE. 410, TOPEKA, KS 66612-1367
Voice 785-291-3245 Fax 785-296-4823 E-Mail ahemmy@kdheks.gov

Sincerely,

Allan Hemmy
Project Manager
Superfund Unit/Assessment & Restoration Section

cc: Jorge Jacobs→Bob Jurgens → KSAAP (C3-050-72533-1)
Mostafa Kamal, KDHE/BWM (via email)
Renee Brown, KDHE/SEDO (via email)
Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP

KANSAS

DEPARTMENT OF HEALTH
AND ENVIRONMENT
Division of Environment

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

May 24, 2010

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Final Work Plan, and Sampling and Analysis Plan, Closure of Explosive Waste Incinerator, Pistol Range, and Burn Pads 5 and 6, Kansas Army Ammunition Plant, Parsons, Kansas, dated April 2010

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed the referenced planning documents, received on May 7, 2010. KDHE/BER's previous comments have been substantially addressed, but there are discrepancies between different volumes and sections of the planning documents. KDHE/BER grants approval of the planning documents subject to the following conditions.

1. **Work Plan, Section 4.13.1, page 4-20:** KDHE/BER notes that the proposed investigation and sampling for the aboveground storage tank (AST) at the Explosive Waste Incinerator should be consistent with the requirements for the AST Remediation Construction Work Plan which were communicated by EPA and KDHE in correspondence on November 25, 2009 and by KDHE/BER in correspondence on May 18, 2010. These procedures include, but are not limited to, the removal of the containment at all AST locations where the tank is not being transferred, a visual inspection beneath the containment for potential contamination, and groundwater sampling at all ASTs exhibiting signs of releases.

2. **Work Plan, Section 5.9.2, page 5-23:** As requested by KDHE/BER on a letter dated May 18, 2010, the Work Plan now incorporates a description of the disposal of berm soils from Burn Pad 6. However, the text, under the heading Berm Soils, was seemingly copied word for word from Section 5.9.1, and incorrectly references Burn Pad 5 as well as the Residential Soil to Groundwater levels applicable to Burn Pad 5. Please revise this section as needed and provide a replacement page.

3. **Work Plan, Figure 5-2:** On its May 18, 2010 letter (Work Plan Comment No. 2), KDHE/BER referenced the magnetic anomalies in the area surrounding Burn Pad 6, and requested that the pre-remedial action characterization encompass the magnetic anomalies.

This revision of the Work Plan provides for Material Potentially Presenting an Explosive Hazard (MPPEH) survey, clearance, and disposal out to 100 feet from all sides of the burn pads. In addition, as requested by KDHE/BER, the Work Plan specifies that the area subject to pre-remedial characterization sampling will be expanded as needed to delineate contaminated soils. However, Figure 5-2 indicates that some of the pits extend or are located beyond 100 feet from Burn Pad 6. The lack of investigation at all of these previously identified anomalies represents a potential data gap.

KDHE/BER requests an intrusive inspection (e.g., trenching or test pitting) followed by a visual inspection under the supervision of a licensed geologist for the purpose of distinguishing between native soil and any backfill representing potential disposal areas. If evidence of potential contamination or backfill is encountered, representative subsurface soil sampling should be conducted for the appropriate suite of contaminants.

4. **Field Sampling Plan, Section 1.5.2, page 1-5:** Although not originally commented on by KDHE, it is noted that this section references KDHE Residential Soil Pathway levels as applicable to Burn Pad 6. However, other sections of the planning documents reference Non-Residential Soil Pathway levels for Burn Pad 6.

5. **Field Sampling Plan, Section 5.2.1.2, page 5-6:** This section still describes the now discarded random sampling approach originally proposed for the pre-remedial action characterization of Burn Pad 6. Please revise this section to incorporate the revisions made to the Work Plan following input from KDHE and EPA, and provide replacement pages.

If you have any questions please call me at (785) 296-8801.

Sincerely,

Jorge Jacobs
Superfund Unit Manager
Assessment & Restoration Section

cc: Bob Jurgens → Kansas Army Ammunition Plant (C3-050-00021-1), SWMU 24 (C3-050-71395-1), SWMU 20 (C3-050-71411-1), and Pistol Range (C3-050-71418-1)
Allan Hemmy, KDHE/BER
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Kathy Baker, USACE
Rose Zeiler, KSAAP

State of Kansas

State Conservation Commission

Notice to Contractors

Sealed bids for the construction of a 15,100 cubic yards (fill) detention dam, Site 29 located in Marshall County, will be received by the Horseshoe Creek Watershed Joint District No. 110 at the office of the county clerk, Marshall County Courthouse, 1201 Broadway, P.O. Box 391, Marysville, 66508, (785) 562-5361, until 2 p.m. June 9 and then opened. Bids may be hand delivered prior to bid opening. A copy of the invitation for bids and the plans and specifications can be reviewed at and obtained from the office of CES Group P.A., 1102 Broadway, Marysville, 66508, (785) 562-5148. A $25 nonrefundable deposit will be required for each set of plans requested. Plans can be sent electronically at no charge if requested at tduever@bluevalley.net.

Greg A. Foley
Executive Director

Doc. No. 038338

State of Kansas

Department of Health and Environment

Request for Comments

The Kansas Department of Health and Environment and the U.S. Environmental Protection Agency Region 7 (EPA) has received a closure plan from the United States Army (Army) for closure of the Burn Pad 5 hazardous waste treatment unit at the Kansas Army Ammunition Plant (KAAP) located in Parsons. The current Resource Conservation and Recovery Act (RCRA) hazardous waste management permit issued in December 1989 to the Army and Day and Zimmermann, Inc. allowed continued operation of the hazardous waste treatment operations at Burn Pad 5 under interim status. Burn Pad 5 began burning hazardous waste in 1967.

A decision to include Burn Pad 5 in the December 1989 permit was delayed until hazardous waste regulations were promulgated for the management of explosive and reactive hazardous wastes in this type of treatment unit. Treatment operations at Burn Pad 5 consisted of open burning of explosive and reactive hazardous wastes on the ground until 1984 when metal burn pans were installed.

KAAP was originally permitted to store hazardous wastes in containers and to treat hazardous waste in an incinerator. The December 1989 permit was issued after the RCRA Hazardous and Solid Waste Amendments of 1984 (HWSA) were enacted and contained provisions for corrective action if there had been any releases of hazardous waste or hazardous constituents from solid waste management units (SWMU). EPA completed an RCRA Facility Assessment in March 1989 prior to the issuance of the permit that identified 25 SWMU groups including Burn Pad 5 at the KAAP facility, requiring further investigation. KAAP completed all Phase I and II RCRA Facility Investigations in May 1998.

With the promulgation of regulations contained in 40 CFR Part 264 Subpart X - Miscellaneous Units, the EPA and KDHE began review of the hazardous waste permit renewal application, which included Burn Pad 5 in 2001. Part of the permit renewal process required a risk assessment to be completed for this hazardous waste treatment operation. The risk assessment concluded the quantities of hazardous wastes being treated at Burn Pad 5 did not pose an unacceptable risk to human health and the environment.

Burn Pad 5 continued to operate under interim status and was inspected regularly by the EPA under the HSWA corrective action regulations as an SWMU while alternatives to the open burning of reactive and explosive hazardous wastes were sought. In 2007, KDHE prohibited the open burning of these wastes as other treatment alternatives became available. In 2008, KAAP ceased its operations as part the Base Realignment and Closure (BRAC) Committee recommendations. A large portion of the land determined by KDHE and the EPA not to be impacted by permitted hazardous waste management operations or SWMUs is to be transferred to the Great Plains Redevelopment Authority (GPRA) in Parsons. The remaining land where permitted hazardous waste operations occurred, interim status operations occurred and corrective actions for SWMUs are ongoing, will either be clean closed and transferred to GPRA or the existing hazardous waste management permit will be transferred to a new entity for these operations to continue under a new permit.

The U.S. Army Corps of Engineers submitted a closure plan for Burn Pad 5 in April 2009. A copy of the closure plan and supporting work plans are available for public review May 24-June 25, Monday through Friday during normal business hours, at the following locations:

Kansas Department of Health and Environment
Hazardous Waste Permits Section
1000 S.W. Jackson, Suite 320
Topeka, 66612
Contact: Mostafa Kamal
(785) 296-1609

Parsons Public Library
311 S. 17th St.
Parsons
During library hours

Anyone wishing to comment on the closure plan should submit written comments postmarked not later than June 25 to Mostafa Kamal. After consideration of all comments received, the Secretary of Health and Environment will make a final decision on the closure plan. Notice will be given to the applicant, to all persons who submitted written comments, and to those who requested notice of the final closure plan decision.

Roderick L. Bremby
Secretary of Health
and Environment

Doc. No. 038339

DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

REPLY TO
ATTENTION OF

May 05, 2010

Planning, Programs, and Project Management Division
Environmental Programs Branch

Mr. Mostafa Kamal
Kansas Department of Health and Environment
Hazardous Waste Permits Section
1000 SW Jackson St.
Suite 320
Topeka, KS 66612

Dear Mr. Kamal,

Please find enclosed for your review the Final Closure Plan for Burn Pad 5. This should complete the set of planning documents for the closure of Burn Pad 5.

Also, enclosed with this letter are the revisions made per the Response to Comment Matrix.

If you have any questions or if I can be of further assistance please contact me at (816) 389-3906 (kathy.t.baker@usace.army.mil).

Sincerely,

Kathy Baker

Kathy Baker
Project Manager

Enclosure

cf: Ken Herstowski (EPA)
Rose Zeiler (KSAAP)
Don Dailey (KSAAP)

Letter of Transmittal

ENGINEERING & SCIENCES

Date: April 29, 2010

To: Mr. Mostafa Kamal
Kansas Dept. of Health and Environment
Curtis State Office Building
1000 SW Jackson Street
Topeka, KS 66612

From: Mr. John Coughlin
ARA Inc.
7520 Main Street
Suite 103
Sykesville, MD 21784

RE: KSAAP

Mr. Mostafa Kamal:

ARA is pleased to provide you with the following information for the Closure of the Explosive Waste Incinerator, Pistol Range, and Burn Pads 5 and 6 for the Kansas Army Ammunition Plant.

- 2 hard copies of the Work Plan (Volume 1)
- 2 hard copies of the Sampling and Analysis Plan - Field Sampling Plan (Volume 2A)
- 2 hard copies of the Sampling and Analysis Plan - Quality Assurance Project Plan (Volume 2B)
- 2 hard copies of the Explosive Waste Incinerator Closure Plan
- 2 CDs containing a digital copy of Appendix B of the Sampling and Analysis Plan - Quality Assurance Project Plan (Volume 2B)
- 2 CDs containing a digital copy of Volumes 1, 2A, 2B and the EWI Closure Plan

Please distribute one copy to Akhter and one copy to Jorge. If you have any questions or comments regarding this transmittal please feel free to contact me.

Best Regards:

John Coughlin
Director, Engineering and Sciences

Quarterly Corrective Action Meeting

Kansas Army Ammunition Plant

April 6, 2010

Meeting Minutes and Action Items

Attendees: Please see the attached sign-in sheet.

Participants by phone: Rose Zeiler, KSAAP BEC

Akhter Hossain, KDHE-BWM

Richard Flanary, KDHE-BWM

1200 CSM

USACE's Andy Gosnell briefed the newly developed 1200 Area CSM. This included an understanding of the "rework" processes which took place in the 1200 Area and the release pathways from this process which contributed to the hexavalent chromium soil and sediment contamination in the 1200 Area and Pond 3. Also, presented was the evidence that a similar process occurred in the 1100 Area.

Following the CSM briefing, USACE's Francis Zigmund explained Army's approach for removal of the remaining settling lagoon known to contain hexavalent chromium soils.

Water Tower SOW presentation

USACE's Francis Zigmund presented Army's approach for removal of additional lead contaminated soils around the water towers.

The SOW discussions were ended. KDHE and EPA requested time to review the CSM and proposed remedial activities. A final meeting to discuss the SOWs will be held in Kansas City on April 14 starting at 0900.

Site Updates and Discussions

Pond 3

The excavation of the final grid at Pond 3 has been completed. Results confirm action levels have been met. Stockpiled soils will be transported off-site as soon as the haul road dries. Samples will be taken underneath the stockpile to confirm all excavated soils have been removed.

Closure Report for both the 1200 Area and Pond 3 to be submitted to KDHE/EPA for review by April 23.

Burn Pad 5

Surface clearance and geophysics has been completed. MEC clearance of single point contacts surrounding Burn Pad 5 will be cleared starting the week of April 5th. One modification that will be incorporated into the planning documents : The interior of the pads is saturated with metal contacts; approximately 6 inches to a foot of soil will be scraped off the pad and disposed to facilitate MEC removal; after this is completed the locations for the extended list analytes will be advanced. Another modification will be to add removal of the geophysical anomalies labeled pits 15 & 16 to the planning documents.

Working with agencies on final approval of closure plan and workplans. KDHE-BWM requires for unrestricted clean closure RSKs be used as clean up criteria. If Army proceeds with developing their own clean up criteria for detected analytes clean closure will not be achieved.

Action Item: Army to submit response to comments to KDHE by April 15th for final approval

Burn Pad 6

Surface clearance and geophysics has been completed. MEC clearance of single point contacts surrounding Burn Pad 6 has been completed. One modification that will be incorporated into the planning documents : The interior of the pads is saturated with metal contacts; approximately 6 inches to a foot of soil will be scraped off the pad and disposed to facilitate MEC removal; after this is completed the locations for the extended list analytes will be advanced. EPA retracted the comment concerning additional groundwater wells. The installation of the three wells as planned is sufficient.

Action Item: Army to submit response to comments to KDHE by April 15th for final approval

Decision Point: Analytes for Burn Pad 6. EPA has stated that they will determine the final analyte list and screening criteria once the extended list analysis from Burn Pad 5 is completed. Army is not in complete agreement and requested the regulatory driver for the screening criteria be provided.

Decision Point: Elongated geophysical anomalies surrounding Burn Pad 6 two options presented by EPA. 1) Remove the features and sample, or 2) close Pad 6 as a landfill with perpetual post-closure care.

Pistol Range

ARA clarified the plans for the berm investigation. EPA agreed.

Action Item: ARA/Army submit revised workplans to EPA and KDHE-BER on Wednesday, April 14th.

Action Item: KDHE and EPA provide approval by April 18th.

Permitted Igloos

Closure plans, workplans, and class 1a modification have been approved by EPA and KDHE-BWM..

KANSAS
DEPARTMENT OF HEALTH
AND ENVIRONMENT

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

April 2, 2010

Kathy Baker
Project Manager, HTRW
U.S. Army Corps of Engineers PM-ED
601 East 12th Street
Kansas City, Missouri 64106

Re: Burn Pad 5 and EWI Closure Plan, Work Plan and Sampling Analysis Pan
Burn Pad 6 and Pistol Range Work Plan and Sampling and Analysis
Kansas Army Ammunition Plant – Parsons
EPA ID No. KS0213820467

Dear Ms Baker:

The US Environmental Protection Agency Region 7 (EPA), and the Kansas Department of Health & Environment's Bureaus of Waste Management (BWM) and Environmental Remediation (BER) have reviewed the March 29, 2010 Comment Response Matrix and the March 30, 2010 Revised Comment Matrix with additional information submitted by your email for the above referenced units. Final approval of all of the above referenced plans and conditional approval for Burn Pad 5 can be granted (final approval of Burn Pad 5 will be pending until the results of the 30-day public comment period are evaluated) after receiving adequate response to the following additional comments:

Commnent1: The Response to BWM Comment 1 is approved.

Comment 2: The Response to BWM Comment 2 is approved.

Comments 3, 7, 13, 16, 17, 21, 22, 24, 28, 29 and 32: Neither EPA nor KDHE remember agreeing to using CMD action levels as clean closure levels for the RCRA permitted EWI and Burn Pad 5. Apparently this assumption was based on an earlier version of the Igloo Closure Plan that was not approved. In order to achieve clean closure the facility must achieve soil to ground water protection pathway values in accordance with the Kansas RSK Manual or meet Laboratory Practical Quantitation Limit values for all constituents listed in the approved Igloo Closure Plan. Once actual available data indicates these action levels can not be achieved, KDHE will further review each such constituent on a case-by-case basis to determine if clean closure requirements can still be met.

Comments 4, 5, 6 and 8: The responses to BWM's Comments 4, 5, 6 and 8 are approved.

Comments 9, 10 and 19: In accordance with the Geophysical Survey dated February 9, 2010, please revise Figures 1-3 and 5-2 of the Work Plan to include Disposal Pits 15 and 16. Figure 5-2 is also included in Appendix C of the Burn Pad 5 Closure Plan and as Figure 5-1 in the Sampling and Analysis Plan – Field Sampling Plan (Volume 2a). Disposal Pits15 and 16 are adjacent to Burn Pad 5 and are a necessary part of Burn Pad 5's clean closure requirements (EPA email comment dated March 31, 2010).

Comments 11 and 20: In addition to the ARA response, the discovery of additional Disposal Pits 2-13 from the latest Geophysical Survey dated February 9, 2010 near Burn Pad 6 will require additional ground water monitoring wells be proposed and located closely adjacent and down gradient of these disposal pits. The additional monitoring wells proposed to be installed must be included in Figure 5-3 in the Sampling and Analysis Plan – Field Sampling Plan (Volume 2a). These additional monitoring wells must be established to bedrock if the Disposal Pits extend near the bedrock/overburden interface (EPA email additional comment dated March 31, 2010).

Comment 12: The Response to BWM Comment 12 is approved.

Comments 14 and 15: The Responses to BWM Comments 14 and 15 are approved.

Comment 18: The Response to BWM Comment 18 is approved.

Comment 23: The Response to BWM Comment 23 is approved.

Comments 25, 26 and 27: The Responses to BWM Comments 25, 26 and 27 are approved.

Comments 30 and 31: The Responses to BWM Comments 30 and 31 are approved.

BER Comment 1: In addition to the ARA response, please add the following:

1. If Contaminants of Concern (COCs) exceed cleanup criteria in grid cells adjacent to cells that have not been sampled (i.e. on the periphery of the gridded area for the EWI) then those adjacent cells will also need to be sampled in order to properly delineate the contamination.
2. If COCs exceed cleanup levels in the judgmental samples under the EWI slab, all grid cells under the slab will need to be sampled, as each one is clearly a separate decision unit, and excavated as needed (BER email comment dated March 31, 2010).

BER Comment 2: In addition to the ARA response, please add the following:

Verification sampling at Burn Pad 6 shall include all constituents of the Burn Pad 5 closure plan short list plus the additional constituents detected from the analysis of the Burn Pad 5 extended list samples. All contaminated soil above unrestricted use levels shall be removed. If the extended list constituents do not have CMD restricted use levels, the EPA Regional Screening Level Master Table (December 2009 updated

version) shall be used to determine the restricted use cleanup levels (EPA email comment dated March 31, 2010).

BER Comment 3: In addition to the ARA response, please add the following:

Berm soil from Burn Pad 6 shall not be used to backfill any portion of burn pad 5. Soil used for backfill of Burn Pad 5 shall not exceed unrestricted use levels (EPA email additional comment dated March 31, 2010).

BER Comment 4: The Response to BER Comment 4 is approved.

BER Comment 5: The Response to BER Comment 5 is approved.

Additional Comment 1: Disposal Pits 2 - 13 from the latest Geophysical Survey dated February 9, 2010 shall be included in the remediation of Burn Pad 6. The Work Plan and Sampling and Analysis Plan must be revised to include the removal of all materials in Disposal Pits 2 - 13 and any soil contaminated above restricted use levels (EPA email comment dated March 31, 2010).

Hopefully all of the remaining outstanding issues listed above can be resolved during the Quarterly Corrective Action Meeting on April 6, 2010. Should you have any questions, please feel free to call me at (785) 296-1609. Thank you for your continued cooperation with KDHE.

Sincerely,

M. Kamal

Mostafa Kamal, PE, CPM
Chief, Hazardous Waste Permits Section
Bureau of Waste Management

cc: Ken Herstowski - EPA Region 7/RCAP/AWMD
Jorge Jacobs – BER
David Stutt – DEA/SEDO/Waste Programs
Brad L. Koltak - ARA

KANSAS

DEPARTMENT OF HEALTH
AND ENVIRONMENT
Division of Environment

Q Rec'd File

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

March 18, 2010

RECEIVED
MAR 19 2010
BUREAU OF WASTE MANAGEMENT

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Final Work Plan, and Sampling and Analysis Plan, Closure of Explosive Waste Incinerator, Pistol Range, and Burn Pads 5 and 6, Kansas Army Ammunition Plant, Parsons, Kansas, dated January 2010

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed the referenced documents, received on February 8, 2010. KDHE/BER provided a letter on the Pistol Range on March 11, 2010; the following comments address planned activities at the Explosive Waste Incinerator and at Burn Pads 5 and 6.

General Comment:

These documents encompass planned activities at RCRA-permitted and non-permitted units; thus, responsibility for review and approval of the documents does not rest solely upon KDHE/BER. KDHE/BER has focused its review on sections of the documents that address the pre-remedial action characterization, remediation, and confirmation sampling of soils, and groundwater-related activities, and on all activities at non-permitted units. Approval of closure documents for permitted units rests with KDHE/Bureau of Waste Management. Additionally, KDHE/BER will neither review nor comment on the Accident Prevention Plan/Site Safety and Health Plan.

Volume 1, Work Plan:

1. **Section 4.13.1, page 4-19, and Figure 4-1:** According to the planning documents, soil samples will not be collected from some of the 30' by 30' grid cells during the pre-remedial action characterization at the Explosive Waste Incinerator. While this random sampling approach may be deemed appropriate for a site assessment, it is not sufficient for the purposes of performing site characterization and remediation leading to closure. Each 30' by 30' grid cell is a decision unit, and ruling out sampling at these units is equivalent to preemptively deciding that Contaminants of Concern (COCs) are not present above threshold

values and no remediation is necessary without going through the process for making the same decision at grid cells that will be sampled; this is inconsistent and will leave data gaps. KDHE/BER has previously conveyed this concern; it is expected that all grid cells will be sampled. Additional grid cells will need to be added and sampled should COCs exceed their threshold values at grid cells on the periphery of the currently gridded area. Any grid cells where COCs exceed threshold values will need to be excavated.

2. **Section 5.8.3, page 5-21, and Figure 5-3:** According to the work plan, not all of the 30' by 30' grid cells will be sampled during the pre-remedial action characterization of Burn Pad 6. While this random sampling approach may be deemed appropriate for a site assessment, it is not sufficient for the purposes of performing site characterization and remediation leading to closure. Each 30' by 30' grid cell is a decision unit, and ruling out sampling at these units is equivalent to preemptively deciding that COCs are not present above threshold values and no remediation is necessary without going through the process for making the same decision at grid cells currently designated for sampling; this is inconsistent and will leave data gaps. KDHE/BER has previously conveyed this concern; it is expected that all grid cells will be sampled. Additional grid cells will need to be added and sampled should COCs exceed their threshold values at grid cells on the periphery of the currently gridded area. Any grid cells where COCs exceed threshold values will need to be excavated.

   Additionally, geophysical data provided to KDHE/BER by the U.S. Army Corps of Engineers via email on March 5, 2010 shows magnetic anomalies within, on, and outside the berm at Burn Pad 6. It is expected that the pre-remedial action characterization will encompass the berm and an appropriate area outside the berm in order to identify all areas where soil removal is warranted. Please submit revised figures and text, as appropriate, indicating areas/grid cells that will be investigated.

3. **Section 5.9.3, pages 5-22 and 5-23:** This section does not address the disposition of berm soils from Burn Pad 6. Please provide details of the handling and sampling for berm soils.

4. **Section 5.9.8, page 5-25:** This section only addresses post-removal confirmation sampling at Burn Pad 5, yet confirmation sampling will also be performed at Burn Pad 6. Please revise the document accordingly.

Volume 2A, Sampling and Analysis Plan – Field Sampling Plan:

1. **Section 1.5.2, page 1-4:** The first paragraph indicates that no additional samples will be collected at Burn Pad 5 other than from the berms. This contradicts other sections of the planning documents. Please revise.

2. **Table 1-2:** The title of this table should be revised to reflect its applicability to Burn Pads 5 and 6 and to the Pistol range, as indicated on Tables 3-2 and 3-3.

If you have any questions please call me at (785) 296-8801.

Sincerely,

Jorge Jacobs
Superfund Unit Manager
Assessment & Restoration Section

cc: Bob Jurgens → Kansas Army Ammunition Plant (C3-050-00021-1), SWMU 24 (C3-050-71395-1), SWMU 20 (C3-050-71411-1), and Pistol Range (C3-050-71418-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Kathy Baker, USACE
Rose Zeiler, KSAAP

KANSAS

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

DEPARTMENT OF HEALTH
AND ENVIRONMENT

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Division of Environment

March 15, 2010

Kathy Baker
Project Manager, HTRW
U.S. Army Corps of Engineers PM-ED
601 East 12th Street
Kansas City, Missouri 64106

Re: Facility EPA ID No. KS0213820467
Final Burn Pad 5 Closure Plan Comments Prior to Approval and
Placement on Public Notice
Final Explosive Waste Incinerator Closure Plan Comments Prior to Approval
Final Burn Pad 5 and Explosive Waste Incinerator Work and Sampling and Analysis
Plan Comments

Dear Ms Baker

We have reviewed the Closure Plan dated February 2010 for the Burn Pad 5 RCRA regulated treatment unit operated under interim status and the Closure Plan dated January 2010 for the RCRA permitted Explosive Waste Incinerator (EWI) and the Work & Sampling and Analysis Plans for the closure of the RCRA permitted EWI, Pistol Range and Burn Pads 5 & 6 dated December 2009. Our review only pertains to the RCRA regulated Burn Pad 5 and EWI units. The information for the closure of the Pistol Range and Burn Pad 6 contained in these plans must be approved by the Bureau of Environmental Remediation.

Table 1 in Section 2 the Burn Pad 5 Closure Plan only includes the short list of constituents and not the extended list in Table 1-1 located in the Work Plan (Volume 1) and Table 1-2 located in the Sampling and Analysis (Volume 2a) Plan. The short and extended constituent lists were developed for the RCRA closure performance standards for the hazardous waste igloos and were adopted for both Burn Pad 5 and the EWI to document clean closures have been achieved.

The extended list for the EWI will be used to analyze five judgmental soil samples with any detected constituents to be added to the short list before analyzing all the remaining soil samples. The extended list for Burn Pad 5 will be used to analyze five soil samples beneath the burn pads with any detected constituents to be added to the short list before analyzing all the remaining soil samples.

Table 1-1 in the Work (Volume 1) or Table 1-2 in the Sampling and Analysis Plan (Volume 2a) after revisions must replace Table 1 in Section 2 of the Burn Pad 5 Closure Plan and be added to Section 2 of the EWI Closure Plan.

Tables 1-1 and 1-2 which are identical must be revised to include all the Residential Soil to Ground Water Protection Pathway and Laboratory Practical Quantitation Limit mg/kg values for all constituents as detailed in Enclosure 1 – Tables 4-1 through 4-22 from the hazardous waste igloos closure plan. Two constituents, 5 Nitro-o-Toludine, CAS #99-55-8 and Bis(2-Chloro-1-Methyl) Ether, CAS # 108-60-1 need to be added and cooper oxide, CAS # 1317-38-1 and duplicate 1,1-Dichloroethene, CAS # 75-35-4 (should only be included on the extended list) should be removed from Table 1-1. Some of the risk based screening level concentrations (summarized by EPA in tables available at http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm) should be included in the revised Table 1-1 as follows:

Compound	Residential mg/kg	Industrial mg/kg	Compound	Residential mg/kg	Industrial mg/kg
1,1 dichloroethane	3.3	17	toluene	5000	45000
1,2dichlorbezene	1900	9800	trichlorofluoromethane	790	3400
carbon disulfide	820	3700	vinyl chloride	0.06	1.7
chlorobenzene	290	1400	1,4 dichlorobenzene	2.4	12
ethylbenzene	5.4	27	benzene	1.1	5.4
methylene chloride	11	53	cyclohexane	7000	29000
styrene	6300	36000	3 nitrotoluene	6.1	620
tetrachloroethene	0.55	2.6	mercury	5.6	34
2,3,7,8 TCDD	4.5E-06	1.8 E-05			

Table 1-1 also must be revised to indicate which constituents are on both the short and extended list as it appears many extra chemicals are indicated to be included on the short list.

Additional Burn Pad 5 Closure, Work and Sampling and Analysis Plan Final Revisions

Section 2 of the Closure Pan must delete all references to Corrective Measures Decision (CMD) and U.S. Environmental Protection Agency (USEPA) Soil Screening Levels. After removal of contaminated soils clean closure will be documented by remaining soils meeting the Kansas RSK (Soil to Groundwater Protection) Residential Clean Up Levels or if an RSK (Soil to Groundwater Protection) Clean Up Level is not available the laboratory Practical Quantitation Limit (PQL) as listed in the revised Table1 for the short list of chemicals plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred. Three groundwater monitoring wells will also be installed during closure to assess if groundwater has been impacted from the burn pad's operation.

Section 9 of the Closure Plan must include the possibility of groundwater contamination being detected for submittal of a post closure plan.

Appendix C in the Closure Plan must include the revised Figure 5-2 indicated directly below to include the latest Geophysical Survey dated February 9, 2010 in Enclosure 2

Figures 1-3 and 5-2 of the Work Plan must be revised to indicate expanded areas of excavation from the latest Geophysical Survey dated February 9, 2010 in Enclosure 2

Section 5 of the Work Plan must include installation of three monitoring wells at Burn Pads 5/6 and removal of the last sentence that the scope of work does not include or address groundwater.

Section 5.1 of the Work Plan must include a drill rig in the equipment list.

Section 5.9.2 of the Work Plan must delete references to CMD Clean Up Levels and replace with Kansas RSK (Soil to Groundwater Protection) Residential Clean Up Levels or if an RSK (Soil to Groundwater Protection) Clean Up Level is not available the laboratory Practical Quantitation Limit (PQL) as listed in the revised Table 1-1 for the short list of chemicals plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred.

Section 5.9.4 of the Work Plan must be expanded to include the details of the boring, installation and construction information for the three wells. Enclosure 3 –Well Installation Work Plan and Installation Report Checklist lists the requirements below that will be used by KDHE to determine whether the Work Plan and later the Well Installation Report are acceptable. Therefore based on the checklist please note the six items below must be provided in the Work Plan to document the necessary completion details of each well that will be included with the Well Installation Report.

1. Continuous core barrel or split spoon sampling of the geologic material penetrated during drilling to characterize the lithology and identify potential ground water flow pathways.

2. Field screening of each 2.5 feet of recovered sample and if field screening results indicate the possibility of contamination, two or more samples per borehole must be submitted for laboratory analysis.

3. Drawings and/or text descriptions, in the Work Plan, of well completion details, including description of construction materials.

4. Note that emplacement of well pack material, bentonite pellets, and grout must be done using a Tremie pipe to fill from the bottom and raising the pipe as it fills when such method helps ensure the material will be placed uniformly without bridging. (Also, note that during emplacement of screen, casing, or other down-hole material, disposable gloves must be worn.)

5. Note that monitoring wells must be developed in two stages, including pre-development which should include a gentle surge of water inside the screen/casing to settle the filter pack prior to bentonite seal emplacement, and development following well completion that applies sufficient energy to cause flow reversals within the well pack.

6. A report is required following well installation, which documents the field notes collected during the field activities and information about each well.

Appendix B of the Work Plan must include boring, installation and sampling of the three monitoring wells.

Table 3-2 in the Sampling and Analysis Plan – Field Sampling Plan (Volume 2a) must be revised by replacing the CMD Clean Up Levels with Kansas RSK (Soil to Groundwater Protection) Residential Clean Up Levels or if an RSK (Soil to Groundwater Protection) Clean Up Level is not available the laboratory Practical Quantitation Limit (PQL) as listed in the revised Table 1-2 for the short list of chemicals plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred. Also in the Temporal Boundaries Decision Unit 3, Table 1-2 must be referenced.

Section 5.2.1.1in the Sampling and Analysis Plan – Field Sampling Plan (Volume 2a) must delete references to CMD Clean Up Levels and replace with Kansas RSK (Soil to Groundwater Protection) Residential Clean Up Levels or if an RSK (Soil to Groundwater Protection) Clean Up Level is not available the laboratory Practical Quantitation Limit (PQL) as listed in the revised Table 1-2 for the short list of chemicals plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred.

Section 5.2.1.3 in the Sampling and Analysis Plan – Field Sampling Plan (Volume 2a) must be revised as indicated in Section 5.9.4 of the Work Plan above.

Figure 5-1 in the Sampling and Analysis Plan – Field Sampling Plan (Volume 2a) must be revised to indicate expanded areas of excavation from the latest Geophysical Survey dated February 9, 2010 in Enclosure 2

Table 5-1 in the Sampling and Analysis Plan – Field Sampling Plan (Volume 2a) must be revised to indicate the collection of subsurface soils and groundwater samples during installation and sampling of the three monitoring wells.

Pages 28 and 29 of 97 of the QAPP Worksheet No 10 Problem Definition in the Sampling and Analysis Plan - Quality assurance Project Plan (Volume 2b) must delete references to CMD Clean Up Levels and replace with Kansas RSK (Soil to Groundwater Protection) Residential Clean Up Levels or if an RSK (Soil to Groundwater Protection) Clean Up Level is not available the laboratory Practical Quantitation Limit (PQL) as listed in the revised Table 1-2 for the short list of chemicals plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred.

Page 32 of 97 of the QAPP Worksheet No 11 Project Quality Objectives/Systematic Panning Process Statements in the Sampling and Analysis Plan - Quality assurance Project Plan (Volume 2b) must reference screening for all analytes in Table 1-2 and delete references to CMD Clean Up Levels and replace with Kansas RSK (Soil to Groundwater Protection) Residential Clean Up Levels or if an RSK (Soil to Groundwater Protection) Clean Up Level is not available the laboratory Practical Quantitation Limit (PQL) as listed in the revised Table 1-2 for the short list of chemicals plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred.

Page 32 of 97 of the QAPP Worksheet No. 11 Project Quality Objectives/Systematic Panning Process Statements in the Sampling and Analysis Plan - Quality assurance Project Plan (Volume 2b) must reference the extended list Table 1-2 in Volume 2a for analysis of the 5 judgmental samples.

Additional EWI Closure, Work and Sampling and Analysis Plan Final Revisions

Section 2 of the Closure Pan must be revised similarly to Section 2 of the Burn Pad 5 Closure Plan. After removal of contaminated soils clean closure will be documented by remaining soils meeting the Kansas RSK (Soil to Groundwater Protection) Residential Clean Up Levels or if an RSK (Soil to Groundwater Protection) Clean Up Level is not available the laboratory Practical Quantitation Limit (PQL) as listed in the revised Table1-2 for the short list of chemicals plus any additional chemicals detected from the extended list analysis from the five locations designated by KDHE where maximum soil contamination would be expected to have occurred.

Section 3.4 and 3.8 of the Closure Plan must be revised to indicate rinsate and/or wash water samples will be analyzed for the short list of analytes in the Table in Section 2 of the Closure Plan plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred.

Section 4.3 of the Closure Pan must be revised to reference Table 1-2 which details the short and extended list of chemicals to be analyzed during contingency soil sampling activities.

Section 4.10.3.1 of the Work Plan must be revised to indicate rinsate will be analyzed for the short list of analytes in Table 1-1 plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred.

Section 4.13 .2 of the Work Plan must delete references to CMD Clean Up Levels and U.S. Environmental Protection Agency (USEPA) Soil Screening Levels and replace with Kansas RSK (Soil to Groundwater Protection) Residential Clean Up Levels or if an RSK (Soil to Groundwater Protection) Clean Up Level is not available the laboratory Practical Quantitation Limit (PQL) as listed in the revised Table 1-1 for the short list of chemicals plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred.

Section 1.1.1 the Sampling and Analysis Plan – Field Sampling Plan (Volume 2a) must delete references to CMD Clean Up Levels and replace with Kansas RSK (Soil to Groundwater Protection) Residential Clean Up Levels or if an RSK (Soil to Groundwater Protection) Clean Up Level is not available the laboratory Practical Quantitation Limit (PQL) as listed in the revised Table 1-2 for the short list of chemicals plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred.

Table 3-1 in the Sampling and Analysis Plan – Field Sampling Plan (Volume 2a) must be revised by replacing 2 judgmental samples for appendix 8 in the Basis of info DQO subtask (4) with 5 judgmental samples for the extended list in Table 1-2. Also in the Basis of info DQO (5) replace New Data with -13 remaining judgment samples for the short list and any analytes detected during analysis of the 5 judgmental samples from the extended list in Table 1-2.

Section 5.2.1 in the Sampling and Analysis Plan – Field Sampling Plan (Volume 2a) must be revised in the third paragraph to reference Table 1-2 instead of Table 1-1.

Pages 26 and 27 of 97 of the QAPP Worksheet No.10 Problem Definition in the Sampling and Analysis Plan - Quality Assurance Project Plan (Volume 2b) must delete references to CMD Clean Up Levels and replace with Kansas RSK (Soil to Groundwater Protection) Residential Clean Up Levels or if an RSK (Soil to Groundwater Protection) Clean Up Level is not available, the laboratory Practical Quantitation Limit (PQL) as listed in the revised Table 1-2 in Volume 2a for the short list of chemicals plus any additional chemicals detected from the extended list analysis of the five locations where maximum soil contamination would be expected to have occurred.

Please provide revised pages or new document submittals as soon as possible so the Closure Plan for Burn Pad 5 can be approved and placed on public comment.

Sincerely,

Brad Robert (on behalf of Mostafa Kamal)

Mostafa Kamal, PE, CPM
Chief, Hazardous Waste Permits Section
Bureau of Waste Management

Enclosures 1. Tables 4-1 through 4-22
from the Hazardous
Waste Igloos Closure Plan

2. February 9, 2010
Geophysical Survey

3. Well Installation Work
Plan and Installation
Report Checklist

cc Ken Herstowski
Jorge Jacobs
Brad L. Koltak

KANSAS
DEPARTMENT OF HEALTH
AND ENVIRONMENT
Division of Environment

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

G Roesler

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MAR 12 2010
BUREAU OF WASTE MANAGEMENT

March 11, 2010

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Final Closure Plan for Open Burn Pad 5, Kansas Army Ammunition Plant, Parsons, Kansas, dated February 2010

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed the referenced document, received on February 8, 2010. KDHE/BER has no comments on this closure plan and defers to KDHE/Bureau of Waste Management for approval of the document. KDHE/BER will issue a letter following its review of the Work Plan, Sampling and Analysis Plan, and other planning documents for closure of the Explosive Waste Incinerator, Burn Pads 5 and 6, and the Pistol Range.

If you have any questions please call me at (785) 296-8801.

Sincerely,

Jorge Jacobs
Superfund Unit Manager
Assessment & Restoration Section

cc: Bob Jurgens → KSAAP SWMU 24 (C3-050-71395-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Kathy Baker, USACE
Rose Zeiler, KSAAP

KANSAS
DEPARTMENT OF HEALTH
AND ENVIRONMENT

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

February 17, 2010

Ms. Rose Zeiler
Kansas Army Ammunition Plant
BRAC Environmental Coordinator
727 S. Brooklyn Rd.
P.O. Box 220
Ratcliff, AR 72951

Subject: Request for Investigation of Former Fuel Aboveground Storage Tank Systems, Kansas Army Ammunition Plant, Parsons, Kansas

Dear Ms. Zeiler:

This letter is to request that the Army perform an environmental investigation for the former aboveground storage tank (AST) systems at the Kansas Army Ammunition Plant (KSAAP). The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has attached a list of historic fuel containing storage tanks for the Army's review, and requests a schedule for an environmental investigation for soil and groundwater contamination of the former ASTs. The list of fuel tanks is from the Oil, Hazardous Wastes, and Hazardous Substances Spill Control and Contingency Plan for KSAAP (Appendices VII and VIII), dated January 1982. KDHE/BER provides the following comments.

- KDHE/BER has concerns that the Army has omitted information for the needed investigation of former fuel ASTs. The Army has not discussed investigations for the former ASTs in the Draft Finding of Suitability for Early Transfer (FOSET) dated January 13, 2010. The former ASTs are a potential source for soil and groundwater contamination and are expected to be investigated for environmental cleanup. KDHE previously sent comments with concerns for the Army to address with revisions to the FOSET, prior to the Army's placement of the FOSET on Public Notice. KDHE E-mailed the comments to the Army on January 21, 2010. In addition to those comments, KDHE/BER requests that the Army revise the FOSET to include a discussion of the necessary investigation for the former AST systems in the next version of the FOSET, prior to Army's placement of the FOSET on Public Notice.

- The former ASTs do not appear to be included in the Army's implementation schedule dated December 14, 2009, or in the Construction Work Plan Above Ground Storage

Tank Remediation, dated November 2, 2009. KDHE/BER has concerns that former ASTs at KSAAP have not been adequately investigated and there are no current plans to adequately investigate releases from former AST systems. The investigation should consider potential releases from the tanks, underground and above ground product lines, and fuel dispenser areas. Some of the AST sites on the 1982 list are no longer used, recognized, and appear abandoned with potential contamination remaining. Other ASTs on the 1982 list may have been removed and the AST footprints may have been subsequently covered during construction of newer secondary containment structures, potentially leaving contamination in the subsurface. Releases from AST systems are common, and are a cause of soil and groundwater contamination.

- Although, KDHE/BER has attached a list of historic tanks from the 1982 document, it is uncertain if all the former ASTs have been identified. It is requested that the Army review historic records and develop a comprehensive list for all former ASTs, beginning in the early 1940s to the present. KDHE/BER requests that the Army indicate a schedule for the environmental investigation of the former fuel AST systems.

If you have any questions please call me at (785) 291-3089.

Sincerely,

Ashley Allen

Ashley Allen
Professional Geologist
Superfund Unit/Assessment & Restoration Section

Attachments: 4 pages: Appendices VII and VIII, KSAAP (1982)

Cc (w/attachments): Jorge Jacobs→ Bob Jurgens →KSAAP (C3-050-00021-1)
Gary Blackburn, KDHE/BER
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Ken Herstowski, EPA R7
Kathy Baker, USACE
Don Dailey, KSAAP

Letter of Transmittal

Date: January 25, 2010

To: Mr. Mostafa Kamal
Kansas Dept. of Health and Environment
Curtis State Office Building
1000 SW Jackson Street
Topeka, KS 66612

From: Mr. John Coughlin
ARA Inc.
7520 Main Street
Suite 103
Sykesville, MD 21784

RE: KSAAP

Mr. Mostafa Kamal:

ARA is pleased to provide you with the following information for the Closure of the Explosive Waste Incinerator, Pistol Range, and Burn Pads 5 and 6 for the Kansas Army Ammunition Plant.

- 3 hard copies of the Work Plan (Volume 1)
- 3 hard copies of the Sampling and Analysis Plan - Field Sampling Plan (Volume 2A)
- 3 hard copies of the Sampling and Analysis Plan - Quality Assurance Project Plan (Volume 2B)
- 3 hard copies of the Contractor Quality Control Plan (Volume 3)
- 3 hard copies of the Accident Prevention Plan/Site Safety and Health Plan (Volume 4)
- 3 CDs containing a digital copy of Appendix B of the Sampling and Analysis Plan - Quality Assurance Project Plan (Volume 2B)
- 3 CDs containing a digital copy of the Explosive Waste Incinerator Closure Plan
- 3 CDs containing a digital copy of Volumes 1 thorugh 4 and the EWI Closure Plan

Please distribute two copies to Akhter and one copy to Jorge. If you have any questions or comments regarding this transmittal please feel free to contact me.

Best Regards:

John Coughlin
Director, Engineering and Sciences

KANSAS
DEPARTMENT OF HEALTH
AND ENVIRONMENT

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

January 14, 2010

Mr. Ken Herstowski
U.S. Environmental Protection Agency, Region 7
ARTD/RCAP
901 North 5th Street
Kansas City, Kansas 66101

Subject: Old Ammunition Storage Area No Further Action Report at Kansas Army Ammunition Plant, Parsons, Kansas, dated November 24, 2009

Dear Mr. Herstowski:

The Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER) has reviewed the above the referenced document, received on November 30, 2009.

The Army in a meeting on January 12, 2010 indicated they plan to submit additional information and/or clarifications to address the KDHE/BER environmental and unexploded ordnance (UXO) concerns for the site. However, at this time KDHE/BER does not concur with the proposed no further action (NFA) at the Old Ammunition Storage Area.

COMMENTS:

1. KDHE/BER provided comments and concerns for the Old Ammunition Storage Area (also known as KAAP-001-R-01; and the open ammunition storage area in historic documents/records), in an October 21, 2009 letter. The Army has not addressed or resolved the comments and concerns in the letter. The comments and concerns were reiterated in a letter dated December 15, 2009. In a meeting on January 12, 2010, the Army indicted that they have plans to address concerns in the KDHE/BER letter dated October 21, 2009 for the Old Ammunition Storage Area (OASA). Pending receipt and review of the Army's response to comments for the OASA, KDHE/BER does not concur with a NFA at this time.

2. KDHE/BER requests that the Army perform a comprehensive review of historical Kansas Army Ammunition Plant (KSAAP) records and documents for additional background information on the OASA. It does not appear that all of the historic information has been considered for the NFA Report. This includes information presented in the RCRA Facility Assessment (1989), the Installation Assessment of KSAAP, Records Evaluation Report No. 126 (1978), and the 1983 Day and Zimmerman map for the OASA.

3. Based on KDHE/BER's current understanding of the site, it appears that only the northern-most of the three storage areas has had a comprehensive geophysical investigation. KDHE/BER recommends the remaining two open ammunitions storage areas be comprehensive investigated for UXO. If the two open ammunition storage areas do not include a comprehensive geophysical investigation, KDHE/BER requests institutional controls adequate to address concerns for potential remaining UXO until a comprehensive investigation is performed.

4. KDHE/BER notes that the Environmental Conditions of Property (ECP) report (2006) indicates the Army Materiel Command report (2003) mis-identified the general location for where the old munitions were likely stored.

5. Gravel pads were reportedly used to stock-pile unspecified HE (high explosive munitions) in the ECP report (2006). The HE was reportedly scattered from weather-deteriorated containers that were placed on gravel pads. It appears based on a conceptual site model that remaining scattered HE would have a likelihood of occurring immediately around and underneath the gravel pads.

   The NFA Report does not correlate the investigation to the gravel pads where the HE was reportedly storage and spilled. Instead of focusing on the gravel pad areas, it appears that the investigation somewhat of a general reconnaissance, covering the 27 acres of the OASA site. KDHE/BER requests detailed investigation figures and field notes that correlate the reported spilled HE with the gravel pads.

6. U-shape berms are discussed in the ECP (2006) for the OASA. There has not been subsequent report discussion on if the berms were used to contain the stored HE or if the gravel storage pads were within the U-shaped berms.

7. It is not clear in the NFA Report if the surface water drainages within the OASA have been appropriately assessed.

8. Page 1, section 2.0, paragraph 4. This paragraph of the NFA Report indicates that the 1956, 1973, and 1996 aerial photographs were reviewed for the Army's previous investigations. It

is requested that the Army review an electronic copy of the 1950 and other aerial photographs not previously considered which may provide additional clarification for where the HE was stored and reportedly spilled.

9. Page 3, section 3.1, paragraph 1. In consideration of future land use, the cobalt maximum sample results of 33.5 milligrams per kilogram (mg/kg) as reported in this paragraph, exceeded the residential Regional Screening Level (RSL) (23 mg/kg) and background (25.88 mg/kg), but was below the industrial RSL of 300 mg/kg for cobalt.

10. The NFA Report does not address an apparent open trench shown on historic areal photographs (e.g. July 4, 1963 aerial photograph, Areal Photographic Analysis of the KSAAP, EPA, June 1993) located north of the OASA. It is requested that this area north of the OASA be assessed for potential open trench disposal of wastes from the OASA or other environmental concerns.

If you have any questions please call me at (785) 291-3089.

Sincerely,

Ashley Allen

Ashley Allen
Professional Geologist
Superfund Unit/Assessment & Restoration Section

cc: Jorge Jacobs→Bob Jurgens → KSAAP (C3-050-72533-1)
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Kathy Baker, USACE
Rose Zeiler, KSAAP
Don Dailey, KSAAP

Open Detonation Grounds Baseline Survey Report

Kansas Army Ammunition Plant
Parsons, KS

FINAL REPORT
January 2010

Prepared for:

United States Army Corps of Engineers, Kansas City District
Federal Building CT-H 601 East 12th Street
Kansas City, MO 64106-2896

Contract No. W912DQ-08-C-0027
ARA Project No.: 1301

Prepared by:

ARA
ENGINEERING SCIENCES

ARA Incorporated
11211 Waples Mill Road, Suite 310
Fairfax, VA 22030-7406

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KANSAS
DEPARTMENT OF HEALTH
AND ENVIRONMENT

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

December 23, 2009

Mr. Mostafa Kamal
Kansas Department of Health and Environment
Bureau of Waste Management
1000 S.W. Jackson, Suite 320
Topeka, Kansas 66612

Subject: Draft Permit Modification, Former Kansas Army Ammunition Plant, Parsons Kansas, Parsons, Kansas

Dear Mr. Kamal:

The Kansas Department of Health and Environment provides the following comments for the Great Plains Development Authority (GPDA)/Department of Army, and Day and Zimmerman Kansas, LLC Draft Permit Modifications. The Permits are for the investigation, cleanup, and institutional controls of soil and groundwater contamination at the site.

Through recent negotiations of the Draft Consent Order between GPDA and KDHE, various Contaminants of Concern (COCs) were removed from the draft Consent Order. The current draft order covers only, lead based paint (LBP), asbestos containing materials (ACM), and pesticides in soil. KDHE requests that all other COCs at the site be included in the cleanup action performed pursuant to the Permits. The requested cleanup levels for the COCs should be protective to the anticipated land use and institutional controls would be necessary for contaminants remaining above the unrestricted land use cleanup standards.

The Draft Permits currently lists the more predominant soil and groundwater contaminants COCs; however, KDHE believes the investigation and cleanup of the remaining COCs that exceed state and federal cleanup standards are necessary to protect human health and the environment. KDHE has found that certain contaminants on the KAAP site exceed restricted land use and unrestricted land use standards but do not observe cleanup standards for these compounds listed in the permits for the site. Additionally, other COCs may be discovered during the future soil and groundwater investigations at the site that require corrective action.

KDHE believes these contaminants should be addressed as part of the RCRA Corrective Action under the Permits. The permits should be modified to indicate that these other contaminants will be addressed as part of the corrective action.

If you have any questions related to this comment letter, please contact me at (785) 296-1662.

Sincerely,

Gary Blackburn, Director
Bureau of Environmental Remediation

cc: KSAAP file

Day&Zimmermann

We do what we say.

MUNITIONS & GOVERNMENT
KANSAS DIVISION

December 22, 2009

Mr. Mostafa Kamal
Kansas Department of Health and Environment
Hazardous Waste Permits Section
1000 SW Jackson, Suite 320
Topeka, KS 66612

Mr. Ken Herstowski
U.S. Environmental Protection Agency
Region VII Office – RCRA Branch
901 North 5th Street
Kansas City, KS 66101

Re: Comments Responding to Public Notice on Permit Action

Dear Sirs:

The following comments are being submitted on behalf of Day & Zimmermann, Inc., the current operator on behalf of the U.S. Army, of the Kansas Army Ammunition Plant ("KSAAP"), and Day & Zimmermann Kansas LLC, the proposed future owner and operator of a portion of KSAAP (that portion will be referenced as the "D&Z Footprint"). These comments are being submitted to the Kansas Department of Health and Environment ("KDHE") and Environmental Protection Agency, Region VII ("EPA") within the time period requested by the November 12, 2009, Public Notice. We appreciate your consideration of these comments.

1. The proposed future owner and operator of the proposed D&Z Footprint is Day & Zimmermann Kansas LLC (not Day and Zimmermann Kansas, LLC).

2. Day & Zimmermann Kansas LLC's application for transfer of a portion of the permit is contingent upon accomplishing the proposed transfer of the D&Z Footprint to Day & Zimmermann Kansas LLC. The transfer of property will not be accomplished by December 31, 2009. As such the permit cannot be transferred at that time as proposed since Day & Zimmermann Kansas LLC will be neither an owner nor an operator. Day & Zimmermann, Inc. and Day & Zimmermann Kansas LLC continue to negotiate terms with the Army and will continue to coordinate with KDHE and EPA to ensure that KDHE and EPA have adequate information to issue an appropriate permit at or around the time of transfer.

3. The proposed revised permit, Section I, Paragraph I.I.1., outlines a schedule for submitting the Closure Cost Estimate for the container storage areas and open

detonation area (90 days after date of permit modification), and obtaining Financial Assurance for Closure and Liability Requirements (6 months after date of permit modification). KSAAP has not previously been required to prepare and submit such closure estimates or obtain financial assurance because it has been operated as a federal installation. 40 CFR § 264.140(c). Upon transfer of the D&Z Footprint and portion of the permit, the D&Z Footprint will no longer be part of a federal installation and therefore no longer subject to the exemption of 40 CFR § 264.140(c). It is more consistent with the RCRA requirements applicable to the proposed D&Z permit that closure cost estimates be prepared and approved, and financial assurance be calculated and secured, in advance of the effective date of a RCRA Permit. Day & Zimmermann Kansas LLC would propose that the Closure Cost Estimate for the container storage areas and open detonation area be prepared, submitted, reviewed and approved in advance of issuance of the proposed revised permit. In addition, Financial Assurance for Closure and Liability Requirements would also be obtained in advance of authorization under the permit. Such a process is more consistent with the requirements of RCRA.

4. The definition of the Facility in Section VI, Paragraph 2. and Figure 1 should reference the "D&Z Footprint" rather than the "DZI Footprint," as it is Day & Zimmermann Kansas LLC, rather than Day & Zimmermann, Inc. who will become the owner / operator of the D&Z footprint.

5. The proposed revised permit, Section VI, Paragraph 20.I., directs that a Cost Estimate for Correction Action Work be prepared and submitted within sixty (60) days of the effective date of the Part II. KSAAP has not previously been required to prepare and submit such closure estimates or obtain financial assurance because it has been operated as a federal installation. 40 CFR § 264.140(c). Upon transfer of the D&Z Footprint and portion of the permit, the D&Z Footprint will no longer be part of a federal installation and therefore no longer subject to the exemption of 40 CFR § 264.140(c). It is more consistent with the RCRA requirements applicable to the proposed D&Z permit that the Cost Estimate for Corrective Action be prepared and approved, and financial assurance be calculated and secured, in advance of the effective date of the Part II Permit. Day & Zimmermann Kansas LLC would propose that the Cost Estimate for Corrective Action Work be prepared, submitted, reviewed and approved in advance of issuance of the revised Part II Permit to Day & Zimmermann Kansas LLC. Such a process is more consistent with the requirements of RCRA.

In addition, we requested that Tetra Tech review and prepare comments on the draft permit. Day & Zimmermann, Inc. and Day & Zimmermann Kansas LLC incorporate by reference those comments prepared by our consultant Tetra Tech. A copy of Tetra Tech's comment letter is attached with this letter.

We appreciate the assistance of EPA and KDHE in working on the proposed permit revisions in order to allow KSAAP to transition into private operations. Should you have any questions or need any additional information on these comments or any additional matters related to the permits, we remain available.

Respectfully,

Steve Kosman

STEVE KOSMAN
Director of Engineering
Programs & Projects

SWK/dmh

Attachment a/s

Phone: 620-421-7476 23018 Rooks Road, Parsons, KS 67357-8403 Fax: 620-421-7518

TETRA TECH

December 15, 2009

Ms. Carolyn Smalley
Day & Zimmermann Kansas Division
23018 Rooks Road
Parsons, Kansas 67357-8403

Subject: Comments on Hazardous Waste Management Facility Permit, Part I and II

Dear Ms. Smalley:

Per your request, Tetra Tech EM Inc. (Tetra Tech) has reviewed the Hazardous Waste Management Facility Permit, Parts I and II prepared by the Department of Health and Environment, Division of Environment. Tetra Tech's comments are as follows:

Specific Comments:

1. **Cover Letters.** The effective date of the permit specified at the bottom of the cover letters must be updated.
2. **Section I.A., Effect of Permit.** Section I.A indicates that operation of the open burning/open detonation area is allowed. Day and Zimmermann Kansas, LLC (D&Z) will not operate the open burning area.
3. **Section I.E.9, Monitoring and Records.** Two typos appear in the first and second sentences of Section I.E.9.a. The fourth word in the first sentence "fro" should read "from," and the 28th word in the second sentence "cr" should read "or."
4. **Section V.A., Unit Description.** The first sentence should be modified to read as follows: "Hazardous wastes generated at the installation are stored in permitted storage areas ." ("storage areas" should be plural, and the "a" should be removed from the sentence).
5. **Section V.A., Unit Description.** The following Hazardous Waste Numbers and descriptions are missing from the permit based on the information provided by D&Z in the Part A permit application: D018, D022, D029, D030, D035, and P065.
6. **Section V.E., Management of Containers.** In the first sentence, the word "ad" should be changed to "add."
7. **Section V.G., Inspection Schedules and Procedures.** In the first sentence, the word "container" should be changed to "storage areas."
8. **Section VI, 1, List of Solid Waste Management Units and Areas of Concern.** Two solid waste management units (SWMU) and Area of Concern (AOC) are not included in the table – Burn Pad No. 6 (SWMU 24) and Old Ammunition Storage Area AOC. In footnote number 1, "RFA" should be spelled out. In footnote number 2, the reference to "KSAAP" should be changed to "D&Z."

9. **Section VI, 4, Reporting Requirements.** This document does not specify D&Z's future requirements. Given that corrective action activities have been completed at a number of SWMUs, please indicate what additional information the quarterly progress reports must convey for all activities.

10. **Section VI, 6, Notification Requirements for Newly-Discovered Releases at SWMUs.** "RGT" appears for the first time as the last word of the second sentence. Please define "RGT" in the permit.

11. **Section VI, 7, RCRA Facility Investigation (RFI) Work Plan, A.** Section VI, 7 states that the Permittee shall submit a RFI Work Plan within 180 days after the effective date of the permit. But what the RFI Work Plan must address is unclear. If this work plan is for newly discovered releases, a statement to that effect should appear.

12. **Section VI, 7, RCRA Facility Investigation (RFI) Workplan, C.** In Section VI, 7, C, the word "Swami's" appears in the first sentence. "Swami's" should be changed to "SWMUs."

13. **Section VI, 10, Interim Measures.** In Section VI, 10, the reference to "Kansas Army Ammunition Plant" should be changed to "D&Z."

14. **Section VI, 20, Corrective Measures Implementation, A.** Section VI, 20 discusses the corrective measures implementation for contaminated soils at SWMU Groups 9 and 10. Corrective measures for both these SWMU groups were implemented and addressed in the Permit Modification dated May 15, 2006. Because the corrective measures have been implemented, it is not clear why a new work plan is needed and what specific issues must be addressed.

15. **Section VI, 20, Corrective Measures Implementation, D, E, & G.** Sections D, E, and G refer to delivery dates April 4, 2007, July 3, 2007, and December 31, 2007 for various corrective measure implementation plans and reports. These dates must be modified because they are in the past.

If you have any questions or comments regarding this submittal, please contact me at (816) 412-1762.

Sincerely,

David H. Homer

David H. Homer, Ph.D.
Project Manager

Enclosure

cc: File
Stephanie Luebbering, Tetra Tech

KANSAS
DEPARTMENT OF HEALTH
AND ENVIRONMENT

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

November 25, 2009

Mr. Don Dailey
Commander's Representative
Kansas Army Ammunition Plant
23018 Rooks Rd., Suite AA
Parsons, Kansas 67357-8403

Subject: ***Draft Final, Construction Work Plan Above Ground Storage Tank Remediation, Kansas Army Ammunition Plant, Parsons, Kansas*, dated November 2, 2009**

Dear Mr. Dailey:

The Kansas Department of Health and Environment (KDHE) has reviewed the referenced document. The document (Work Plan) is dated November 2, 2009, and received on November 6, 2009.

Please find attached (2 pages) are the KDHE review comments and the requested revisions to the Work Plan. Also, please note the following items:

- All field work is expected to be performed under KDHE field oversight. Please coordinate and provide advance notification to allow for the necessary KDHE field oversight.

- The Storage Tank Section Limited Site Assessment/Request for Proposal (LSA/RFP) Revision 11, April 2008, and its addendums and attachments referred to in the attached comments is available on the KDHE web site at http://www.kdheks.gov/tanks/rfp/index.html

- All approvals for the Work Plan, field work, and subsequent reports will be performed by KDHE staff.

BUREAU OF ENVIRONMENTAL REMEDIATION
CURTIS STATE OFFICE BUILDING, 1000 SW JACKSON ST., STE. 410, TOPEKA, KS 66612-1367
Voice 785-291-3089 Fax 785-296-4823 E-Mail aallen@kdheks.gov

If you have any questions please call me at (785) 291-3089.

Sincerely,

Ashley Allen

Ashley Allen
Professional Geologist
Superfund Unit/Assessment & Restoration Section

Attachments: KDHE review comments (2 pages)

Cc (w/attachments): Jorge Jacobs→ Bob Jurgens →KSAAP (C3-050-00021-1)
Roger Boeken, KDHE/BER
Mostafa Kamal, KDHE/BWM
Renee Brown, KDHE/SEDO
Ken Herstowski, EPA R7
Kathy Baker, USACE
Rose Zeiler, KSAAP

written request must be submitted to Sharon Burrell, Bureau of Air and Radiation, not later than the close of business December 14 in order for the Secretary of Health and Environment to consider the request.

The U.S. Environmental Protection Agency has a 45-day review period, which will start concurrently with the 30-day public comment period, within which to object to the proposed permit. If the EPA has not objected in writing to the issuance of the permit within the 45-day review period, any person may petition the administrator of the EPA to review the permit. The 60-day public petition period will directly follow the EPA's 45-day review period. Interested parties may contact KDHE to determine if the EPA's 45-day review period has been waived.

Any such petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided for in this notice, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. Contact Patricia Scott, U.S. EPA, Region VII, Air Permitting and Compliance Branch, 901 N. 5th St., Kansas City, KS 66101, (913) 551-7312, to determine when the 45-day EPA review period ends and the 60-day petition period commences.

Roderick L. Bremby
Secretary of Health
and Environment

Doc. No. 037718

State of Kansas

Department of Health and Environment

Request for Comments

The Kansas Department of Health and Environment and the U.S. Environmental Protection Agency, Region 7, have received a request from the United States Army, Great Plains Redevelopment Authority, and Day and Zimmermann to transfer the Resource Conservation and Recovery Act (RCRA) hazardous waste management permit. The current RCRA permit issued November 7, 1989, to the Army and Day and Zimmermann is proposed to be split into two RCRA permits. As a result, one RCRA permit will be transferred to the Great Plains Redevelopment Authority as the new facility owner and the Army as facility operator, and one RCRA permit will be transferred to Day and Zimmermann as owner and operator. The affected facility known as the Kansas Army Ammunition Plant is located at 23018 Rooks Road, Parsons.

The facility was originally permitted to store hazardous wastes in containers and to treat hazardous waste in an incinerator. The RCRA permit transferred to the Army and the Great Plains Redevelopment Authority requires closure of the seven hazardous waste container storage areas and the hazardous waste incinerator and requires the continuation of investigations and cleanup of releases of hazardous waste and constituents. The RCRA permit transferred to Day and Zimmermann will allow storage of hazardous waste to continue at 12 container storage areas and requires continuation of investigations and cleanup of releases of hazardous waste and constituents.

In October 1985, the state of Kansas received final authorization from the EPA to implement its own hazardous waste management program in lieu of the federal program except for the portions covered by the Hazardous and Solid Waste Amendments (HSWA) of 1984. The KDHE portion of the permit (Part I) will be issued under the authority of K.S.A. 65-3430 et seq. and K.A.R. 28-31-9, and the EPA portion of the permit (Part II) will be issued under the authority of Sections 3001(g), 3001(h), 3002 (b), 3004(d), 3004 (u) and (v), 3005, and 6001 of the RCRA.

A copy of the administrative record, which includes the draft permits and permit applications and all information pertaining to this permit action, is available for public review until December 26 during normal business hours, Monday through Friday, at the following locations:

Kansas Department of Health and Environment
Hazardous Waste Permits Section
1000 S.W. Jackson, Suite 320
Topeka, 66612
Contact: Mostafa Kamal
(785) 296-1609

U.S. Environmental Protection Agency
Region VII Office - RCRA Branch
901 N. 5th St.
Kansas City, KS 66101
Contact: Ken Herstowski
(913) 551- 7631

Parsons Public Library
311 S. 17th St., Parsons
(during library hours)

Anyone wishing to comment on the draft permit should submit written comments postmarked not later than December 26 to Mostafa Kamal (KDHE) or Ken Herstowski (EPA) at the addresses above.

A public hearing has not been scheduled; however, if written requests are received that indicate a significant degree of public interest in the draft permit, a public hearing will be scheduled. After consideration of all comments received, the secretary of KDHE and the EPA director of the Air and Waste Management Division will make a final permit decision. Notice will be given to the applicant, to all persons who submitted written comments, to those who commented at the public hearing, and to those who requested notice of the final permit decision. If none of the comments received during the public comment period result in revisions to the draft permit, the permit will become effective immediately upon its issuance. If comments received during the public comment period result in revisions, the permit will become effective 30 days after service of notice of the final decision or at a later date, if a review is requested under 40 CFR 124.19.

Roderick L. Bremby
Secretary of Health
and Environment

Doc. No. 037712

KANSAS

DEPARTMENT OF HEALTH
AND ENVIRONMENT
Division of Environment

Mark Parkinson, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

November 9, 2009

Delores March
Parsons Public Library
311 S 17th
Parsons, Kansas 67357-4213

RE: Kansas Army Ammunition Plant Documents for Public Review

Dear Ms. March,

The Kansas Department of Health and Environment (KDHE) provides the enclosed documents for public review regarding a proposed permit modification of the Kansas Army Ammunition Plant RCRA permit. This packet includes several documents related to the proposed modification that must be available during the upcoming public comment period from November 12 through December 26, 2009. Therefore, KDHE is relying on your facility and EPA's Region 7 office to place these documents where they can be reviewed by interested parties during this period.

KDHE appreciates having the Parsons Public Library serve as an information repository. If you have any questions, please contact me at (785) 296-1609.

Sincerely,

M. Kamal

Mostafa Kamal
Chief, Hazardous Waste Permits Section

enclosure:
Fact Sheet
Part A Application GPDA
Part A Application DZI
Parts 1 & 2 of GPDA Permit
Parts 1 & 2 of DZI Permit

cc w/fact sheet only:
Rose Zeiler - Army
Dan Goddard – GPDA
Carolyn Smalley - DZI
Ken Herstowski – RCAP/AWMD EPA Region 7
David Stutt – DEA/SEDO Waste Programs
Bill Bider - BWM

Meeting Minutes and Action Items
KSAAP Quarterly Meeting
October 8, 2009

Attendees: See attached sign-in-sheet
: Rose Zeiler participated by phone

Ongoing Corrective Actions- for details please see attached PowerPoint

1200 Area

Excavations in the 1200 Area are complete. Those grids remaining above action levels will be backfilled first with low-perm material and then brought to existing grade with common fill and topsoil.

A new RFI is being planned for FY10 to include investigation of the new settling pond A & B and delineation of chromium in groundwater.

Action: USACE draft a letter of extension of corrective measure for the 1200 Area

Action: USACE continues to develop CSM for the 1200 Area

Pond 3

AVS/SEM samples have been collected and the data is being compiled and analyzed. It seems that the chromium in the center of the pond is not bioavailable, but chromium near the pond shoreline is bioavailable.

KDHE stated that for pond closures they usually require groundwater samples and may request this for Pond 3.

Action: Dave Daniel to send EPA and KDHE data for Pond 3 as well as a CSM

1100 Area PCE Investigation

1100 Area PCE extent delineation complete. First round of groundwater samples in July 2009 indicated plume was captured by the newly installed wells. Well stabilization time and wetter than normal conditions may have diluted results inside the plum. Second round of samples collected on October 7, 2009.

Technical memorandum for the investigation is being prepared by USACE.

Action: USACE send Technical Memorandum to EPA and KDHE—October 14. Complete analytical database needs to be transmitted to KDHE.

Site Wide Groundwater

The Fall Site Wide Event is currently taking place which includes the 3rd quarter 700 Area sampling

Due to the perchlorate soil results in the OD grounds survey, a select set of wells near buildings where perchlorate was used and wells in the OB/OD grounds were sampled for perchlorate. This occurred the week of October 5th. Sampling was not completed due to weather; will be completed the week of October 13th. Results will be analyzed and forwarded to the agencies for review.

SWMU 14 and 16 Cap Upgrades

SWMU 16 is solid waste permit 355. Charles Bowers has sent out the approval letter for the cap upgrades to SMWU 14, 15 and 16.

A letter was received from KDHE solid waste outlining the steps for modification of the permit to make Army and GPDA co-permittees.

SWMU 15 Closure

Cap upgrade is complete. Closure of the Active Industrial and Asbestos Waste Cell near completion; only fine grading, seeding and erosion control is remaining.

Action: Rose Zeiler will staff her comments to this letter through BRAC and submit them to KDHE if necessary.

EWI/Burn Pad 5

Workplans are being finalized. Agreement was reached on the analyte list for the EWI and Permitted Igloos (attached). Berrylium and thallium will be added to the list for the EWI.

Actions: ARA--An electronic version with highlight/strikeout of changes to the plans will be sent to KDHE and EPA for approval. A clean hardcopy will follow.

USACE- PCB data collected on the paint from the EWI will be submitted unvalidated/draft to EPA and KDHE.

USACE/Army need to discuss applying the analyte list to Burn Pad 5

Pistol Range

Action: Kathy submit request for approval on pistol range portion of the workplan to Ken and Jorge.

Closure of Permitted Igloos

Workplans are being finalized. Agreement was reached on the analyte list for the EWI and Permitted Igloos (attached). Information on why the yellow highlighted items have no method will be presented in the closure plan.

Actions: FPM--An electronic version with highlight/strikeout of changes to the plans will be sent to KDHE and EPA for approval. A clean hardcopy will follow.

Rose—Letter from Army stating that there is no Army method for those items highlighted in yellow.

Open Detonation Area Survey

Baseline survey is complete. Report will be completed in early December.

AST Closure

Workplans should be out for review in mid-November

Actions: KDHE storage tank program will be reviewing in conjunction with BER-Renee Brown (Chanute Office)

STP RFI/Skeet Range SI/Haz Waste Storage/PCB Transformer Survey

Plans out for regulatory review in late October 2009

Sumps/Trough Investigation

Agency review is planned for December 2, 2009

Action: Kathy—Add to schedule

USTs

100 Area
- 19 individual heating oil USTs at single family dwellings
- Documentation of removal is being researched

200 Area
- 4 USTs removed
- Will be looking for any residual contamination

300 Area
- 1 UST removed
- Will be looking for any residual contamination

Day&Zimmermann

We do what we say.®

MUNITIONS & GOVERNMENT
KANSAS OPERATIONS

RECEIVED

OCT 09 2009

BUREAU OF WASTE MANAGEMENT

October 7, 2009
EE:DH090004 CJS doc

Mr. Mostafa Kamal
Kansas Department of Health and Environment
Bureau of Waste Management
1000 SW Jackson St., Suite 320
Topeka, Kansas 66612

Dear Mr. Kamal:

Subject: Schedule for Part B Section Submittals

Our schedule for submitting Part B Sections, as discussed last week, is as follows:

October 19
Section B – Facility Description
Section C – Waste Characteristics

October 28
Section D – Process Information for Containers and Miscellaneous Treatment
Section O – Subpart CC Air Emissions Standards

November 4
Section F – Procedures to Prevent Hazards
Section G – Contingency Plan
Section H – Personnel Training
Section K – Other Federal Laws
Section L – Certification

Section I – Closure Post-Closure Plans and Financial Requirements and Section J – Solid Waste Management Units cannot be submitted until after negotiations are completed with the Army. D&Z will submit a schedule for completion of Sections I and J ten (10) days after negotiations are completed.

If you have any questions or comments, feel free contact Carolyn Smalley by email (carolyn.smalley@dzikansas.com) or by phone (620-421-7434).

Respectfully,

STEVE W. KOSMAN
Director of Engineering,
Programs & Projects

SWK/CJS/dmh

Phone: 620-421-7400 **23018 Rooks Road, Parsons, KS 67357-8403** **Fax: 620-421-7440**

DEPARTMENT OF THE ARMY
KANSAS ARMY AMMUNITION PLANT
23018 ROOKS ROAD
PARSONS, KANSAS
67357

RECEIVED
SEP 30 2009
BUREAU OF WASTE MANAGEMENT

September 30 2009

Mr. Mostafa Kamal
Kansas Department of Health and Environment
Hazardous Waste Permits Section
1000 SW Jackson Street, Suite 320
Topeka, Kansas 66612

Subject: Kansas Army Ammunition Plant (KSAAP)
Request for Modification of the RCRA Hazardous Waste Permit
EPA ID: KS0213820467

Dear Mr. Kamal:

In accordance with the agreement reached among all parties during the August 17, 2009 conference call regarding the modification of the existing KSAAP RCRA Hazardous Waste Permit, KSAAP submits the enclosed "Request for Modification for the Great Plains Development Authority Property." The proposed modification is necessitated by the closure of KSAAP in accordance with BRAC 2005 law and the pending transfer of approximately 6,000 acres of the 13,272-acre closed Army facility to the Great Plains Development Association (GPDA) for commercial and light industrial development. This transfer is expected to take place on December 31, 2009. It is requested that the modified permit include only those closure and corrective action requirements that apply to the approximately 6,000 acres being transferred to GPDA, with Army as Operator and GPDA as Owner. No munitions production or hazardous waste processes will be conducted by either the Army or GPDA on the GPDA acreage. The remainder of the operating portion of KSAAP will be transferred to Day and Zimmerman, Inc. who will submit a separate request for modification for a hazardous waste facility with ongoing munitions production.

Also enclosed are Figures A-1 through A-6 as attachments to the Part A, as well as the Draft Closure Plans for the hazardous waste management units on the GPDA property including the Hazardous Waste Permitted Igloos, the Explosive Waste Incinerator, and Burn Pad 5. The legal description of the GPDA property will be submitted on or before November 13, 2009 and it is KSAAP's understanding that the GPDA is submitting the Kansas Business Disclosure information under separate cover. In accordance with EPA's September 1, 2009 letter regarding later submittals, KSAAP provides the following schedule to be determined from the date of transfer of the property to GPDA:

- 90 days - Closure Plans (not yet final) for all of the hazardous waste management units on the GPDA property, Operation and Maintenance Plans for SWMUs and AOCs on the GPDA property, and RCRA Part B Permit application for post-closure of the 700 Area

- 60 days - Land Use (Institutional) Control Plan for SWMUs and AOCs on the GPDA property

- 30 days – Revised Security Plan, Monitoring and Recordkeeping Plan for SWUs and AOCs on the GPDA property

The point of contact (POC) for this action is the BRAC Environmental Coordinator, Rose M. Zeiler. She may be contacted by telephone at (479) 635-0110 or E-mail at rose.zeiler@us.army.mil with any questions and/or concerns.

Sincerely,

Donald D. Dailey
Commander's Representative
Kansas Army Ammunition Plant

Enclosures: Request for Modification for the Great Plains Development Authority Property
Revised Part A Permit Application with Figures (6)
Closure Plans

Copies: Ken Herstowski – USEPA (Region 7)
Jorge Jacobs – KDHE
Dan Goddard, GPDA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

RECEIVED
JUL 30 2009
BUREAU OF WASTE MANAGEMENT

29 JUL 2009

Mr. Don Dailey
Commander's Representative
Kansas Army Ammunition Plant
23018 Rooks Rd., Suite AA
Parsons, KS 67357-8403

Re: Review of Work Plans
Remediation and Closure of EWI, Burn Pads and Pistol Range
Kansas Army Ammunition Plant
Parsons, Kansas
RCRA ID# KS0213820467

Dear Mr. Dailey:

Kansas Army Ammunition Plant (KSAAP) has proposed to conduct remedial activities at the Explosive Waste Incinerator (EWI), Pistol Range and Burn Pads 5 and 6 (Burn Pads). The EWI and Burn Pad 5 are hazardous waste management units pursuant to the Resource Conservation and Recovery Act (RCRA). The EWI is included in the RCRA Permit issued December 1, 1989, and Burn Pad 5 has operated under interim status since November 19, 1980. KSAAP intends that the remedial activities will fulfill the requirements of RCRA clean closure of the EWI and Burn Pad 5. RCRA closure plans for the EWI and Burn Pad 5 are subject to separate review and approval by the Kansas Department of Health and Environment (KDHE).

The Environmental Protection Agency (EPA) has reviewed the work plans provided by the U.S. Army Corps of Engineers. Review of the closure plans for the EWI and Burn Pad 5 is not included in EPA's review of the contractor work plans for the remedial activities. KDHE will provide review and comment on the closure plans. Based upon EPA's review, the activities described in the plans will not adequately remediate the soil at the EWI, Pistol Range and Burn Pads and will not satisfy the requirements for clean closure at the EWI and Burn Pad 5. The enclosed comments are based upon EPA's review of the contractor work plans.

Please provide revised work plans that will adequately remediate soil and implement the approved closure plans within 30 days of the date of this letter. If you have any questions, please call me at 913-551-7631.

Sincerely,

Kenneth Herstowski
Air and Waste Management Division

Enclosure

cc: Mostafa Kamal, KDHE
Jorge Jacobs, KDHE
Rose Zeiler, U.S. Army
Kathy Baker, U.S. Army Corps of Engineers

Review Comments
Proposed Remedial Activities – Explosive Waste Incinerator, Pistol Range & Burn Pads 5/6
Kansas Army Ammunition Plant, Parsons, Kansas
RCRA ID# KS0213820467

Kansas Army Ammunition Plant (KSAAP) has proposed to conduct remedial activities at the Explosive Waste Incinerator (EWI), Pistol Range and Burn Pads 5 and 6 (Burn Pads). The EWI and Burn Pad 5 are hazardous waste management units pursuant to the Resource Conservation and Recovery Act (RCRA). The EWI is included in the RCRA Permit issued December 1, 1989, and Burn Pad 5 has operated under interim status since November 19, 1980. KSAAP intends that the remedial activities will fulfill the requirements of RCRA clean closure of the EWI and Burn Pad 5. RCRA closure plans for the EWI and Burn Pad 5 are subject to separate review and approval by the Kansas Department of Health and Environment (KDHE). Review of the closure plans for the EWI and Burn Pad 5 is not included in this review of the contractor work plans for the remedial activities. The following comments are based upon review of the contractor work plans.

Draft Final Work Plan, Volume 1 dated March 2009 (ARA Incorporated)

1. The work plan does not reflect the required activities in the closure plans for the EWI and Burn Pad 5. The work plan shall be revised to include all the required activities in the closure plans following their approval by KDHE.

2. Table 1-1, Soil Clean-Up Target Levels, is not appropriate to demonstrate clean closure of the EWI and Burn Pad 5. The clean closure levels from the closure plan must be achieved to demonstrate clean closure of the EWI and Burn Pad 5. The work plan shall be revised to include the approved clean closure levels for the EWI and Burn Pad 5.

3. Page 1-7, Prepare and Close EWI Site, describes the activities to close the EWI. Decontamination is described as removing the explosive hazards in EWI structures and equipment. Closure of the EWI must also include decontamination to meet all clean closure levels in structures, equipment, and soil. The work plan shall be revised to include decontamination to clean closure levels in EWI structures, equipment and soil.

4. Page 1-7, Prepare and Close EWI Site, describes the activities to close the EWI. Field screening is described as being used to verify decontamination of EWI structures and equipment. Closure verification sampling must include collection of representative samples and their analysis by an approved laboratory. The work plan shall be revised to include the required closure verification sampling and analysis.

5. The work plan does not include the activities to remove and dispose of the EWI fuel tank. The work plan shall be revised to include a complete and detailed description of all activities required for the removal of the EWI fuel tank and contaminated soil and closure verification sampling that all contaminated soil has been removed.

6. Section 3.8, Analytical Laboratory, provides the vendors of laboratory analysis. Use of CT Laboratories and Test America laboratories must be approved by the KDHE.

7. Section 4, EWI – Planned Activities, provides an overview of the planned activities for closure of the EWI. The second paragraph describes that the EWI structures and equipment will be decontaminated and certified as suitable for unrestricted use. This paragraph must be revised to state that to meet unrestricted use, all chemical constituents will be below unrestricted use levels on all surfaces of the EWI structures and equipment.

8. Section 4, EWI – Planned Activities, provides an overview of the planned activities for closure of the EWI. The third paragraph describes that concrete removed will be disposed of as construction and demolition waste (C&D waste) after being field screened for explosives. Concrete and other demolition waste must be free of contaminants in order to be disposed of as C&D waste. Representative samples must be collected and analyzed by an approved laboratory to demonstrate that the concrete and other demolition waste is free of contaminants and suitable for C&D waste disposal. If the concrete and other demolition waste is not free of contaminants, it shall be disposed at an approved location. The work plan shall be revised to include the proposed locations for disposal of concrete and other demolition waste that cannot be disposed of as C&D waste.

9. Section 4.2.2, Permitting and Notifications, states that the contractor will obtain all permits and variances required for the decontamination and disposal of the EWI site. The contractor shall obtain and provide copies of all notices, permits and variances in the work plan prior to its approval.

10. Section 4.3.1, Quantity Distance Limit Determination, describes an Explosives Safety Submission (ESS). The work plan shall include the approved ESS.

11. Section 4.5.1, Survey for Mercury and PCBs, describes procedures to identify polychlorinated biphenyls (PCBs). The work plan shall be revised to also include a plan for the sampling and analysis of paint and caulk for PCBs.

12. Section 4.5, Preparation for Thermal Decontamination or High Pressure Wash and/or Demolition, indicates that open burning of the EWI structure and/or equipment will be conducted. The work plan shall be revised to include a complete and detailed methods, process and procedures that will be utilized for thermal decontamination. Approval for open burning must be obtained from the KDHE Bureau of Air and included in the work plan prior to approval.

13. Section 4.5, Preparation for Thermal Decontamination or High Pressure Wash and/or Demolition, indicates that erosion and sediment control measures will be determined in cooperation with KDHE. Storm water permits are necessary for erosion and sediment control. The work plan shall include the storm water permit obtained for the EWI activities.

14. Section 4.6.2, Utility Deactivation and Lockout/Tagout, describes asbestos removal in the EWI structure and equipment. Asbestos removal must be completed before any open burning or venting. The work plan shall be revised to require complete asbestos removal before any thermal decontamination, demolition or venting.

15. Section 4.8, Explosives Field Screening, Treatment, and Disposal, describes the use of convective heat to decontaminate in-place asbestos contaminated with explosives. The work plan shall be revised to include a complete and detailed description of the methods, process and procedures associated with convective heat decontamination of asbestos.

16. Section 4.8.1.2, Explosive Perforation/Cutting, describes the venting of equipment. The work plan shall be revised to require the removal of all asbestos prior to venting.

17. Section 4.9, Thermal Decontamination, shall be revised to provide a complete and detailed description of the methods, process and procedures for thermal decontamination.

18. Section 4.10.2, Pressure Washing of Structures and Equipment, describes the construction of a decontamination area. The work plan shall be revised to include a complete and detailed description of all decontamination areas to be constructed.

19. Section 4.10.3.1, Certification of Building and Debris, describes the testing of construction and demolition debris, masonry and concrete rubble and recyclable metal. The work plan shall be revised to provide a complete and detailed description of the representative sampling and analysis for contaminants to necessary before the materials can be disposed or recycled.

20. Section 4.12, Certification of EWI Structures, describes the 5X certification. Certification to 5X alone will not satisfy the requirements for clean closure or unrestricted use. The work plan shall be revised to include the requirement to demonstrate that no contaminants remain above unrestricted use and clean closure levels. Note that neither of the two response complete reports described in the section will include the buildings at the EWI.

21. Section 4.13.1, Site Characterization, states that the Sampling and Analysis Plan – Field Sampling Plan - Volume 2A dated March 2009 will be followed to characterize soil contamination at the EWI. The proposed sampling is not adequate to characterize soil contamination and does not comply with the closure plan. Further comment is provided below in the review section on the sampling plan.

22. Section 4.13.2.1, Decontamination Area, describes that an area will be established to decontaminate personnel and equipment. The work plan shall be revised to provide a complete and detailed description of the location, design and procedures to

decontaminate personnel and equipment and the removal and cleanup of the decontamination area.

23. Section 4.13.3, Transportation and Disposal, describes materials will be disposed at a C&D disposal site. In order for materials to be disposed at a C&D disposal site, the materials must be clean at unrestricted use levels. The work plan shall be revised so that only materials that are clean to unrestricted use levels will be disposed at a C&D disposal site.

24. Section 4.13.6, Final Inspection, describes the preparation of a final report of activity. The work plan shall be revised to require submittal of a Corrective Measures Implementation Report prepared in accordance with RCRA Part II Permit Condition C.2 and the RCRA Corrective Action Plan, EPA 520-R-94-004, May 1994.

25. Section 5.3.2, Permitting and Notifications, describes that permits will be obtained to conduct clearance of munitions potentially presenting an explosive hazard and refers to Section 2.4. Note that Section 2.4 does not address permitting and notifications. The contractor shall obtain and provide copies of all notices, permits and variances in the work plan prior to its approval.

26. Section 5.3.4, Site Preparation, describes erosion and sediment controls will be constructed. Storm water permits are necessary for erosion and sediment control. The work plan shall include the storm water permit obtained for the Burn Pad 5/6 and Pistol Range activities.

27. Section 5.3.5, Quantity Distance Limit Determination, describes an Explosives Safety Submission (ESS). The work plan shall include the approved ESS.

28. Section 5.8, Sifting Operations, describes that berm soil from Burn Pads 5/6 will be used as backfill in excavated portions of the burn pads. The work plan must be revised to include a detailed description of representative sampling and analysis of the berm soil to demonstrate that contaminants are below unrestricted use levels before it can be used as fill.

29. Section 5.9, Pre-Remedial Action Characterization Sampling, states that the Sampling and Analysis Plan – Field Sampling Plan - Volume 2A dated March 2009 will be followed to characterize soil contamination at Burn Pad 6. The proposed sampling is not adequate to characterize soil contamination. Further comment is provided below in the review section on the sampling plan.

30. Section 5.10.1, Rationale/Design, describes x-ray fluorescence (XRF) sampling of the Pistol Range berm and firing positions. The proposed sampling is not adequate to define the contaminant concentrations. The Pistol Range appears to have had several configurations. Grid sampling of the entire extent of the Pistol Range area must be

conducted. Remedial activities must include the removal of all berms for off-site disposal. Laboratory analyses of representative samples will be required to document all clean areas. The work plan shall be revised to require these actions.

31. Section 5.10.3.1, Decontamination Area, describes that an area will be established to decontaminate personnel and equipment. The work plan shall be revised to provide a complete and detailed description of the location, design and procedures to decontaminated personnel and equipment and removal and cleanup of the decontamination area.

32. Section 5.10.4, Transportation and Disposal, describes materials will be disposed at a C&D disposal site. In order for materials to be disposed at a C&D disposal site, the materials must be clean at unrestricted use levels. The work plan shall be revised so that only materials that are clean to unrestricted use levels will be disposed at a C&D disposal site.

33. Section 5.11, Final Inspection, describes the preparation of a final report of activity. The work plan shall be revised to require submittal of a Corrective Measures Implementation Report prepared in accordance with RCRA Part II Permit Condition C.2 and the RCRA Corrective Action Plan, EPA 520-R-94-004, May 1994.

34. Section 6.1.2, Asbestos, shall be revised to include roofing material, mastics, floor material, gaskets, and any other material which may include asbestos. All asbestos must be removed prior to demolition and open burning.

35. Section 6.1.4, PCBs, shall be revised to include paint, caulk and other interior or exterior electrical equipment which may contain PCBs. In addition, fuels used to open burn explosives in the EWI and Burn Pads 5/6 areas may have included PCBs resulting in PCB soil contamination.

36. Section 6.2.1, RCRA Hazardous Waste, shall be revised to include EPA Waste Codes K044, K045, K046 and K047 as those materials have been treated by open burning.

37. Table 6-1, KSAAP Laboratory Analysis and Disposal Options, shall be revised to define "RIC," include PCB analysis for soil, water, asbestos, wood and debris, concrete and scrap metal, and define "Use divide by 20 rule."

Draft Final Sampling and Analysis Plan – Field Sampling Plan, Volume 2B dated March 2009 (ARA Incorporated)

38. Table 1-2, Facility Wide Soil Cleanup Criteria, lists constituents of concern (COCs) for the EWI. The table does not include the required COCs from the EWI closure plan. The work plan shall be revised to include all COCs from the approved closure plan.

39. Section 1.3, Summary of Existing Area 2700 Burn Pad 5 and 6 Site Data, states that no significant contamination was found in groundwater from previous investigations. Groundwater has not been investigated at Burn Pad 5 and 6. A RCRA Facility Investigation (RFI) will be needed for groundwater at Burn Pad 5 and 6.

40. Section 1.3, Summary of Existing Area 2700 Burn Pad 5 and 6 Site Data, lists various past investigations of soil at Burn Pads 5/6. These investigations were limited and have not fully defined the extent of contamination. Subsurface sampling at areas outside of the defined excavation areas will be necessary at Burn Pad 5 to demonstrate that no further contamination exists at Burn Pad 5.

41. Section 1.4, Pistol Range, summarizes lists various past investigations of the Pistol Range. An adequate RFI at the Pistol Range has not been completed. The limited sampling proposed in the work plan will not be adequate to demonstrate that all contaminants have been identified and removed. The work plan shall be revised to include an adequate delineation of contamination and provide for the removal of contamination above unrestricted use levels.

42. Section 1.5.3, Pistol Range, describes only limited soil removal from firing sites and the berm will be based upon XRF delineation. The proposed actions are not adequate to fully remediate the Pistol Range. Historical activities have occurred outside of the current configuration. Complete delineation of the area is needed and supported with laboratory analysis of representative samples. Based upon the complete site investigation, all soil and sediment above unrestricted use levels shall be removed for off-site disposal. The berm will require complete removal and off-site disposal. The work plan shall be revised to include these activities.

43. Section 2.12, Environmental Protection Agency, describes EPA as the support regulatory agency. EPA is the approving agency for all matters associated with the proposed remedial actions. Work undertaken without EPA approval is at risk by the Army and may not be subsequently approved if determined to be inadequate. However, KDHE is the lead agency in matters pertaining to delegated environmental programs under the Clean Air Act, Clean Water Act and hazardous and solid waste identification and disposal under RCRA and determination of RCRA clean closure of the EWI and Burn Pad 5. The work plan shall be revised to show the correct lead agency for each environmental program task.

44. Section 3.2, Applicable Regulations/Standards, describes KDHE as the lead regulatory agency. See previous comment.

45. Section 3.2, Applicable Regulations/Standards, describes the comparison of "relevant" soil in the vicinity of Burn Pads 5/6 to confirmation results. It is not clear what is intended by "relevant" soil. The work plan shall be revised to clarify "relevant" soil and a detailed description of the procedures and methods for any soil comparisons.

46. Section 3.2, Applicable Regulations/Standards, describes lead as the only contaminant at the Pistol Range. Other contaminants from range actions may also be present. The delineation of contamination at the Pistol Range will include all possible contaminants. The work plan shall be revised to include delineation of all possible contaminants at the Pistol Range.

47. Section 3.2, Applicable Regulations/Standards, describes a single aqueous sample from the sump at Building 2702. This will not be adequate to clean close the EWI. The sump shall be decontaminated and verification sampling completed in accordance with the approved EWI closure plan. The work plan shall be revised to require these activities.

48. Section 3.2, Applicable Regulations/Standards, describes waste characterization based solely upon toxicity characteristic leaching procedure (TCLP) and other RCRA waste characteristic values. Wastes shall also be characterized as listed hazardous wastes K044, K045, K046 and K047 and shall meet land disposal restriction requirements (LDRs), including those for underlying hazardous constituents, prior to disposal. The work plan shall be revised to require these characterizations, determinations and requirements.

49. Table 3-1, Summary of Data Quality Objectives for the EWI, includes "Study Question 2" which shall be revised to state clean closure criteria from the approved EWI closure plan. Note that this study question refers to a non-existent Table 2-1. "Decision Rules 2" shall be revised to state clean closure criteria from the approved EWI closure plan. "Target Population 2" refers to the Burn Pad 5 figure. The work plan shall be revised to provide a EWI sampling figure and reference. All sampling locations required by the approved closure plan shall be shown on the figure. "Decision Unit" shall be revised to include "All grid locations." Action Level 2 shall be revised to state the clean closure criteria from the approved EWI closure plan. "If…then 2" shall be revised to refer to clean closure criteria from the approved EWI closure plan. "Performance or Acceptance 2" shall be revised to state the clean closure criteria from the approved EWI closure plan.

50. Figure 3-1, Flow Chart for EWI, dispose as MDAS shall be revised to require disposal in accordance with solid and hazardous waste requirements. The box "select random sampling locations" shall be removed as random sampling is not appropriate or adequate to demonstrate clean closure of the EWI.

51. Table 3-2, Summary of Data Quality Objectives for the Burn Pads, includes Study Question 2 for Burn Pad 6 which refers to "USEPA Region 6 PRGs" shall be revised to state "USEPA unrestricted use levels and Burn Pad 5 approved clean closure values." Decision Rules 2 shall be revised to reference USEPA unrestricted use levels and Burn Pad 5 approved clean closure values. "What data are required" shall be revised to reference "USEPA unrestricted use levels and Burn Pad 5 approved clean closure values." "Basis of info" shall be revised to require complete grid sampling at Burn Pad 6, complete grid sampling outside of excavation areas at Burn Pad 5 and shall not exclude

volatile organic analytes. "Target Population 2" shall include Burn Pad 5 soil and sample location figure reference. "Sampling Unit 2" shall include volatile organic analytes and include Burn Pad 5 soil and sample location figure. "Sampling Unit" shall also include each sample grid and clean closure sample location. "Decision Unit" shall be revised to include "All grid locations." "Action Level 2" shall be revised to referece USEPA unrestricted use levels and Burn Pad 5 approved clean closure values. "If…then 2" shall be revised to reference USEPA unrestricted use levels and Burn Pad 5 approved clean closure values. "Performance or Acceptance 2" shall be revised to refer to USEPA unrestricted use levels and Burn Pad 5 approved clean closure values.

52. Figure 3-2, Flow Chart for Burn Pad 5 and 6, shall be revised to collect soil samples at a rate of one per 5 cubic yards of soil. The figure shall be revised to include flow chart items related to removal of the berm soil. The decision points "Results > Region 6 PRGs" shall be revised to "Results > USEPA Unrestricted Use Levels and Burn Pad 5 Approved Clean Closure Values." The box "Lay Out Sampling Grid and Randomly Select Sampling Locations @ Burn Pad 6" shall be revised to "Lay Out Sampling Grid and Sample All Locations @ Burn Pad 6." The decision point "Confirmatory Results < Reg 6 PRGs" shall be revised to "Confirmatory Results < USEPA Unrestricted Use Levels and Burn Pad 5 Approved Clean Closure Values."

53. Table 3-3, Summary of Data Objectives for the Pistol Range, includes a Problem Description describing soil which may be contaminated with lead which must be removed to implement BRAC which shall be revised to require removal of all contaminants above USEPA unrestricted use levels to implement RCRA. The current configuration and use of the Pistol Range does not represent all historical configurations and use of the Pistol Range. CSM shall be revised to state that contaminants may have been released due to historical activities at the Pistol Range. Study Questions shall be revised to "Does site soil have contaminants above unrestricted use levels." Decision Rules shall be revised to "If site soil contains contaminants > USEPA unrestricted use levels, them remove and properly dispose of soil." What data are required shall be revised to "Analytical concentrations of contaminants and USEPA unrestricted use levels." Basis of info shall be revised to "Soil contaminant data and USEPA unrestricted use levels." Sampling and Analysis Methods shall be revised to "USEPA ERT SOP (FSP App. A) for sampling, RCRA Methods from SW-846, 3rd Ed., Update 4B." Target Population shall be revised to "30' x 30' grid over entire Pistol Range site." Target Population shall be revised to include "All grid locations." Decision Unit shall be revised to "Each datum entered into geostatistical mapping program." Action Level shall be revised to "USEPA unrestricted use levels." If …then shall be revised to "If the concentration of a contaminant for any given sample exceeds USEPA unrestricted use levels, then excavate and dispose of soil offsite." Performance or Acceptance shall be revised to compare data to USEPA unrestricted use levels."

54. Figure 3-3, Flow Chart for Pistol Range, shall be revised to replace the two boxes describing XRF testing at the backstop and firing points to a singe box requiring grid

sampling for contaminants across the complete Pistol Range area. The decision point "XRF Results > Threshold" shall be revised to "Contaminant results > USEPA unrestricted use levels." The box "Delineate Areas > Threshold Values" shall be revised to "Delineate Areas > USEPA unrestricted use levels." The decision point "Results > Regulatory Threshold" shall be revised to "Results > USEPA unrestricted use levels."

55. Table 5-1 shall be revised to include all additional samples and analyses required by these comments in the work plan. The table shall be revised to include VOC, SVOC, TPH-DRO, TPH-GRO for sample analysis associated with the EWI fuel tank and lines samples. The table shall be revised to include PCB samples and analyses required by these comments in the work plan. The table shall be revised to remove the notation that only lead analysis shall be conducted on Pistol Range soil samples. The table shall be revised to properly indicate both pre and post excavation samples.

56. Section 5.1.2, Approach to Surface Soil Sampling at the EWI, describes the sampling scheme for soil samples to demonstrate clean closure. The work plan shall be revised to provide a figure and description of all the samples required by the approved closure plan. A random sampling approach is not appropriate to demonstrate clean closure. All references to random sampling shall be removed from the work plan. A grid shall be provided over the entire EWI area and all grids sampled outward from the EWI and EWI impacted areas until clean closure criteria is met. Soil shall be removed from all grids above clean closure criteria until clean closure criteria is met.

57. Section 5.1.3, Study Area Definition and Measurement Spacing, describes sampling grids and verification sampling approaches. A figure shall be provided in the work plan showing all required sample locations in the approved closure plan and the EWI and EWI impacted areas sampling grid. The work plan shall be revised so that verification sampling shall have a minimum of one sample collected from the bottom of the excavation on a 30' x 30' grid. If any excavation has partial grids, each partial grid will have a sample at the bottom of the excavation collected. Each grid that has sidewalls shall be sampled as described in the work plan. The description of the aqueous sample from the EWI sump shall be revised to conform to previous comments. Note that the description does not match the description elsewhere in the work plan.

58. Section 5.2.1, Rationale/Design, describes various proposed sampling. The berm soil after sifting is proposed to have one sample per 1000 cubic yards of berm processed. Since the source of the berm soil may have been from areas used for open burning the work plan shall be revised to a berm sampling frequency of one sample per 5 cubic yards of sifted berm soil. The work plan shall be revised for confirmation sampling at Burn Pad 5 to include collection of samples outside of the excavation areas for analysis of VOCs, SVOCs, PCBs, D/Fs, metals and explosives both at surface and at depth. As in previous comments, the use of random sampling of Burn Pad 6 is not appropriate. The work plan shall be revised to include complete grid sampling at Burn Pad 6.

59. Section 5.3, Pistol Range, states that the Pistol Range consists of the firing points and backstop berm. Historically the Pistol Range has had different configurations and usage. The work plan must be revised such that the remedial action encompasses the entire area which has been utilized. In addition, the current configuration in the work plan shall be revised to include the full firing arcs (and ground within the arcs) and areas where contaminants may have migrated via surface runoff. The work plan shall be revised to include all possible contaminants of the area.

60. Section 5.3.1, Rationale/Design, describes use of XRF to identify lead contamination for removal and to demonstrate clean areas. The work plan shall be revised to remove all references to XRF data as a basis to demonstrate removal of contaminants or clean soil. The work plan shall specify that only laboratory analyses will be used for documentation of clean soil. The work plan shall be revised to specify the entire berm for removal and off-site disposal in accordance with a KDHE approved disposal plan.

61. Section 5.3.2, Field Procedures, states XRF SOPs cannot be provided until the make and model of instrument is determined. The work plan shall specify that only laboratory analyses will be used for documentation of clean soil.

62. Section 5.3.2, Study Area Definition and Measurement Spacing, appears to be misnumbered. The work plan shall be revised so that verification sampling shall have a minimum of one sample collected from the bottom of the excavation on a 30' x 30' grid. If any excavation has partial grids, each partial grid will have a sample of the bottom of the excavation collected. Each grid that has sidewalls shall be sampled as described in the work plan.

63. Section 6, Field Operations Documentation, all documentation including field documentation, laboratory documentation, reports, etc., shall be maintained at KSAAP as required by the RCRA permit. Copies shall be provided to EPA upon request.

DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

REPLY TO
ATTENTION OF

April 08, 2009

Planning, Programs, and Project Management Division
Environmental Programs Branch

Mr. Mostafa Kamal
Kansas Department of Health and Environment
Hazardous Waste Permits Section
1000 SW Jackson St.
Suite 320
Topeka, KS 66612

Dear Mr. Kamal,

Please find enclosed for your review the Draft Final Closure Plan for Burn Pad 5. This should complete the set of planning documents for the closure of Burn Pad 5.

If you have any questions or if I can be of further assistance please contact me at (816) 389-3906 (kathy.t.baker@usace.army.mil).

Sincerely,

Kathy Baker

Kathy Baker
Project Manager

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON DC 20310-0600

REPLY TO
ATTENTION OF

DAIM-ODB

2 December 2008

MEMORANDUM FOR See Distribution

SUBJECT: 19 November 2008 Permits Meeting for Kansas Army Ammunition Plant (KSAAP) After Action Report (AAR)

1. General The U.S. Army, the Kansas Local Redevelopment Planning Authority (LRPA), and Day & Zimmermann, Inc. (D&Z) met with the Kansas Department of Health and Environment (KDHE) and the U.S. Environmental Protection Agency (EPA) Region 7 on 19 November 2008 in Topeka, KS. The purpose of the meeting was to discuss the current Army and Stakeholder position on the environmental cleanup strategy and to continue discussions regarding the regulatory requirements to support the transition of permits at KSAAP.

2. Attendees The meeting sign-in sheet is provided as an attachment.

3. Agenda
   a. Hank Procter (Army) welcomed everyone and provided an overview of the purpose and agenda for the meeting. The meeting agenda included the following items:
      1. Provide an overview of the environmental assessment activities performed to support transfer
      2. Describe the Community Environmental Response and Facilitation Act (CERFA) and Parcel Characterization resulting from the assessment efforts
      3. Summarize the actions to transfer permits
      4. Propose regulatory framework to support the Army cleanup approach and property transfers

4. Environmental Assessment Activities to Support Property Transfer
   a. Rose Zeiler provided an overview of the environmental assessment activities performed to support property transfer.
      1. The Army completed the Environmental Condition of Property (ECP) report in November 2006.
      2. Samples were collected at 15 areas in the Site Investigation to investigate data gaps identified in the ECP.
      3. Based on comments submitted by KDHE on the Site Investigation report, a visual inspection and sampling was performed on 27 October 2008 at the rail line loading docks. All sample results were non-detect.

5. CERFA Map and Parcel Characterization
    a. The CERFA map is being updated based on the results of the ECP and Site Investigation activities, as well as further Army review.
    b. An updated CERFA report will be submitted in December 2008 to EPA for comment and KDHE for concurrence.
    c. The Army may request removal of uncontaminated property from the RCRA footprint.

6. Actions to Transfer Permits
    a. The Army submitted its Letter of Intent on 14 November 2008.
    b. Jessica Merrigan (Lathrop & Gage/D&Z) stated that D&Z will take ownership of the property through a special purpose entity (SPE) that exists only to own and operate the property. The SPE will be wholly-owned by D&Z.
    c. The Army will work with the LRPA and D&Z/SPE to transfer the water, air, and aboveground storage tank (AST) permits as outlined at the 29 September 2008 meeting.
    d. KDHE stated that if an entire NPDES or Air permit is not transferred to the same entity, then two new permit applications for different permits will be required.
    e. Applications and Army's request to cancel the existing permit will need to be submitted together so that the permit and the cancellation request can be submitted as package for public notice.
    f. The LRPA will provide the Army with a list of air permits it will require for boilers.
    g. For the Air Permits, the LRPA and D&Z/SPE will need to submit documents demonstrating that they are independent entities.
    h. D&Z must obtain an NPDES permit for outfalls within their footprint.

7. Regulatory Framework to Support Army Cleanup Approach
    a. The Army proposed to complete certain RCRA closure and corrective activities under CERCLA using its lead agency authority in consultation with the regulators.
    b. This proposal is based on the following:
        1. The Army has no legal basis to be listed on a RCRA operating permit where it is neither the owner nor the operator.
        2. This approach is consistent with 40 CFR 264.110(c), as well as EPA's policy on CERCLA/RCRA integration.
            a. EPA contended that the goal of these policies is to eliminate duplicative effort under RCRA and CERCLA and could not be applicable at KSAAP without special circumstances.
            b. The Army position is the conditions of the BRAC action and the need for economic redevelopment are indeed "special circumstances" and a transfer of regulatory framework is warranted.
    c. The Army's goals are to facilitate property disposition and stimulate

economic development. KSAAP has special circumstances to consider, including:

1. The LRPA would find it very difficult to meet the financial assurance provisions required under a RCRA permit.
2. It will be difficult for the LRPA to market and redevelop a RCRA-encumbered property.
3. The CERCLA approach preserves fair market value, which provides resources to fund remedial activities.

d. Jim Stevens (EPA Region 7) stated that he believed that the Army remained on the permit at Sunflower AAP. He stated that since KSAAP is not on the NPL list and has a RCRA permit currently in place, EPA's position is that the Army should remain on the permit and that the cleanup/closure should be conducted under RCRA.
e. Both EPA and KDHE stated it is appropriate for the Army to remain on the RCRA permit as an operator if the Army is retaining liability for cleanup/closure actions or on the site performing corrective actions. This meets EPA's definition of an Operator.
f. SWMUs cannot be removed from the permit even once cleanup/closure actions have been completed.
g. D&Z expressed concerns with the Army's proposal since KDHE stated, that even though the Army would accept responsibility / liability for the cleanup of SWMUs on their parcel, that D&Z would need to provide financial assurance for the SWMUs on their approximately 4000 acre footprint . Thus, they expressed concerns with accepting the liability of the sites on its footprint as well as meeting the accompanying financial assurance requirements.
h. The Army contended that having the SWMUs remain on the D&Z RCRA permit while the Army retains responsibility and liability for cleanup of these sites is duplicative and unnecessary.
i. Section 106 Consent Order
    1. David Minvielle (Army) explained that the Army would favorably consider agreeing to negotiate an enforceable document. This document would be a Consent Order to conduct cleanup activities under CERCLA. It would be negotiated between the Army, EPA, and KDHE.
    2. With the exception of areas that will continue to be used by D&Z/SPE, all areas on both the LRPA and D&Z/SPE footprints would be subject to the Consent Order.
    3. EPA stated that it would talk about a Section 106 Consent Order only if Army agreed that it would include stipulated penalties.
    4. David Minvielle indicated the Army would not accept a Consent Order that included stipulated penalties
    5. EPA stated the CERCLA approach is not a viable option for EPA without stipulated penalties.

8. RCRA Approach to Cleanup
    a. Proposal to "Work Out" of RCRA permit
        1. EPA stated that the Army could work out of its permit once cleanup/closure activities are completed and the appropriate financial assurance provisions from the new property owner are met for the areas remaining in the permit. This was a change in position from the 29 September meeting in Topeka, KS.
        2. This would include any post-closure actions, including long-term monitoring.
        3. KDHE stated that the Army would not need to remain on the RCRA permit if all liability was transferred to D&Z/SPE. D&Z/SPE would need to provide financial assurance for the entire parcel.
        4. Once the Army obligations had been met, a Class I permit modification could be used to remove the Army from the permit.
        5. The LRPA needs to evaluate whether this option would work in their footprint.
        6. D&Z agreed to further discuss this option. Army agreed to present this option to Army decision-makers.
    b. Financial Assurance
        1. Mostafa Kamal (KDHE) stated that as long as the Army remains on the LRPA's RCRA permit, he would defer the requirement for the LRPA to provide financial assurance until post closure. This was a change in position from the meeting on 29 September 2008 in Topeka, KS.
        2. Financial Assurance for D&Z footprint is still being negotiated and worked out. D&Z parent may participate and Army may fund a trust.
        3. KDHE stated that even if Army agreed to clean up some of the SWMUs on the D&Z footprint, this assurance would not be adequate and D&Z would be required to post financial assurance for cleanup of these SWMUs. D&Z raised concerns with this requirement.
        4. This included those HW units (SWMUs) the Army is liable for and has committed to cleanup, generating the discussion of duplicative liability by D&Z/SPE.
    c. Removal of Uncontaminated Areas from the Permit
        1. EPA stated that they are willing to remove uncontaminated areas from the RCRA permit to shrink the permit boundary; however, did not provide any definitive guidance on how to accomplish this or the timeframe that would be required for their review and concurrence. KDHE suggested that the Army and LRPA look at the RCRA closure criteria for regulated SWMUs as a place to start even though the parcels in question are contained within the RCRA facility boundary but not regulated by the RCRA permit.
            a. The Army and LRPA took the action to assemble the applicable environmental assessment data, complete the

metes and bounds survey, and submit this information to the EPA for review. The Army and LRPA also took the action to draft a standard approach to remove these "non-regulated" areas from the permit.

b. Failure to define a standardized process to "free release" parcels of land from the RCRA permit boundary interpretation in a timely manner places the Economic Development Conveyance in significant jeopardy.

2. All solid waste management units (SWMUs) in the footprint need to be included in the RCRA permit. There cannot be any holes in the permit.
3. EPA stated there cannot be any concerns remaining with lead-based paint in drip lines, pesticides in soil, asbestos-containing material, and polychlorinated biphenyls (PCBs) in paint on the parcels to be removed from the permit.
4. EPA stated that only areas that were remediated to unrestricted reuse can be removed from the permit.
   c. The Army disagreed and stated that institutional controls would be placed in the deed to restrict reuse to industrial levels.
   d. EPA stated that they are concerned that Kansas' Environmental Use Controls are not enforceable because Kansas has not enacted the Uniform Environmental Covenants Act (UECA).
   e. EPA stated that properties cleaned up to industrial levels that have enforceable institutional controls can be removed from the permit. Zoning would be one approach used to ensure that institutional controls are enforceable, but that EPA prefers multiple layers of controls.
      i. Dan Goddard (LRPA) stated that KSAAP will be zoned industrial by the county.

d. Open Detonation (OD) Grounds
   1. The Army is planning to complete additional investigation at the Open Detonation (OD) Grounds to understand the liability associated with property transfer.
   2. EPA stated that cleanup of the OD grounds needs to be conducted on an ongoing basis after each detonation and should not wait until closure of the OD grounds. This came as a surprise to D&Z, the Army and KDHE as this was the first time such a position was made public. This statement if facilitated into a hard operational environmental requirement could severely impact the D&Z mission and business operations.
   3. Both Army and D&Z pointed out that this would make continued operation of the OD grounds impossible.
   4. EPA questioned the need for continuing operation of the OD grounds, citing Iowa APP as an example, and urged D&Z to

consider alternatives not including the OD grounds. D&Z stated they would contact and discuss this with the Iowa plant. However, D&Z pointed out that if the Iowa plant is using Milan, TN for this purpose that will not resolve the issue since Milan may cease operation.

5. The parties agreed to share the results of environmental testing and evaluate whether action was needed on the OD grounds.

e. Munitions Storage Igloos
    1. EPA stated that once the munitions storage igloos are no longer used to store munitions, then they will be regulated under RCRA and the appropriate closure and cleanup actions will need to be taken, including decontamination of the igloo interiors.
    2. The Army does not agree with this. The munitions storage igloos are used to store product, not a waste, and they are not currently regulated as a SWMU in the RCRA permit. The Army plans to follow the standard Army/DoD clearance procedures once the igloos are no longer being used.
    3. EPA could not provide specific activities that would need to be conducted to investigate potential releases at the igloos. Sampling at a representative group of igloos would not be sufficient to address regulatory concerns.
f. SWMU Boundaries
    1. The LRPA would like to ensure that the SWMU boundaries are tightly defined to ensure that no SWMUs overlap parcel boundaries.
    2. KDHE stated that the groundwater plume boundary adjacent to the 700 area is clearly defined. This information has recently been reviewed by KDHE in the Corrective Measures Evaluation.
    3. The boundary for the landfill (SWMU 15) should be consistent with the boundary defined in the Solid Waste permit for the landfill. Additional research needs to be done to determine the footprint in that permit.
g. The LRPA needs to provide a commitment to the Kansas Department of Wildlife and Parks (KDWP) on the 3,000 acres that will be transferred to them by 1 December 2008. EPA is willing to write a comfort letter to KDWP assuring them that these areas can be removed from the permit.
a. KDHE stated that Kansas law requires the submittal of background information before any permit information can be reviewed.
    1. Separate Business Concern Disclosure Statements (BCDS) need to be submitted by both the LRPA and D&Z.
    2. D&Z stated that their BCDS is almost ready for submittal.
h. Timeframe
    1. The goal remains to transfer the first parcel in the January 2009 timeframe. The proposed order of property transfer for the four parcels is:
        1. Negotiated sale to D&Z/SPE

2. Fair market value Economic Development Conveyance (EDC) parcel to LRPA
3. Army Compatible Use Buffer (ACUB) exchange parcel
4. Public sale of administrative space (including Building 101)

b. Finding of Suitability for Early Transfer (FOSET)
    1. The Army is currently working on a draft FOSET. A cleanup plan will need to be in place and included with the FOSET.
c. The Army will share the results of its investigations as well as cleanup assumptions with the LRPA and D&Z.
d. D&Z is in the process of hiring an environmental consultant to assist in property transfer issues.
e. KDHE requested that the Army revise and resubmit its Letter of Intent to address the revised approach. KDHE will use this letter as the basis for its work to transition the permits.

9. Path Forward
    a. A video teleconference is scheduled for 5 December 2008 at 1000 eastern/0900 central.

10. Identified Follow-On Actions
    a. Draft a standard approach to remove clean areas from the permit. Action: Army/LRPA. Suspense: 15 December 2008.
    b. Define SWMU boundaries. Action: Army/LRPA. Suspense: 15 December 2008.
    c. Provide appropriate documentation to EPA to request permit modification to remove parcels from the permit. Action: Army/LRPA. Suspense: 30 December 2008.
    d. Share environmental investigation results and cleanup assumptions with the LRPA and D&Z. Action: Army. Suspense: 26 November 2008.
    e. Submit revised Letter of Intent to KDHE. Action: Army/LRPA/D&Z. Suspense: 30 December 2008.
    f. Begin review of characterization documents for the 2,200-acre conveyance to the KDWP. Action: EPA

11. Point of Contact:
    a. The POC for this event is Hank Procter (703) 602-2962.

Distribution:
KDHE/BWM
KDHE/BOW
KDHE/BAR
KDHE/BER
EPA Region 7
DAIM-ODB
OTJAG

KSAAP
USACE-Kansas City District
LRPA
D&Z

Enclosures:
List of Attendees
Presentation Slides

Kansas Army Ammunition Plant Meeting
Topeka – November 19, 2008

Name	Organization	Phone	Email
Danny Lungerhot	D+Z	620-421-7506	danny.lungerhot@dzikansas.com
Carolyn Smalley	D+Z	620.421.7434	carolyn.smalley@dzikansas.com
DEAN CRAMER	D & Z	620-421-7532	dean.cramer@dzikansas.com
Marian Massoth	KDHE	785 296 0616	mmassoth@kdhe.state.ks.us
Jim Stewart	KDHE	785-296-1556	jstewart@kdhe.state.ks.us
JEFF GIANGIULI	US ARMY BRAC/CALIBER	301-606-9299	JEFF.GIANGIULI@CALIBERCS.COM
Jennifer Gibson	BRACD/CALIBER	703.602.2896	jennifer.gibson@hqda.army.mil
Michelle Beekman	matrix/LRA	303-572-0200	michelle.beekman@matrixdesigngroup.com
Peggy Llewellyn	Matrix/LRA	832-528-9979	peggy-llewellyn@matrixdesigngroup.com
Don Dailey	KSAAP	620-421-7449	donald.dailey@us.army.mil
Kevin Bishop	KC USACE	816.389.3763	Kevin.l.bishop@usace.army.mil
Kathy Baker	USACE	816.389.3906	kathy.t.baker@usace.army.mil
Jorge Jacobs	KDHE/BER	785-296-8801	jjacobs@kdhe.state.ks.us
Donald Carlson	KDHE/BOW	785-296-5547	dcarlson@kdhe.state.ks.us
Christy McCormick	KDHE/BWM	785-296-6597	cmccormick@kdhe.state.ks.us
Brad Roberts	KDHE/BWM	785-296-5639	broberts@kdhe.state.ks.us

Kansas Army Ammunition Plant Meeting
Topeka – November 19, 2008

Name	Organization	Phone	Email
David Minvielle	US Army Legal Services Agency	703 696 1597	david.minvielle@hqda.army.mil
Rose M. Zeiler	KSAAP BEC	479-635-0110	rose.zeiler@us.army.mil
DAN Goddard	GREAT PLAINS DEV. AUTORITY	620-421-1228	dgoddard@parsonsks.com
Hank Procter	US Army BRAC Division	703-602-2962	hank.procter@us.army.mil
JIM STEVENS	EPA/Contractor	913-551-7328	stevens.jim@epa.gov
Ken Herstowski	EPA R7	9135517631	herstowski.ken@epa.gov
MOSTAFA KAMAL	KDHE/BWM	785-296-1609	mkamal@kdhe.state.ks.us
Sally Boulanger	D+Z	620-421-7500	sally.boulanger@dzikansas.com
Steve KOSMAN	D+Z	620.421.7476	steve.KOSMAN@dzikansas.com
Jessica Merrigan	Matrix Design Group D+Z	816.400.3906	jmerrigan@matrixpmg.com
Pat Casey	KDHE	785-296-0721	pcasey@kdhe.state.ks.us
Nancy Ulrich	kdhe Legal	785-296-0687	nulrich@kdhe.state.ks.us

DEPARTMENT OF THE ARMY
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON, DC 20310-0600

14 NOV 2008

DAIM-ODB

Mostafa Kamal
Chief, Hazardous Waste Permits Section
Bureau of Waste Management
1000 SW Jackson, Suite 320
Topeka, KS 66612-1592

Letter of Intent to Modify / Transfer Permits and Follow-up to the 29 September 2008 Meeting for Kansas Army Ammunition Plant (KSAAP)

Mr. Kamal,

The attached information paper details the Army's intent to modify/transfer current active permits, and the Army's preferred approach to conduct clean-up at the Kansas Army Ammunition Plant (KSAAP), located in Parsons KS. This information is a follow-up response to our meeting held on 29 September 2008 with the various bureaus of the Kansas Department of Health and Environment (KDHE) and the U.S. Environmental Protection Agency (EPA) Region 7.

Details of the Army's intent/approach to permit transition and clean-up of the sites at KSAAP will be discussed at the next transition meeting, scheduled for 19 November 2008.

My POC for this action is Hank Procter (703) 602-2962.

Enclosure

James B. Balocki
Colonel, U.S. Army
Chief, Base Realignment
& Closure Division

CF:
Kansas Department of Health and Environment-Bureau of Waste Management
Kansas Department of Health and Environment-Bureau of Water
Kansas Department of Health and Environment-Bureau of Air
Kansas Department of Health and Environment-Bureau of Environmental Restoration
U.S. Environmental Protection Agency-Region 7

Headquarters US Army, Office of the Judge Advocate General-Environmental Law Division
Kansas Army Ammunition Plant-Commander's Representative
Headquarters, US Army Corps of Engineers-Kansas City District
Parsons Local Redevelopment Planning Authority
Day and Zimmerman Incorporated

INFORMATION PAPER

DAIM-ODB
14 Nov 08

Subject: Letter of Intent to Modify / Transfer Permits and Follow-up to the 29 September 2008 Meeting for Kansas Army Ammunition Plant (KSAAP)

1. Purpose: Provide details of the Army's intent and approach to modify/transfer current active permits, and preferred approach to conduct of clean-up at the Kansas Army Ammunition Plant (KSAAP), located in Parsons KS.

2. General: The U.S. Army, the Kansas Local Redevelopment Planning Authority (LRPA), and Day & Zimmermann, Inc. (D&Z) met with the Kansas Department of Health and Environment (KDHE) and the U.S. Environmental Protection Agency (EPA) Region 7 on 29 September 2008 in Topeka, KS. The purpose of that meeting was to identify the regulatory requirements and actions of all parties to support the transition of permits at KSAAP.

3. Background: The Army plans to complete its production mission and close KSAAP on 31 December 2008. The goal for property transfer is January 2009.

   a. A total of four property conveyances by the Army are planned at KSAAP:

      1) Approximately 8,700 acres to the LRPA via a fair market value economic development conveyance (EDC). In exchange for state development grants approximately 2000 acres would be conveyed from the LRPA to the State of Kansas for conservation purposes.

      2) Approximately 4,000 acres to a special purpose entity formed by and wholly owned by D&Z for the purpose of owning the D&Z footprint and continuing ammunition plant operations (SPE), via negotiated sale.

      3) Approximately 1,000 acres for conservation purposes to the State of Kansas as part of an Army Compatible Use Buffer (ACUB) exchange with Fort Riley.

      4) Approximately 10 acres of administrative space (including Building 101) via public sale that supports the community's economic redevelopment plans.

   b. The Army, the LRPA, and D&Z/SPE intend to undertake the required permit actions in order to complete the conveyances referenced above by January 2009.

   c. Following consultation with Army Office of General Counsel, Army has determined that it is not in a position to participate as a long-term RCRA permittee for an operating facility where it has no ownership interest and is not, in fact, an operator. Army is therefore proposing alternative mechanisms and assurances in this Letter of Intent. The Army is still negotiating with D&Z to determine how to fulfill

its closure and post-closure obligations for units within the SPE footprint. In addition, the Army, LRA and D&Z continue to negotiate other significant items related to the terms of the transfer and future obligations.

4. Approach to Transferring General Operating Permits:

a. The LRPA does not have a need for most of the permits currently associated with its parcel. The LRPA's development priorities include the 900 Area, due to the rail access, as well as the northern portion of the property by the Administrative building. The majority of the buildings will be demolished and the area redeveloped. The LRPA will need permits for several aboveground storage tanks (ASTs) and air permitted units.

b. D&Z intends for SPE to continue operations in two production lines: the 1000 and 1100 areas, and continue as a large quantity generator. The same types of activities will occur as in the past but within a smaller footprint. D&Z/SPE has begun the permit application process, and is currently working on the Business Concern Disclosure Statements and the financial assurance requirements. SPE plans to complete its Resource Conservation and Recovery Act (RCRA) Part A application when survey data is available to define the SPE operating area. SPE will subsequently complete its Part B application for a permitted storage and treatment (Open Detonation) facility which will govern the waste management activities on the SPE property. The timeline for the D&Z/SPE permitting process will depend upon satisfactory resolution of the Army's closure and post-closure obligations for areas within the SPE footprint.

c. There are three types of water permits at KSAAP: drinking water supply system, wastewater treatment plant, and storm water run-off permits. To transfer the drinking water supply permit, a letter from the current and future permittee needs to be submitted to the KDHE-Bureau of Water Management. The letter should identify when the property conveyance will occur. The timeline for processing is one to two weeks. The new permittee will have an arrangement with both a certified water treatment plant operator and a certified lab for analysis. For the wastewater treatment plant permit, the system will be split between both the LRPA and SPE since SPE will operate the 1000/1100 lines on its property. Both parties will have an arrangement with certified operators. All parties will submit their letters/applications concurrently so the State can publish one public notice related to the entire facility.

d. KSAAP currently has a Kansas Water Pollution Control Permit for Industrial Activity discharges. SPE will need this permit for its production activities in the 1000/1100 Areas. The LRPA will need a permit for the decommissioning activities on its property. When all units on LRPA property have been closed, this permit will no longer be needed. Consequently, the Army intends to transfer a portion of its permit to the LRPA and a portion to SPE. The LRPA and SPE will prepare their applications. The documents from all three parties will be coordinated and submitted together. The current permit expires on 31 December 2008. KDHE will

allow an administrative extension since the new permit application was submitted in July as required. The Army will seek a Kansas Water Pollution Control Permit for Construction Activity for storm water discharges for any remedial activities that disturb one acre or more. The Army intends to apply for one permit that covers all remedial activities planned for the year site-wide and will modify it annually to include the planned activities for the following year.

e. With respect to air permits, SPE does not expect to be a Class I operator as they have no plans for construction or additional emissions sources on their footprint. The main emissions source will be boilers and other units in the 1000 and 1100 areas as well as open detonation activities. D&Z has already submitted documentation for renewal of the current air permit; this application is currently pending. A new application will need to be submitted based on the revised footprint. The timeframe to process the new permit is about 3 to 6 months. It is anticipated that the current air permit will remain in effect until a new permit is issued. The Army intends to close out about 84 units that are not needed by the LRPA or SPE and will document these actions with its overall closure actions.

f. For the Aboveground Storage Tanks (ASTs), the receiving parties will file Change in Ownership Forms for those ASTs they intend to operate. The following ten ASTs will be transferred to the LRPA: 52, 202E, 202C, 202W, 258, 259, 261, 264, 2106, and 2203.

5. Approach to Resource Conservation and Recovery Act (RCRA) Requirements:

a. EPA's policy on CERCLA/RCRA integration has been presented in two documents, OSWER Directive 9272.0-22 (Improving RCRA/CERCLA Coordination at Federal Facilities) and the 24 September 1996 Memo on the Coordination between RCRA Corrective Action and Closure and CERCLA Site Activities in which is stated EPA's commitment to the principle of parity between the two programs and the deferral from one to the other. In keeping with this policy, the Army desires to complete its environmental restoration actions under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Program in full consultation with EPA and KDHE, and in coordination with the stakeholders and the public, providing an equivalent quality of cleanup at all affected sites. The Army offers to negotiate an agreement with EPA and KDHE which would document the consultation process among the agencies for the cleanup work.

b. 40 CFR 264.110(c) gives the Regional Administrator of EPA and the appropriate state official the discretion to substitute all or part of the requirements of 40 CFR Part 264 Subpart G [closure and post-closure requirements for Hazardous Waste Treatment, Storage, and Disposal Facilities], and the unit-specific standards in §264.111(c) applicable to a regulated unit, with the alternative requirement for closure set out in an approved closure or post-closure plan, or in an enforceable document (as defined by §270.1(c)(7)), based on a determination that: (1) A regulated unit is situated among solid waste management units (SWMUs) or areas

of concern (AOCs), a release has occurred, and both the regulated unit and one or more SWMUs or AOCs are likely to have contributed to the release; and (2) It is not necessary to apply the closure requirements of 40 CFR Part 264, Subpart G because the alternative requirements will protect human health and the environment, and will satisfy the performance standards of §264.111(a) and (b).

c. The Army proposes that SPE would become the owner / operator of operational units within the SPE footprint after conveyance. Regulated storage and treatment units within the LRPA footprint will be closed by the Army in accordance with the standards set forth in the State of Kansas Hazardous Waste Facility Permit. For all current Corrective Action sites, including those within the SPE footprint other than the Open Detonation (OD) Field (SWMU 17 / KAAP-37), the Army will undertake closure and, where necessary, post-closure actions in accordance with the "Declaration of Final Site-wide Corrective Action Measures Decision" (12 April 2006). For the OD Field, which SPE will continue to use after transfer, the Army acknowledges that it has liability for closure and post-closure based on pre-conveyance operations. The Army proposes to negotiate the terms, conditions, parameters, and funding requirements for the OD Field cleanup with D&Z/SPE.

d. Under this approach, the LRPA will not be part of any RCRA hazardous waste treatment or storage permit. There is concern that such a permit would unduly burden the economic redevelopment effort since it requires a significant financial assurance and encumbers the property, making it difficult to market and redevelop. Preserving fair market value of the parcel to be transferred will provide more resources to the Army which can be used to fund cleanup efforts.

e. The ponds that had previously been used in association with the Waste Water Treatment Plant, as well as the hazardous waste storage igloos and other regulated units on the LRPA footprint will be closed by the Army pursuant to CERCLA under this approach.

f. Following satisfactory resolution of the Army's environmental obligations related to the SPE footprint and conveyance of the SPE property, the SPE-owned property will be covered under the new RCRA Part B Permit. The Army's obligations regarding closure and post-closure for the former KSAAP property would be included in the enforceable document.

g. It is the Army's intent that the enforceable document negotiated under 40 270.1(c) (7) will satisfy the substantive requirements of the "Declaration of Final Site wide Corrective Action Measures Decision" and the "USEPA Final Permit: Modifications to Part II of the Permit Originally Issued by the EPA on November 7, 1989" (12 April 2006) for applicable SWMUs, and with the State of Kansas Hazardous Waste Facility Permit for applicable storage and treatment units.

6. Schedule

   a. The next meeting is scheduled for 19 November 2008 in Topeka, KS.

   b. The Army, LRPA, and D&Z wish to have further discussions regarding the permit transfer process. The Army will provide an overview of the Environmental Condition of Property (ECP) effort.

7. The POC for this event is Hank Procter (703) 602-2962.

Program Manager HANK PROCTER / 703-602-2962
Approved By:_____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

RECEIVED

NOV 10 2008

BUREAU OF WASTE MANAGEMENT

05 NOV 2008

Webster Procter
ATTN: DAIM-ODB
Department of the Army
Base Realignment and Closure Division
Office of the Assistant Chief of Staff for Installation Management
600 Army Pentagon
Washington, DC 20310-0600

Re: Transfer of Hazardous Waste Permit
Kansas Army Ammunition Plant
Parsons, Kansas
RCRA ID# KS0213820467

Dear Mr. Procter:

Thank you for meeting with the United States Environmental Protection Agency (EPA) and the Kansas Department of Health and Environment (KDHE) to discuss the Army's closure and transfer of Kansas Army Ammunition Plant (KSAAP). As we understand, the Army's mission at KSAAP will end on December 31, 2008, when government production of munitions will cease and when Army equipment, stores and munitions will be moved to other facilities. At some date shortly after December 31, 2008, the Army intends to transfer the facility in separate transactions to Day and Zimmerman, the local redevelopment authority, and the State of Kansas.

An important aspect of transferring the facility is the disposition of existing environmental permits, in particular, the hazardous waste permit issued to the Army pursuant to the Resource, Conservation and Recovery Act (RCRA). Subsequent to our meeting, both EPA and KDHE have conferred to determine a path forward that meets the objectives of RCRA and the interests of the parties involved with each portion of the transferring facility. EPA and KDHE have determined initially to transfer the existing permit by modification to add the appropriate parties as owners and/or operators. To initiate this process, a permit modification request accompanied by a Part A permit application (EPA Form 8700-23) shall be submitted at least 90 days prior to the scheduled changes in ownership. The Part A shall identify all parties

and their permit interest as either owner, operator or both; the facilities which will be owned and operated by each party; and be signed by all parties by the person required by 40 CFR 270.11. At this time, we would anticipate that the Army, Day and Zimmerman and the Local Redevelopment Authority will submit the Part A. If appropriate, the State of Kansas would also.

All parties shall also comply with KDHE requirements for background investigation submittals. All parties who will be required to submit and maintain financial assurance shall also provide drafts of the requisite financial assurance documents that will be executed upon transfer of the hazardous waste permit. Once the Part A, background investigation and draft financial assurance documents are acceptable, EPA and KDHE can approve the permit modification request. Attendant to this modification will be the inclusion of appropriate compliance schedules for submittal of new or revised closure plans and Part B permit applications.

We have not yet received the Army's letter of intent that would clarify the ownership and operational interests of each party which the Army committed to submit by October 15, 2008. However, as we understand the transfer, two RCRA facilities will result from the transfer of KSAAP. One facility would be owned and operated by Day and Zimmerman with the Army as an additional operator and a second facility would be owned by the local redevelopment authority and operated by the Army. Each of these two facilities will eventually require a separate hazardous waste permit which will replace the existing single hazardous waste permit.

We understand that the Army has determined that it would be beneficial to revise the definition of facility in the permit to exclude certain parcels of land to be transferred to the State of Kansas. It is the Army's belief that these certain parcels have not been impacted by the operations at KSAAP. To date, the Army has not identified these parcels. EPA reaffirms its commitment to review the Army's permit modification request to change the definition of the facility in the permit once it is received.

In addition, this transfer introduces new issues and concerns not previously contemplated by EPA or the Army. To ensure the protection of human health and the environment, EPA will also immediately begin preparation of a permit modification to add additional solid waste management units and areas of concern to be investigated and, if necessary, cleaned up. We anticipate this permit modification will be processed separately from the one discussed above for changes to ownership and operation of the facility. We can discuss the scope of these corrective action requirements at a future meeting or conference call.

In summary, the requirements for transfers of hazardous waste permits are found at 40 CFR 270.40. To meet these requirements, the Army shall provide its notice of intent, and the parties shall submit a Part A permit application (EPA Form 8700-23) and Business Concern Disclosure Statement (required by K.S.A 65-3437c and K.A.R. 28-31-9b) no later than 90 days prior to the transfer. EPA and KDHE can modify the permit to effect its transfer and include the appropriate compliance schedules for submittal of new or revised closure plans and Part B permit applications.

Thank you for your attention to this matter. Please call me at 913-551-7631 if you have any questions regarding this letter.

Sincerely,

Becky Weber
Director
Air and Waste Management Division

cc: Mostafa Kamal
KDHE
Dan Goddard
KSAAP – LRPA
Sally Boulanger
Day and Zimmerman

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

OCT 27 2008

RECEIVED
OCT 30 2008
Bureau of Air and Radiation

John Mitchell
Kansas Department of Health and Environment
Curtis State Office Building
1000 SW Jackson Street, Suite 400
Topeka, KS 66612-1367

Source ID No. 09900010

Dear Mr. Mitchell:

You have requested our response to questions relating to restrictions on open burning of hazardous wastes at the Kansas Army Ammunition Plant operated by Day and Zimmermann, Inc. (DZI). As indicated in our previous response dated August 15, 2008, the EPA-approved State Implementation Plan (SIP) contains provisions which prohibit the open burning of wastes and other materials.

EPA has reviewed the information on the types and quantities of waste DZI is requesting approval to open burn. EPA has considered the air emissions, handling concerns and waste disposal requirements for these materials. Our initial review of the risk assessment submitted by DZI to support their application for a hazardous waste permit indicates that open burning in the amounts proposed by DZI could adversely affect human health and the environment. In addition, except for the materials identified in the paragraph below, it appears that alternative means of disposal exist both onsite and offsite that do not involve open burning. Therefore, the exemption does not appear to apply to these materials.

A more recent DZI proposal, submitted after we sent the previous letter, requests open burning for flashing contaminated equipment and scrap metal prior to going off-site for recycling/salvage. For very large equipment or certain structures within this category, EPA believes the open burning for flashing of contaminated equipment and scrap metal prior to recycling/salvage could be within the exemption to the extent that other disposal/treatment options are impractical. However, open burning for flashing of this equipment should be carefully coordinated with your office to eliminate any significant adverse impacts.

We appreciate the opportunity to coordinate with you on these issues. Should you have any questions, please feel free to contact Lynn Slugantz at (913) 551-7883, or Mark A. Smith at (913) 551-7876.

Sincerely,

Becky Weber, Director
Air & Waste Management Division

cc: Rick Brunetti
Kansas Department of Health and Environment
William Bider
Kansas Department of Health and Environment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

26 SEP 2008

RECEIVED
SEP 29 2008
BUREAU OF WASTE MANAGEMENT

Dean Creamer
Project Engineer
Kansas Army Ammunition Plant
23018 Rooks Road
Parsons, KS 67357

Dear Mr. Creamer

RE: Kansas Army Ammunition Plant
Parsons, KS
RCRA ID No KS0213820467

On August 12, 13, 2008, a representative of the U. S. Environmental Protection Agency (EPA) inspected your facility. The inspection was conducted under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA). A copy of that inspection report is enclosed.

I have reviewed the inspection report and determined that no violations of RCRA were documented. Therefore, no further action concerning this matter is necessary at this time. Please note that EPA reserves its enforcement authorities, including assessment of penalties, for violations that occur at any time.

I encourage you to contact the Kansas Department of Health and Environment (KDHE) at (785) 296-1600 to obtain a copy of their hazardous waste regulations or to ask any questions you may have regarding the regulations. If you have any questions regarding this letter, please feel free to contact James Terry working under a grant at EPA at (913) 551-7958.

Sincerely,

Edwin G Buckner, PE
Compliance Officer
RCRA Enforcement and State Programs Branch

Enclosure

cc: Jim Rudeen
KDHE

Agenda

April 23, 2008

Environmental Permits at Kansas Army Ammunition Plant

1. Introductions
2. Overview of KSAAP Activities
3. Current BRAC Compliance Schedule
4. Impacts of BRAC on current KSAAP Environmental Permits
    - Air Permit Options
    - NPDES Permit Options
    - Solid Waste Permit Options
    - RCRA Permit Options

4/23/08

ATTENDEES

NAME	ORGANIZATION	PHONE NO.
BRET RAINES	KSAAP, ARMY	620-421-7596
Don Carlson	KDHE - BOW	785-296-5547
Russ Brichacek	KDHE - BAR	785-296-1544
AKHTER HOSSAIN	KDHE - BWM	785-296-1610
Jorge Jacobs	KDHE - BER	785-296-8801
Gary Blackburn	KDHE - BER	785-296-1662
Joe MESTER	KDHE - BOW	785-296-6804
ERIC STAAB	" "	785-296-4347
SAM SUNDERRAJ	KDHE BWM SOLID WASTE SECTION	785-296-6563
Carolyn Smalley	D+Z	620-421-7434
DEAN CRAMER	D & Z	620-421-7532
Ed Dillingham	KDHE - BOW	785.296.5513
MARILYN MASSOTH	KDHE - BAR	785-296-0616

KSAAP Transfer Activities

The Army has agreed to pursue an Early Transfer of KSAAP to the LRA as early as the end of 2008. The Army will then lease back KSAAP in order to complete its mission of transferring munitions production and storage to other locations.

Although, production of munitions while under Army control is scheduled to end Dec 2008, the Army's mission will not be ending at this point. Once production ends the remaining stocks, material and equipment need to be removed. There will be an Army presence at KSAAP until at least Apr 2009, and if required the Army is prepared to stay beyond Jan 2010.

DZI's role will change and their footprint will be reduced in size. DZI and the LRA are developing the extent of the footprint and a lease agreement. The Army is to hire a caretaker contractor to manage the installation operations starting Jan 2009, through mission completion. Once the Army's lease back ends, the LRA will be responsible for all operations.

Below is an overview of the different areas at KSAAP, and the activities which are expected to take place. These activities will be done in order to complete the Army's mission, support the transfer of the plant to the LRA, and to meet environmental regulatory requirements.

Area	Apr 08	Oct 08	Dec 08	Jan 09	Mar 09	Apr 09	Dec 09	Dec 10+
100 Area - Administration:	Army/DZI			Army/DZI/LRA				

The 100 Area will to continue to be used as administrative office space. It is anticipated that a combination of Army, DZI and LRA staff will be present for some period of time during the transfer process.

200 Area - Infrastructure Maintenance:	Army/DZI	Army/LRA

DZI to begin the process of moving equipment and materials into DZI's new reduced footprint. The LRA's redevelopment plan identifies this area as part of the Education and Training reuse parcel.

Area	Apr 08	Oct 08	Dec 08	Jan 09	Mar 09	Apr 09	Dec 09	Dec 10+
300, 500, 700, 800 & 900 Areas - Inactive Prod. Areas:	Army/DZI			Army/LRA				

The LRA's redevelopment plan identifies these areas as part of the Industrial/Manufacturing parcel. A production line facility assessment will be conducted in order to determine, if there are any explosive hazards present and to identify any other hazardous materials presence: i.e. asbestos, lead base paint, pcbs, mercury switches, etc. All facilities with explosive hazards which will not be used for the production of munitions in the future will be decontaminated.

1000, 1100 Areas - Active Production Areas:	Army/DZI			DZI/LRA				

The LRA's redevelopment plan identifies these areas as part of the Commercial Energetics & Munitions Storage parcel. A production line facility assessment will be conducted in order to determine, if there are any explosive hazards present and to identify any other hazardous materials presence: i.e. asbestos, lead base paint, pcbs, mercury switches, etc. After Army production contract ends, it is anticipated that DZI's footprint will be reduced to include the 1000 & 1100 Areas for the production of commercial energetics.

1200 Area - Inactive Prod. Area & Storage:	Army/DZI			DZI/LRA				

The LRA's redevelopment plan identifies this area as part of the Commercial Energetics & Munitions Storage parcel. A production line facility assessment will be conducted in order to determine, if there are any explosive hazards present and to identify any other hazardous materials presence: i.e. asbestos, lead base paint, pcbs, mercury switches, etc. All facilities with explosive hazards which will not be used for the production of munitions in the future will be decontaminated. After Army production contract ends, it is anticipated that DZI's footprint will be reduced to include the 1200 Area for storage and production.

1300 Area - Rail Classification Area:	Army/DZI			Army/LRA				

The LRA's redevelopment plan identifies these areas as part of the Transportation & Warehousing parcel. The 1300 Area will to continue to be used as a rail classification yard. A facility assessment will be conducted in order to determine, if hazardous materials are present: i.e. asbestos, lead base paint, pcbs, mercury switches, etc.

Area	Apr 08	Oct 08	Dec 08	Jan 09	Mar 09	Apr 09	Dec 09	Dec 10+
1400 Area - Inert Storage:	Army/DZI			Army/LRA				

DZI to begin the process of moving equipment and materials into DZI's new reduced footprint. The LRA's redevelopment plan identifies these areas as part of the Transportation & Warehousing parcel. A facility assessment will be conducted in order to determine, if hazardous materials are present: i.e. asbestos, lead base paint, pcbs, mercury switches, etc.

1500, 1600, 1700 Areas -Igloo Storage Areas:	Army/DZI			Army/LRA				

The process of moving stocks and materials is to begin. The LRA's redevelopment plan identifies these areas as part of the Commercial Energetics & Munitions Storage parcel. A munitions assessment will be conducted in order to determine, if there are any explosive hazards are present and to identify any other hazardous materials presence: i.e. lead base paint, pcbs, mercury switches, etc. All facilities with explosive hazards, which will not be used for the storage of munitions in the future will be decontaminated.

1800, 1900 Areas - Igloo Storage Areas:	Army/DZI			DZI/LRA				

The LRA's redevelopment plan identifies these areas as part of the Commercial Energetics & Munitions Storage parcel. A munitions assessment will be conducted in order to determine, if there are any explosive hazards are present and to identify any other hazardous materials presence: i.e. lead base paint, pcbs, mercury switches, etc. All facilities with explosive hazards, which will not be used for the storage of munitions in the future will be decontaminated. After Army production contract ends, it is anticipated that DZI's footprint will be reduced to include the 1800 & 1900 Areas for the production of commercial energetics.

2000 Area - Test Areas:	Army/DZI			Army/LRA				

The LRA's redevelopment plan identifies these areas as part of the Energy Park parcel. Futher evaluation of the Test Areas is anticipated.

2100 Area - Water Treatment Facility:	Army/DZI			Army/LRA				

The LRA to eventually take over the operation of the Water Treatment Facility. Future upgrade to the facility is anticipated.

Area	Apr 08	Oct 08	Dec 08	Jan 09	Mar 09	Apr 09	Dec 09	Dec 10+
2200 Area - Sewage Treatment Facility:	Army/DZI			Army/LRA				

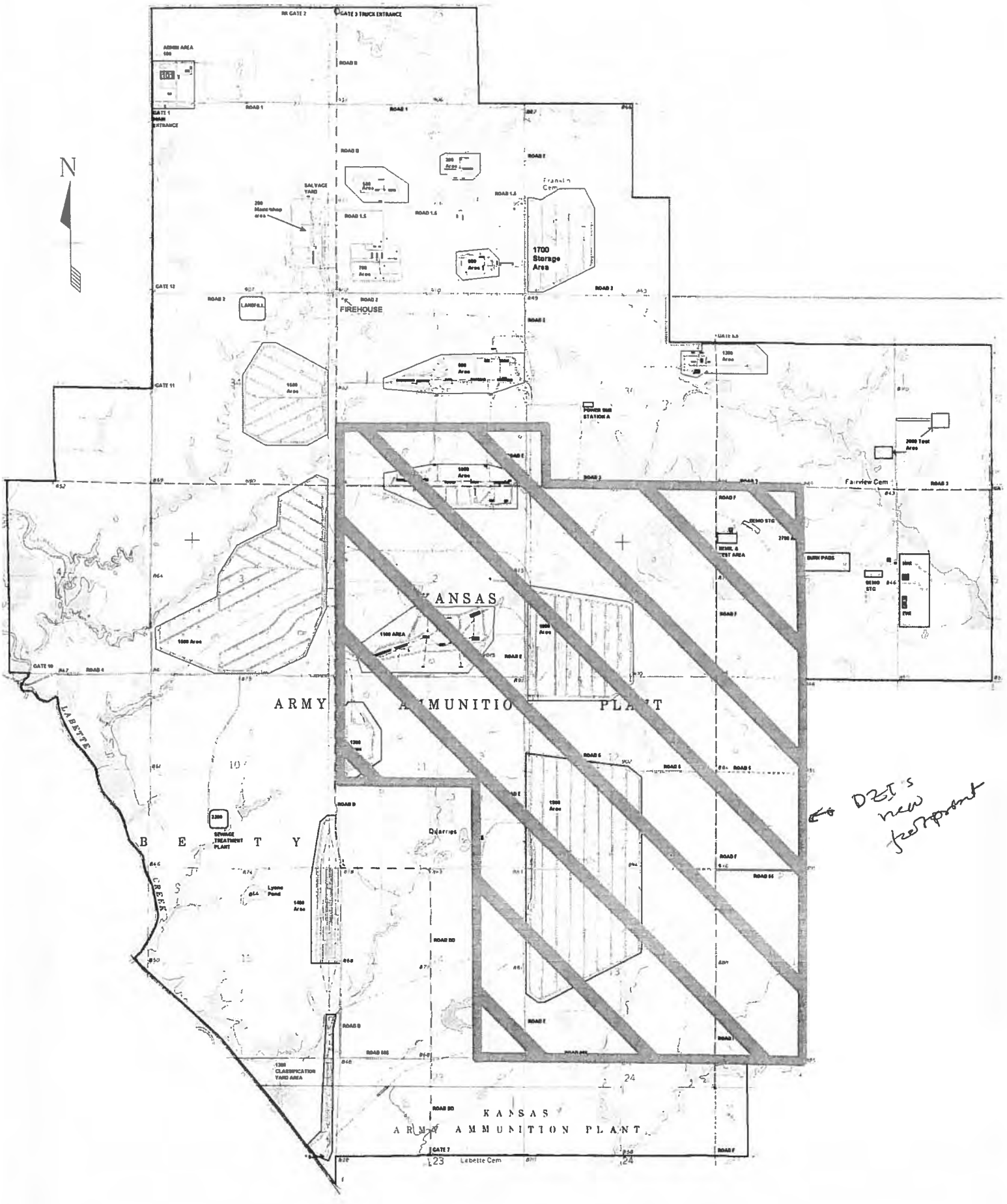
The LRA to eventually take over the operation of the Sewage Treatment Facility. Future upgrade to the facility as well as the underground lines is anticipated.

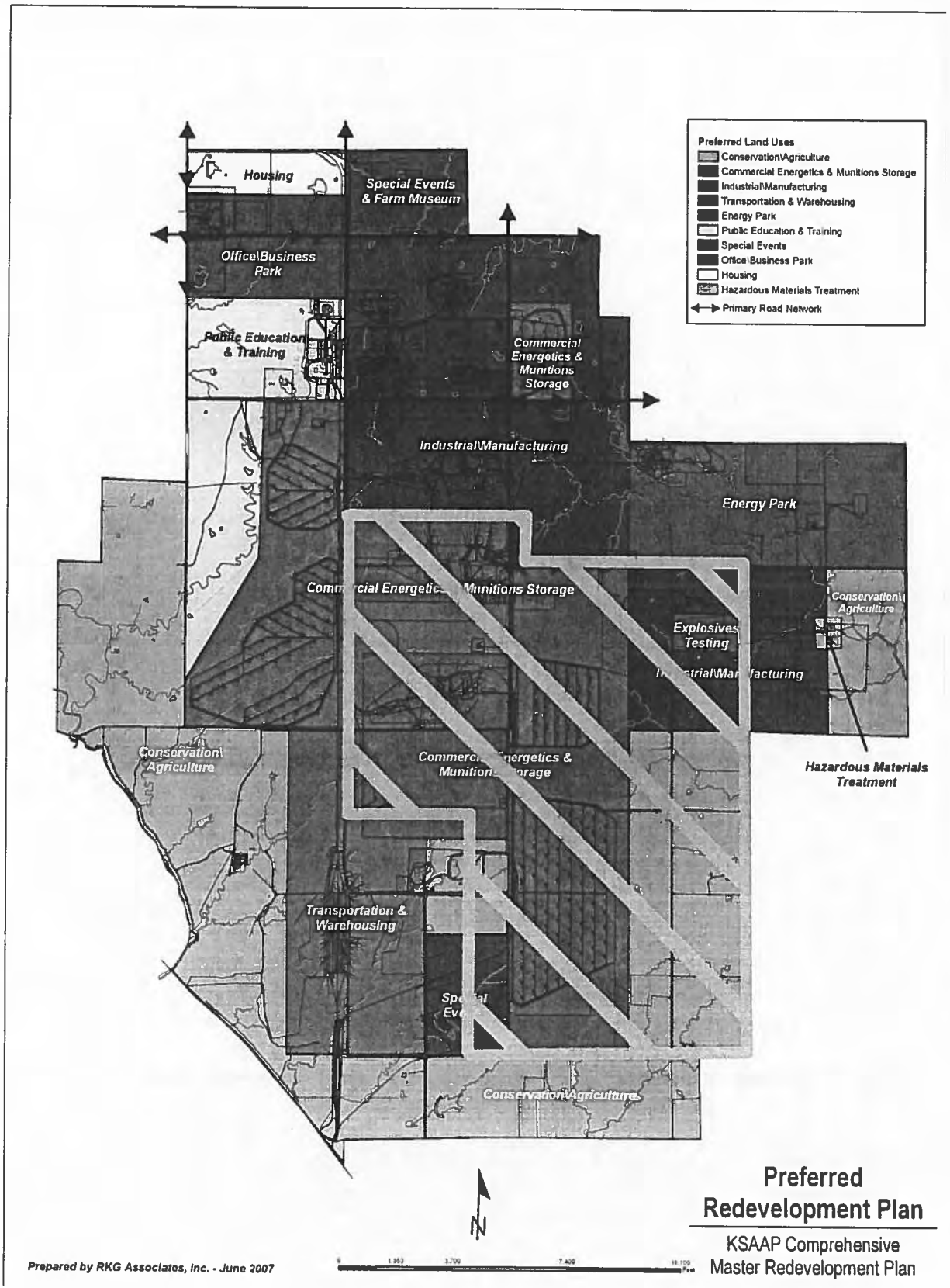
2700 Area - Test/OD Area, Inactive OB Area:	Army/DZI			Army/DZI/LRA				

The LRA's redevelopment plan identifies these areas as part of the Industrial/Manufacturing and the Commercial Energetics & Munitions Storage parcels. The LRA proposes a portion of the area to be used for Explosive Testing. DZI plans limited use of Open Detonation Area after baseline is established. Areas previously used for Open Burning are expected to be remediated.

3000 Area - Inactive Production Area:	Army/DZI			Army/LRA				

The LRA's redevelopment plan identifies these areas as part of the Energy Park parcel. A production line facility assessment will be conducted in order to determine, if there are any explosive hazards present and to identify any other hazardous materials presence: i.e. asbestos, lead base paint, pcbs, mercury switches, etc. All facilities with explosive hazards will be decontaminated. Kansas Army National Guard is currently negotiating with LRA to lease the 3000 Area for training purposes.


N
1700 Storage Area
FIREHOUSE
LANDFILL
SALVAGE YARD
Fairview Cem
Labette Cem
ARMY AMMUNITION PLANT
KANSAS
ARMY AMMUNITION PLANT
LABETTE CREEK
SEWAGE TREATMENT PLANT
CLASSIFICATION YARD AREA
DZI's new footprint



Preferred Redevelopment Plan

KSAAP Comprehensive Master Redevelopment Plan

KSAAP BRAC Compliance Schedule

= phase underway

Site ID	Site Name	Phase	FY09	FY10	FY11	FY12	FY13	FY14+
KAAP-BC-01	Explosive Decon of Buildings	RFI/CMS						
		CMI(C)						
KAAP-BC-02	Asbestos & Lead base Paint	RFI/CMS						
		CMI(C)						
KAAP-BC-03	PCBs in Soils	RFI/CMS						
		CMI(C)						
KAAP-BC-04	ASTs	RFI/CMS						
		CMI(C)						
KAAP-BC-05	OB/OD Ranges	RFI/CMS						
		CMI(C)						
		LTM						
KAAP-BC-07	Hazardous Waste Storage Areas	RFI/CMS						
		CMI(C)						
KAAP-BC-09	Pistol Range	RFI/CMS						
		CMI(C)						
KAAP-BC-10	EWI	RFI/CMS						
		CMI(C)						
KAAP-BC-11	CWP	RFI/CMS						
		CMI(C)						

Site ID	Site Name	Phase	FY09	FY10	FY11	FY12	FY13	FY14+
KAAP-BC-14	Construction Landfill	RFI/CMS						
		CMI(C)						
		CMI(O)						
		LTM						

Site ID	Site Name	Phase	FY09	FY10	FY11	FY12	FY13	FY14+
KAAP-BC-19	Igloo Storage Areas 1700 & 1900	RFI/CMS						
		CMI(C)						
		CMI(O)						

Site ID	Site Name	Phase	FY09	FY10	FY11	FY12	FY13	FY14+
KAAP-BC-20	Igloo Storage Areas 1500 & 1600	RFI/CMS						
		CMI(C)						
		CMI(O)						

Site ID	Site Name	Phase	FY09	FY10	FY11	FY12	FY13	FY14+
KAAP-BC-21	Production Area Building Foundations	RFI/CMS						
		CMI(C)						
		CMI(O)						

Site ID	Site Name	Phase	FY09	FY10	FY11	FY12	FY13	FY14+
KAAP-BC-22	Production Area Outfall Sumps	RFI/CMS						
		CMI(C)						
		CMI(O)						

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

21 APR 2008

RECEIVED
APR 24 2008
BUREAU OF WASTE MANAGEMEI

Dean Cramer
Project Engineer
Kansas Army Ammunition Plant (KAAP)
23018 Rooks Road
Parsons, Kansas 67357

Dear Mr. Cramer:

RE: Kansas Army Ammunition Plant (KAAP)
Parsons, Kansas
RCRA ID No.: KS0213820467

On August 16, 2007, a representative of the U. S. Environmental Protection Agency (EPA) inspected your facility. The inspection was conducted under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA).

A Notice of Violation (NOV) was issued to your company during the inspection. I have reviewed your August 29, 2007, response to the NOV and determined that it adequately addresses the violations listed in the NOV. Therefore, no further submittals are required at this time. Please note that EPA reserves its right to pursue appropriate enforcement actions, including penalties, for violations discovered as a result of this inspection, regardless of whether the violations were subsequently corrected.

I encourage you to contact the Kansas Department of Health and Environment (KDHE) at (785) 296-1600 to obtain a copy of their hazardous waste regulations or to ask any questions you may have regarding the regulations. If you have any questions regarding this letter, please feel free to contact me at (913) 551-7517.

Sincerely,

Marc A. Matthews
Environmental Engineer
RCRA Enforcement and State Programs Branch

cc: Jim Rudeen, KDHE
KDHE District Office

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

29 NOV 2007

Dean Cramer
Project Engineer
Kansas Army Ammunition Plant (KAAP)
23018 Rooks Road
Parsons, KS 67357

Dear Mr. Cramer:

On August 15&16, 2007, a representative of the U.S. Environmental Protection Agency (EPA) inspected your facility. The inspection was conducted under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA). A copy of the inspection report is enclosed for your information.

EPA is presently reviewing the findings of the report to determine your facility's compliance with the applicable statutes, permits, or regulations. If it is determined that violations exist, EPA reserves all rights it may have to take appropriate enforcement action, regardless if any violations were subsequently corrected.

If there are any questions regarding this report or actions that you may want to take, please contact me at (913) 551-7517.

Sincerely,

Marc Matthews
Compliance Officer
RCRA, Enforcement and State Programs Branch

Enclosure

cc: Rebecca Wenner
KDHE

KANSAS

DEPARTMENT OF HEALTH
AND ENVIRONMENT
Division of Environment

Kathleen Sebelius, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

October 1, 2007

Steve Kosman, Director of Engineering
Day and Zimmermann, Inc.
Kansas Division
23018 Rooks, Road, Suite A
Parsons, Kansas 67357-8403

Source ID Number: 09900010

RE: Day and Zimmermann request for an exception from K.A.R. 28-19-645, Open Burning Prohibited at the Kansas Army Ammunition Plant in Parsons, Kansas

Dear Mr. Kosman:

We are in receipt of your letter dated September 10, 2007 requesting further reconsideration of the Kansas Department of Health and Environment (KDHE) denial of Day and Zimmermann, Inc. (D & Z) request for an exception of the Open Burning Prohibition on the Kansas Army Ammunition Plant (KSAAP) in Parsons, Kansas.

On June 28, 2007, a letter with my signature was sent to D & Z regarding its request for reconsideration of the Bureau of Air and Radiation (BAR) denial of an exception to the open burning prohibitions. Upon reconsideration of D & Z's request, and applicable state and federal regulations, D & Z's request for an exception to open burning of these hazardous wastes was appropriately denied.

In your letter dated September 10, 2007, D & Z again states its request for an exception to open burn these hazardous wastes, the economic expense of the lawful disposal of hazardous waste materials. The denial of D & Z's request for an exception to the open burn prohibition is based upon Kansas and EPA hazardous waste disposal and air quality control statutes and regulations. The fact that these waste materials can be properly disposed of effectively and safely by other means – without the open burning - has not changed. Other facilities and D & Z competitors are disposing of similar explosive waste materials without open burning of these wastes. Disposal of these hazardous waste materials through the use of an EWI or CWP is available off-site, and can be performed safely and effectively, as demonstrated by disposal of similar explosive materials by other facilities.

The additional cost and expenses associated for off-site disposal, presented during the May 9, 2007 meeting with KDHE and EPA representatives, are not an exorbitant expense.

KDHE's position remains unchanged, and hereby denies D & Z request for an exception to the open burning prohibition as contained in K.A.R. 28-19-645 and K.A.R. 28-19-647. The open burning of these hazardous wastes is not in the public interest of the citizens of Kansas.

In addition, D & Z's alternative request for open burn period of 30 open-burn days for current hazardous waste treatment is not an exception offered in K.A.R. 28-19-647(e)(9). D & Z's request is not applicable, as this subpart of the regulations refers to the revocation of a current in-force open burning approval and exception, as D & Z does not have an open burning exception granted by KDHE for 2007 for these hazardous waste materials.

KDHE will not provide an exception to D & Z to open burning these hazardous waste materials in violation of state and federal hazardous waste disposal regulations. D & Z has only demonstrated the open burning of these hazardous wastes as an economic concern of D & Z, whereas the open burning would give D & Z an economic advantage over its competitors who are required to properly dispose of these hazardous wastes without open burning. KDHE requires D & Z to use an alternative method of disposal in compliance with all applicable KDHE and EPA regulatory requirements associated with the disposal of these hazardous wastes. If you have any additional questions about this letter, please contact Russ Brichacek at (785) 296-1544 or Mostafa Kamal (BWM) at (7785) 296-1609.

Sincerely,

Ron Hammerschmidt, Ph.D
Director, Division of Environment
Kansas Department of Health and Environment

C: Bureau of Air and Radiation
Bureau of Waste Management
SEDO

Day & Zimmermann
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September 10, 2007
EE:DH070010.Ronald Hammerschmidt.doc

Kansas Department of Health and Environment
Division of Environment
1000 SW Jackson St.
Topeka, Kansas 66612-1366

Attention: Mr. Ronald Hammerschmidt, PhD, Director

Dear Mr. Hammerschmidt:

Subject: Appeal for Reconsideration of Kansas Department of Health and Environment (KDHE) Decision to Deny Day & Zimmermann's (D&Z's) Request for Exemption of the Open Burn Prohibition at the Kansas Army Ammunition Plant (KSAAP)

Reference: KDHE Letter (Mr. Hammerschmidt) dated June 28, 2007; subject: RE: Day & Zimmermann Request for an Exception from K.A.R. 28-19-645, Open Burning Prohibited at the Kansas Army Ammunition Plant in Parsons, Kansas

Over the past 30+ years, Day & Zimmermann (D&Z), contractor-operator of the Kansas Army Ammunition Plant (KSAAP), has annually requested, and received, an exemption to the Open Burning Prohibition (K.A.R. 28-19-645) from the Kansas Department of Health and Environment (KDHE), to allow the open burn treatment of specified hazardous wastes. This activity was, and still is, considered to be in the best interest of the public for the treatment of these wastes.

During the many years of receiving annual exemptions to the open burning prohibition, D&Z has grown to expect that form of treatment to be an integral part of production contracts, and thus has bid – and won – many contracts with that provision included. There have been no changes or revisions to the regulations that have indicated to D&Z that future exemptions would no longer be allowed. Current contracts were obtained without any advance notification from the KDHE that their interpretations of the regulations were changing. Thus, D&Z was not anticipating these changes, and did not incorporate any costs associated with alternative forms of treatment in the bidding process for the production contracts.

It is understood that economics is not considered by the KDHE to be a viable argument against the elimination of the exemption to open burn, and D&Z will make appropriate adjustments in the bidding process for future contracts. However, without any advance notification of a change in KDHE interpretations, D&Z had no opportunity to prepare for the change in the bidding for the current contracts.

Therefore, D&Z hereby requests that the KDHE approve our request for exemption to the open burning prohibition through the end of the current production contracts, giving D&Z some time to incorporate the regulatory restrictions in future contracts. If this is deemed to be an unfair request, then D&Z would at least ask for a period of 30 open-burn days for current hazardous waste treatment as offered in K.A.R. 28-19-647(e)(9), which states "The department may revoke any approval upon 30 days notice."

23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

Kansas Division

Phone: 620-421-7400
Fax: 620-421-7477

Subject: Appeal for Reconsideration of Kansas Department of Health and Environment (KDHE) Decision to Deny Day & Zimmermann's (D&Z's) Request for Exemption of the Open Burn Prohibition at the Kansas Army Ammunition Plant (KSAAP)

Your thoughtful consideration of this appeal is appreciated. If you have any questions concerning this request, our point of contact is Dean Cramer, telephone 620-421-7532.

Respectfully,

Steve Kosman

STEVE KOSMAN
Director of Engineering,
Programs & Projects

SWK/CJS/dmh

cf: Mostafa Kamal (BWM)
Russ Brichacek (BAR)
Bret Raines (ACO)
Danny Langerot
Dean Cramer
Environmental File
Reading File

KANSAS

DEPARTMENT OF HEALTH
AND ENVIRONMENT
Division of Environment

Kathleen Sebelius, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

June 28, 2007

Day and Zimmermann, Inc.
Kansas Division
23018 Rooks, Road, Suite A
Parsons, Kansas 67357-8403

Source ID Number: 09900010

Dear Mr. Cramer:

RE: Day and Zimmermann request for an exception from K.A.R. 28-19-645, Open Burning Prohibited at the Kansas Army Ammunition Plant in Parsons, Kansas

On February 5, 2007, The Kansas Department of Health and Environment (KDHE) denied your 2007 request for an exemption from K.A.R. 28-19-645, **Open Burning Prohibited.** The open burning activities requested were for the following types of materials:

1. Comp A-5 and A-3 Wet Sumpage and Sump Sludge
2. Cyclotol, Octol, Comp B, and TNT Wet Sumpage and Sump Sludge
3. Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, and PAX scrap
4. Absorbent Materials from Cleanup of Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX, and TNT Wastewater Spills
5. Propellants and Propellant Charges
6. Support Collars
7. Various Fuses

The basis of the denial of your request was based upon the fact that these explosive containing waste materials can be disposed of through other means, such as incineration in a properly constructed and maintained Explosive Waste Incinerator (EWI) or Contaminated Waste Processor (CWP). Both of these combustion devices exist at the KAAP site, but are not currently serviceable to meet the current state and federal waste and air quality control pollutant emission regulations. KDHE's Bureau of Air and Radiation (BAR) has granted exception to the prohibition to open burning in the past to DZI based upon these waste materials being unsafe to dispose of by other available means. However, in review with KDHE Bureau of Waste Management (BWM) and EPA Region VII representatives, it was determined that these waste materials can be disposed of effectively and safely by other means – without open burning these wastes. Other facilities are disposing of similar explosive waste materials without open burning these wastes.

On May 9, 2007, KDHE representatives from the BWM and BAR, along with a representative from EPA Region VII met with DZI representatives in the KDHE Topeka office. This meeting provided DZI an opportunity to provide additional information, and to discuss with appropriate KDHE and EPA representatives the regulatory requirements for disposal of these explosive wastes, the current operations and storage of these waste materials by DZI, transportation and disposal options of these waste materials. At this meeting, the issues of disposal was presented by DZI staff and an open discussion with KDHE and EPA representatives was adequate to allow KDHE to determine if open burning of these wastes was the only option to safely and effectively dispose of these explosive containing wastes.

In conjunction with EPA, KDHE was reviewed and considered the written and oral arguments from DZI, and the regulatory requirements associated with the disposal of these waste materials. KDHE position remains unchanged, and hereby denies DZI an exception to the Kansas open burning prohibition regulations, and state and federal waste disposal regulations to dispose of these waste materials by means of open burning. During the May 9, 2007 meeting, DZI failed to demonstrate that open burning was the only safe method of disposal, DZI provided information on the cost estimates for off-site disposal, representing that these waste materials can be safely disposed off-site currently, without open burning. Disposal of these waste materials through the use of a EWI and CWP is available off-site, and can be performed safely and effectively, as demonstrated by disposal of similar explosive waste materials by other facilities. The additional cost estimates presented by DZI for off-site disposal vs. on site open burning are not an exorbitant expense.

KDHE is requiring DZI to use an alternative method of disposal other than open burning for the above listed items, in compliance with applicable state and federal waste disposal regulations. If you have any questions about this letter, please contact Mostafa Kamal (BWM) at (785) 296-1609 or Russ Brichacek (BAR) at (785) 296-1544.

Sincerely,

Ronald F. Hammerschmidt, Ph.D
Director, Division of Environment

C Bureau of Air and Radiation
Bureau of Waste Management
SEDO

Open Burning of Ordnance at Kansas Army Ammunition Plant

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40 CFR Part 257 Sec. 257.3-7

(a) The facility or practice shall not engage in open burning of residential, commercial, institutional or industrial solid waste. This requirement does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, diseased trees, debris from emergency clean-up operations, and ordnance.

K.A.R. 28-19-647

- The Exceptions to Prohibition on Open Burning have not been revised since the EPA's new rule 40 CFR 52.870(c)(32)(i)(B), State effective date: 3/1/96.
- The above CFR exempts certain operations from the previous K.A.R. It does not offer additional prohibitions.

K.A.R.s and CFRs

- There have been no changes since 1996 to the Air or to the RCRA regulations.
- There have been no changes to D&Z open burning operations.
- We believe Open Burning is still the best alternative for ordnance treatment based on the safety and interests of public health.

Ordnance

Ordnance Definition – Army Technology

Ordnance refers to ammunition for weapons as well as explosives and other similar items.

Related products and services:

Ammunition and Fuzes

Artillery and Mortars

Explosive Ordnance and Bomb Disposal

Explosive Ordnance Disposal and Mine Clearance

Explosives, Powders, and Propellants

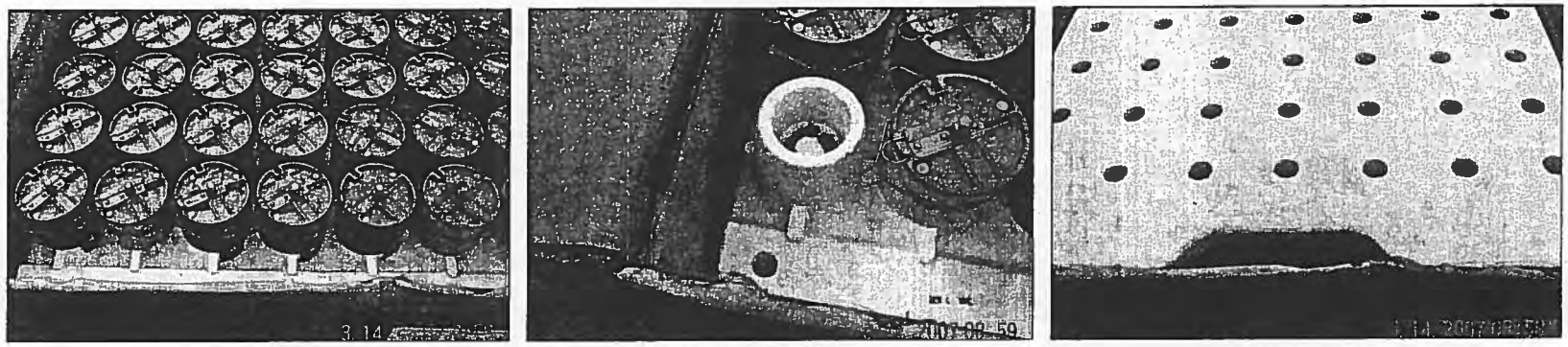
Quantities Open Burned at KSAAP in 2006

Wet Sumpage	.....	11,266.08 Lbs.
Fuzes	.....	27,550 ea. @ .0034 = 93.67 Lbs.
Support Collars	.....	185 ea. @ .00018 = .03 Lbs.
TOTAL	**.....**	**11,359.78 Lbs.**

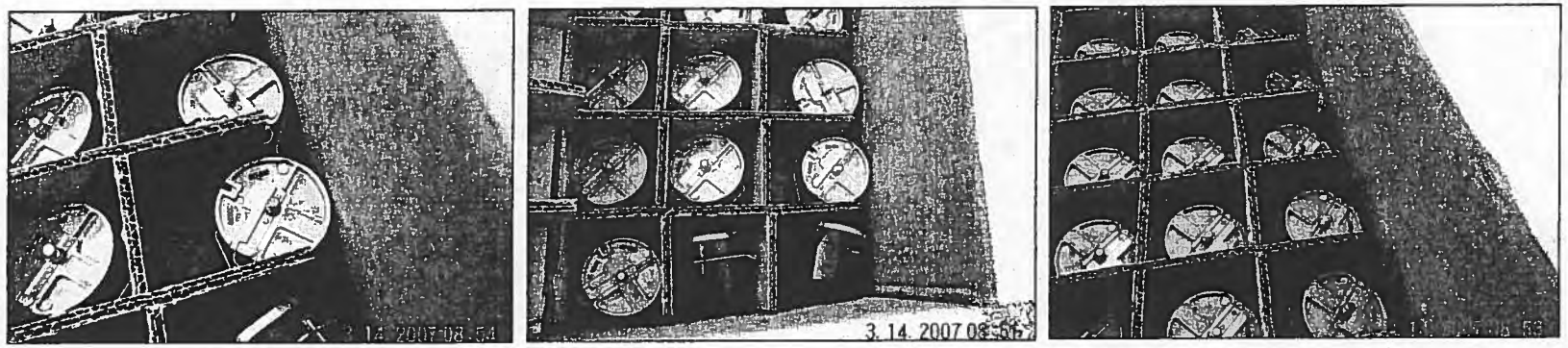
- Resulting in a total of 19 days of open burning of waste ordnance (HW).

Fuzes

DOT Packaging



Non-DOT Packaging



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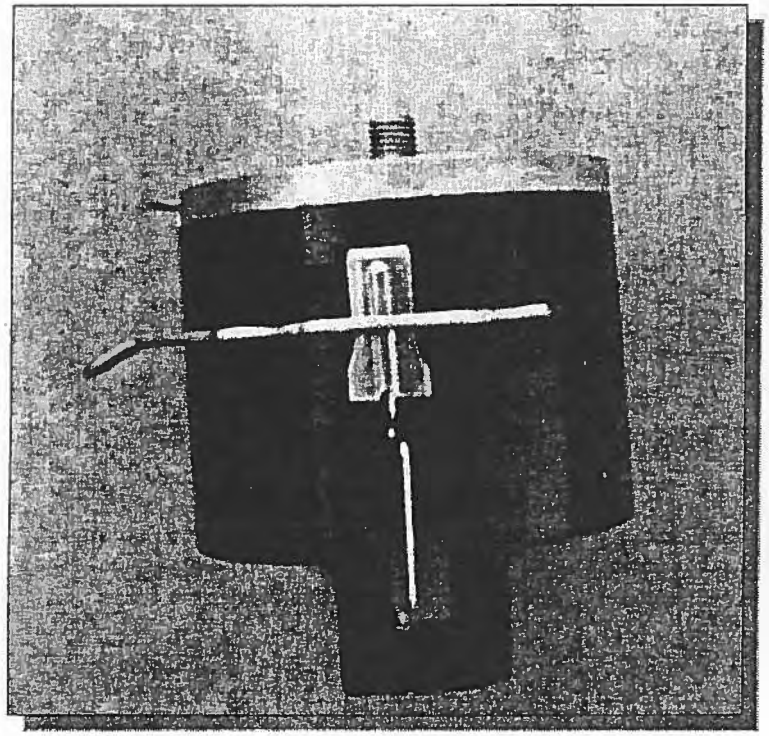
Demilled Fuzes



- The fuze with safeties in place after removal from bomblet.
- Open Burning is **not** a problem.
- Additional handling is required to Open Detonate.
- Open Detonation could result in a blow when being covered with dirt if the safeties are dislodged during handling. Also, after a planned normal blow, unexploded ordnance could have safeties blown off and the ordnance would be armed. An armed condition may then not be easily detected.

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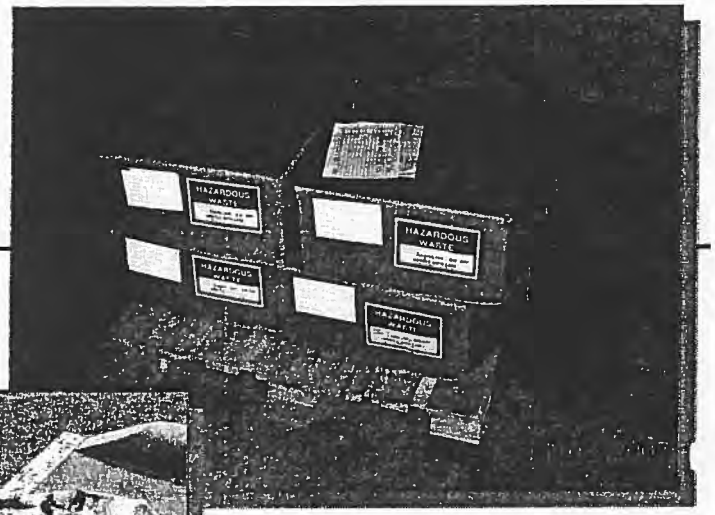
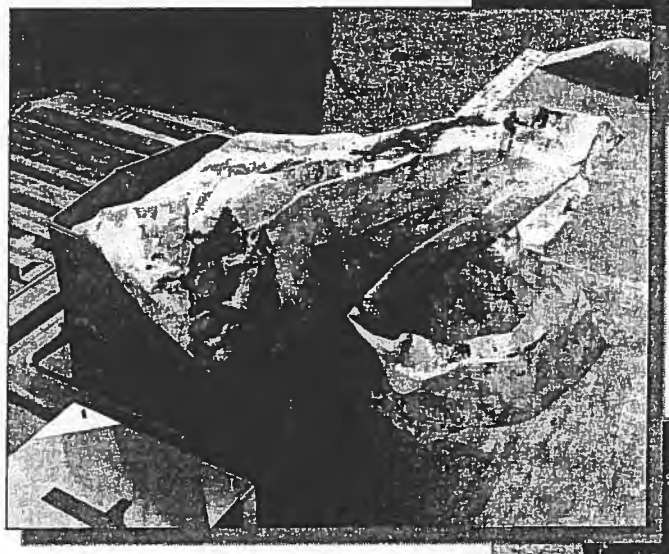
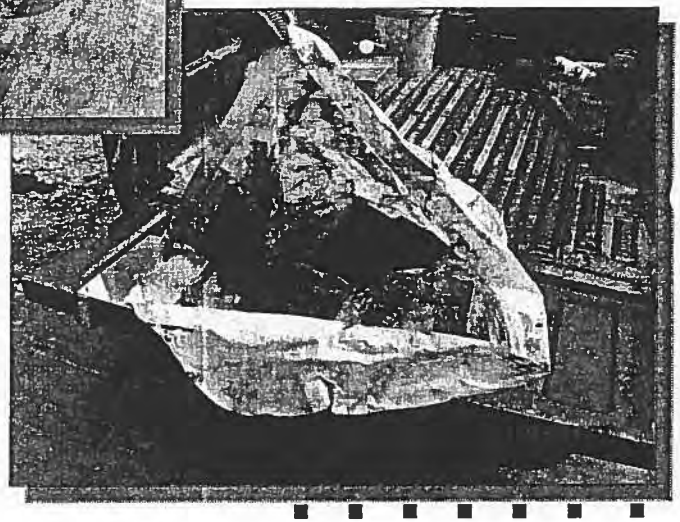
Wet Sumpage

- Wet sumpage as it is stored in Hazardous Waste igloo.
- Wet sumpage in the plastic liners.
- Although the boxes are DOT approved, the inner lining is not leak-proof nor DOT approved. Transportation on public highways would require additional handling to properly containerize.
- The composition of sumpage varies and includes: Frogs, mice, insects, leaves, dirt, floor sweep, and waste explosives (ordnance).







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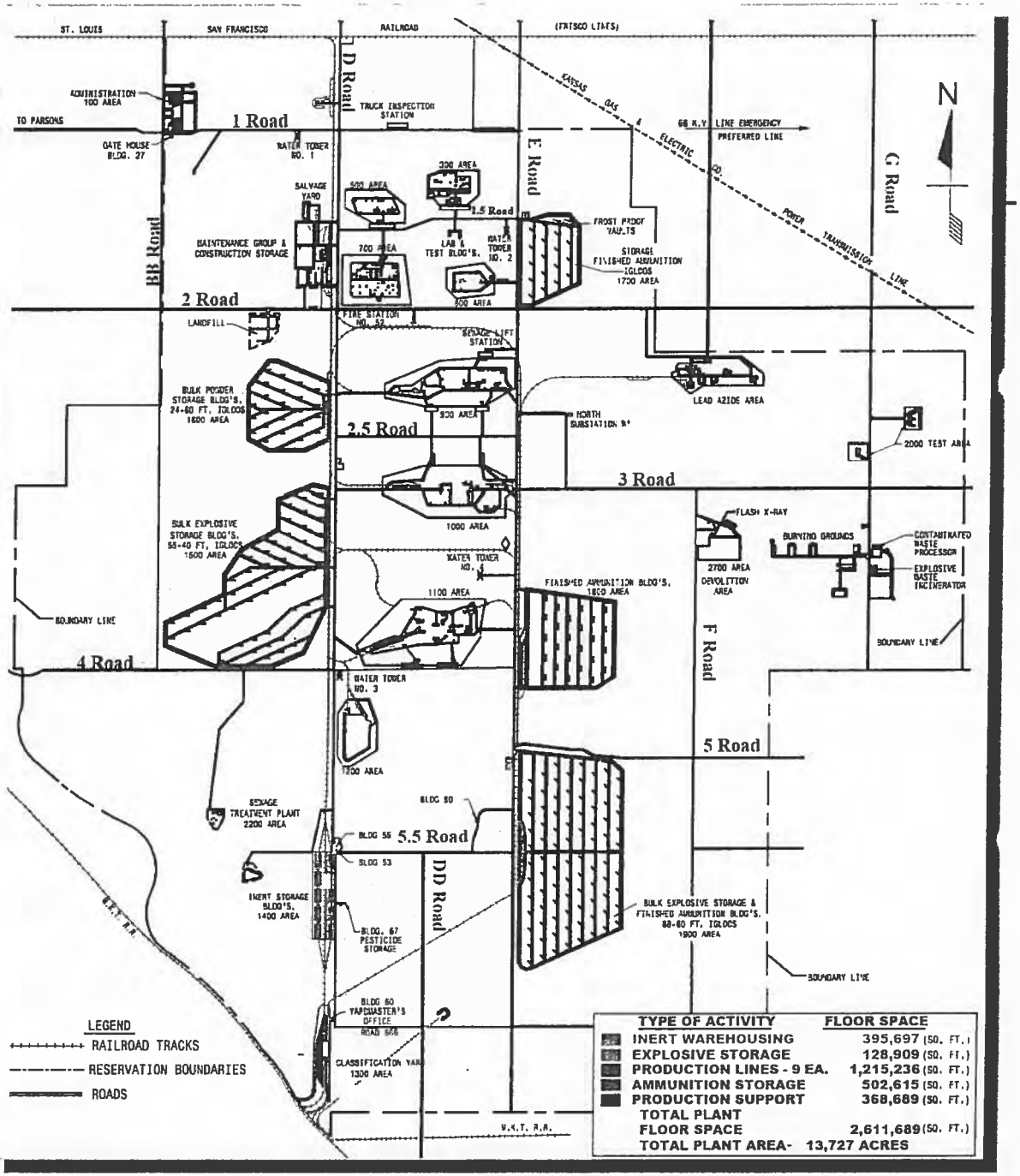
Plant Map



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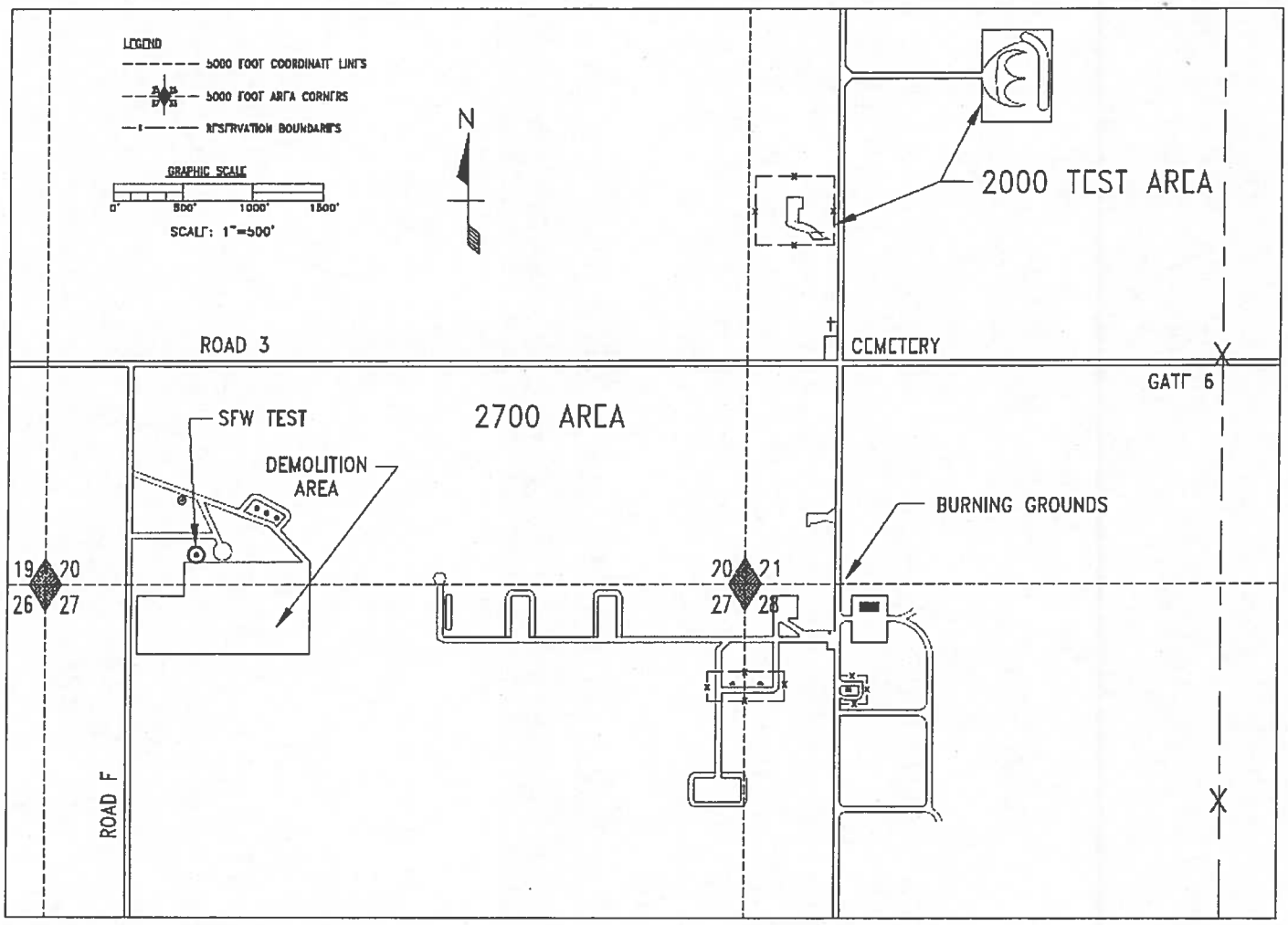
Detail of Plant Map



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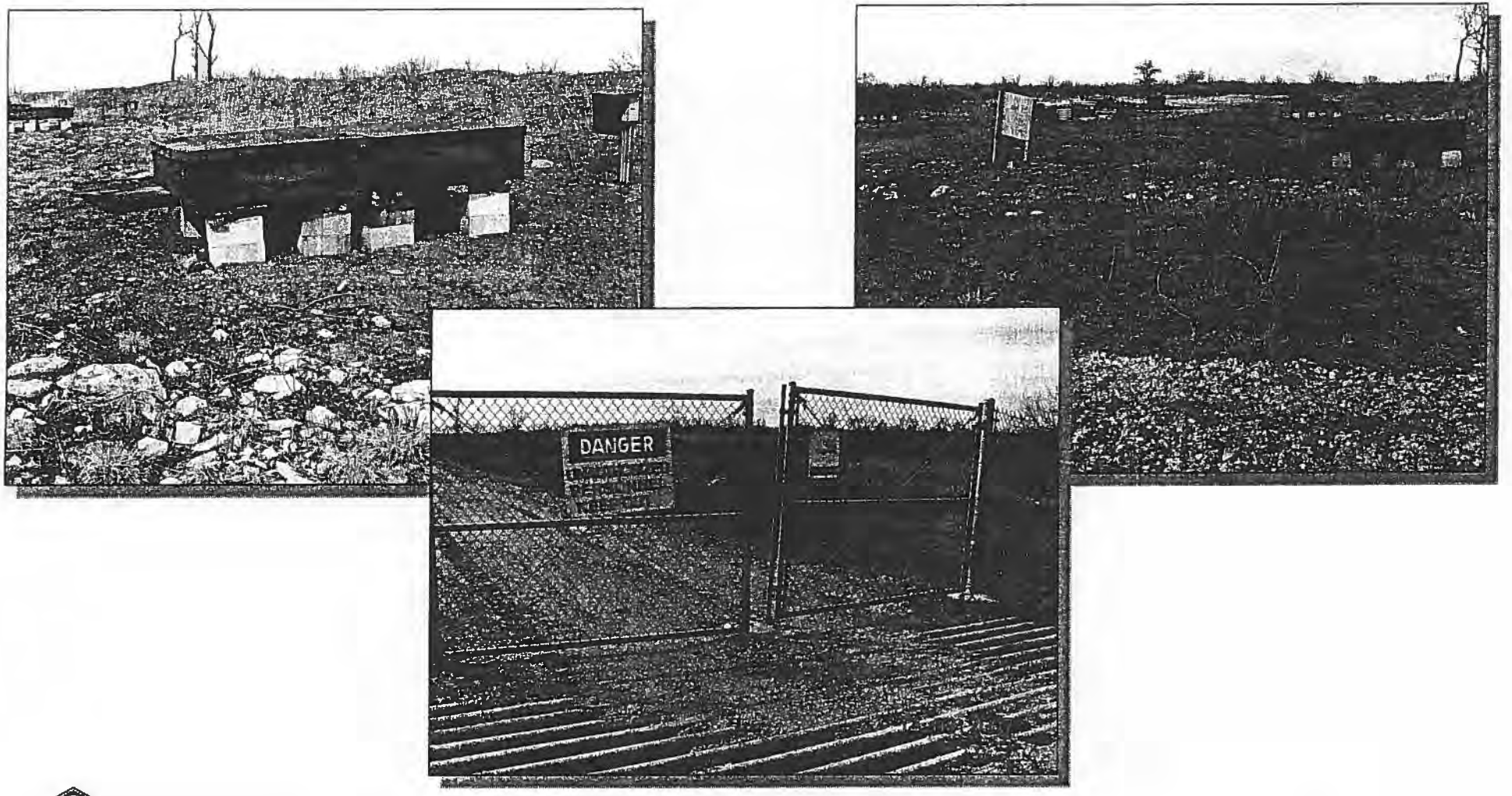
Open Burning Grounds



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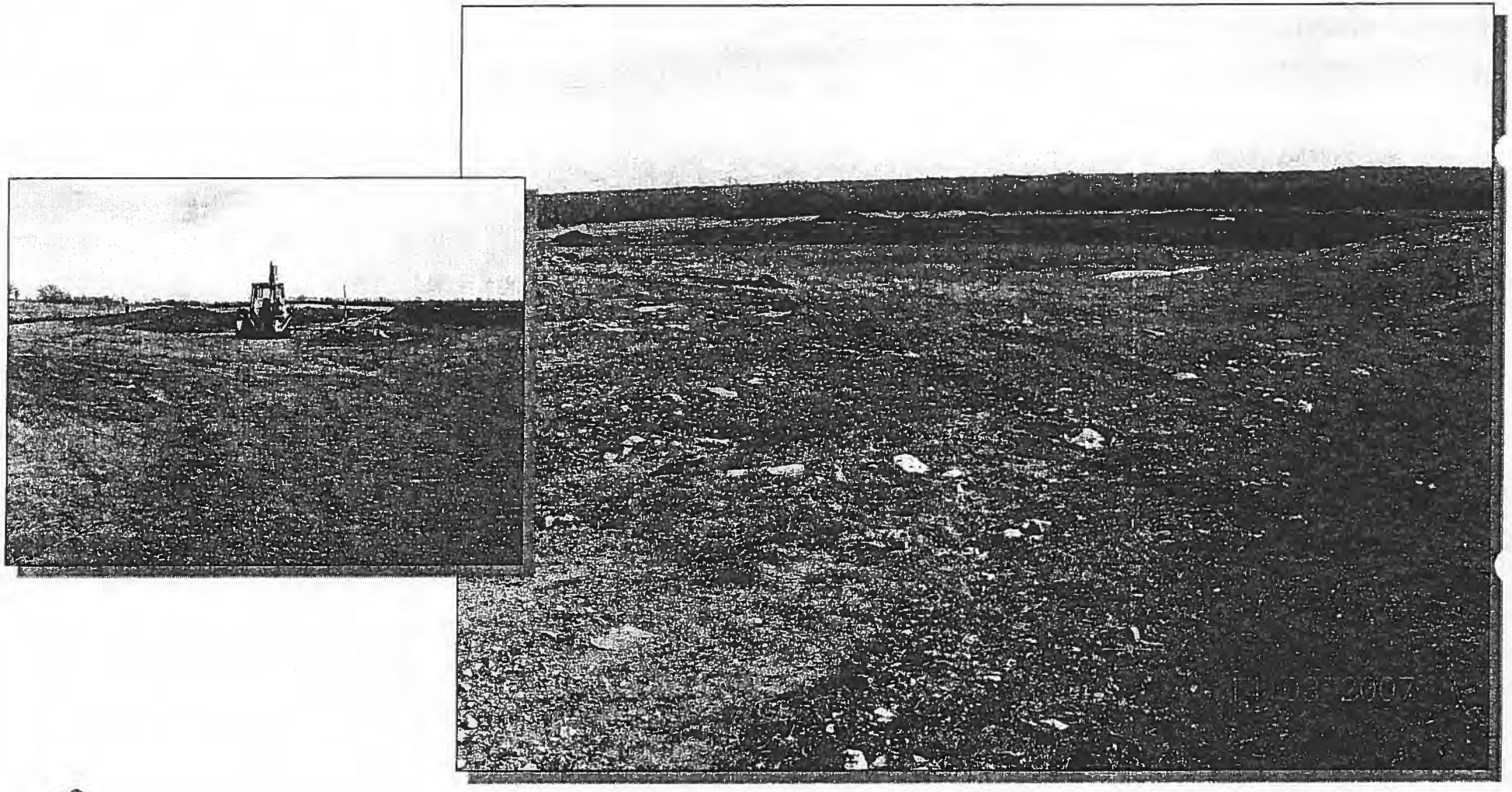
Excerpt from E-mail to Steve Kosman from Carolyn Smalley

E-mail dated Wednesday, December 7, 2005

Subject: BRAC/EPA Meeting today

…3. EPA has a 2008 goal to have all RCRA facilities permitted. That would be our OB/OD Grounds. He has suggested that the Army clean up the OB grounds now and that D&Z request a permit from the KDHE to OB at the OD grounds. Do we want to do that? …

Open Detonation Grounds at KSAAP



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Rationale for Continued OB at KSAAP

- Safety
  - No transportation of unsafe ordnance on public highways.
  - Handling by trained and experienced ordnance workers.
  - Proven safe method for effective and efficient treatment.

Rationale...(continued)

- Security
  - Security practices implemented at all times for the public safety and national security.
  - Transportation incidents on public highways could cause unsecured access to waste ordnance.

Rationale...(continued)

- Environmental Issues
  - Spills off plant could be a major environmental issue for clean-up and security.
  - D&Z has on plant, trained and experienced spill response personnel.
  - Open burning is an environmentally sound practice for treatment of ordnance. Reference: "Risk Assessment for the Open Burning and Open Detonation Unit, Kansas Army Ammunition Plant" prepared by Tetra Tech, Inc. January 2004.
  - D&Z has trained, experienced personnel to monitor and inspect on-site hazardous waste storage and treatment facilities.

Opening Summary

- Open Burning of waste ordnance protects the public health and safety and provides an environmentally sound treatment of hazardous waste.

K.A.R. 28-29-647 Exceptions to Prohibition on Open Burning

- (b) A person may obtain an approval from the department to conduct an open burning operation that is not otherwise exempt from the prohibition imposed by K.A.R. 28-19-645 if it is demonstrated that the open burning is:

K.A.R. 28-29-647 Exceptions to Prohibition on Open Burning...(continued)

- (1) necessary, which in the case of burning for the purpose of disposal of any materials, shall mean that there is no other practical means of disposal;
  - Practical. Definition: Sensible, common sense, mindful of the results, useful, adapted or designed for actual use.
  - Other options are available, but are not practical.

K.A.R. 28-29-647 Exceptions to Prohibition on Open Burning...(continued)

- (2) In the public interest; and
  - This does not state, "in the interest of public health and safety," but in the **"public interest."** This is where economics and job security enter into the public interest.
  - D&Z believes that this exemption is not only in the interest of public health and safety, but also very much in the public interest.

K.A.R. 28-29-647 Exceptions to Prohibition on Open Burning...(continued)

- There are 250 employees whose livelihood will be challenged if the exemption is not allowed. D&Z has contracts which were bid in good faith based on a treatment that has been regulated by the same regulations for many, many years. To eliminate this economically and environmentally feasible treatment will cause D&Z to incur additional costs for handling and DOT packaging of ordnance for transportation to approved off-site facilities.
  - **Off-Site Treatment Costs**:
    $1 per fuze for incineration **PLUS** additional costs for transportation, DOT-approved containers, and labor to repackage items currently packaged in non-DOT containers.
  - **On-Site Open Burning Total Cost:**
    $.32 per fuze

K.A.R. 28-29-647 Exceptions to Prohibition on Open Burning...(continued)

- Denial of the exemption to open burn will not only have a huge impact on the current workforce at KSAAP, but will also have an impact on the proposed post-BRAC employment planned by the Local Redevelopment Planning Authority (LRPA).
  - The LRPA's goal to develop economic opportunities for all citizens of southeast Kansas is largely contingent upon D&Z's continued operations at KSAAP.

K.A.R. 28-29-647 Exceptions to Prohibition on Open Burning...(continued)

- (3) Is not prohibited by any local government or local fire authority.
  - Open burning for treatment of waste ordnance is not prohibited by any local government nor local fire authority.

Significant Advantages and Conclusion

On-site open burning of ordnance provides **three** significant advantages over off-site treatment.

Significant Advantages

1. **Safety**

   OB provides the safest method of ordnance treatment by minimizing handling and shipping of hazardous waste.

Significant Advantages...(continued)

2. Security

OB provides the most security for ordnance by supplying on-site, 24 hour surveillance, and permitted storage. It also eliminates the need to transport ordnance materials on public highways.

Significant Advantages...(continued)

3. Public Interest

OB is in the public interest because it allows a safe, secure, environmentally sound, and economically feasible method of ordnance treatment. The economics are vastly important to the continued operation of D&Z and to the continued employment of its current and future employees.

Conclusion

D&Z respectfully requests that the exemption for Open Burning at KSAAP be re-instated and that the safe, effective, efficient, and environmentally sound treatment be approved.


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KANSAS
DEPARTMENT OF HEALTH
AND ENVIRONMENT

Kathleen Sebelius, Governor
Roderick L. Bremby, Secretary

www.kdheks.gov

February 5, 2007

Dean Cramer
Day and Zimmerman
Kansas Division
23018 Rooks, Road, Suite A
Parsons, Kansas 67357-8403

Dear Mr. Cramer:

The Kansas Department of Health and Environment (KDHE) has reviewed your request for an exemption from K.A.R. 28-19-645, **Open Burning Prohibited.** These burning activities are as follows: comp A-5 and A-3 wet sumpage and sump sludge, cyclotol, octol, comp B, and TNT wet sumpage and sump sludge, comp A-5, comp A-3, comp B, comp CH-6, PBX, cyclotol, octol, RDX, and PAX scrap, absorbent materials from cleanup of comp A-5, comp A-3, comp B, cyclotol, octol, RDX, and TNT wastewater spills, propellants and propellant charges, support collars, and various fuzes.

Based on the information submitted on the behalf of Kansas Army Ammunition Plant (KSAAP), KDHE denies the requested burning activities. KDHE will not be granting conditional approval for Exemptions for Open Burning in accordance with K.A.R. 28-19-647(b) and K.A.R. 28-19-647(d) for the following activities:

1. Comp A-5 and A-3 Wet Sumpage and Sump Sludge
2. Cyclotol, Octol, Comp B, and TNT Wet Sumpage and Sump Sludge
3. Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, and PAX scrap
4. Absorbent Materials from Cleanup of Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX, and TNT Wastewater Spills
5. Propellants and Propellant Charges
6. Support Collars
7. Various Fuzes

KDHE is requesting that KSAAP find an alternative method of disposal instead of open burning for the above listed items. If the waste exhibits the characteristics of reactivity and has the EPA hazardous waste code D003 (40 CFR 261.23), KDHE suggest that the handling of such waste, including the transportation and disposal, must be in accordance with state and federal hazardous waste regulations. Should there be any questions; the facility should contact KDHE for further clarification and/or assistance. Federal solid waste regulations also prohibit the open burning of any residential, commercial, institutional, or industrial solid waste in accordance with 40 CFR Part 257.3-7. This requirement does not apply to the burning of trees and brush generated in land clearing activity or as part of storm clean-up operations, or the burning of grasses or other agricultural wastes in the field.

If you have any questions about this letter, please contact me at (785) 296-1574, Mostafa Kamal at (785) 296-1609, Chief of the Hazardous Waste Permit Section, or the North Central District Office at (785) 827-9369 in Salina, Kansas.

Sincerely,

Cheryl Evans
Environmental Scientist
Compliance and Enforcement Section
Bureau of Air and Radiation

c SEDO
Bureau of Waste Management

Day & Zimmermann
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January 11, 2007
EE:DH070003.Exempt Req for OB for CY2007.doc

Kansas Department of Health and Environment
Air Compliance and Enforcement Section
1000 SW Jackson St., STE 310
Topeka, Kansas 66612-1367

Attention: Mr. Russ Brichacek, Unit Supervisor

Dear Mr. Brichacek:

Subject: Additional Justification to Support the Kansas Army Ammunition Plant (KSAAP) Exemption Request for Open Burning for Calendar Year 2007

References:
1) D&Z letter (Mr. Kosman) dated December 6, 2006; Subject: Open Burning Exemption Request
2) Telecon between KDHE (Mr. Russ Brichacek/Ms. Cheryl Evans) and D&Z (Dean Cramer) dated January 3, 2007; Subject: KDHE's rejection of KSAAP's Exemption Request for Open Burning

Day & Zimmermann (D&Z), contractor-operator of the Kansas Army Ammunition Plant (KSAAP), is hereby responding to the comments expressed in the (Reference 2) telephone conversation concerning the Kansas Department of Health and Environment (KDHE) decision to reject our request for exemption of the open burning regulations for calendar year 2007 (Reference 1). This is a very important and critical component of production activities at KSAAP, and a major deviation from these standard activities will create many problems and dangers previously avoided. Although Section 3 of the Request for Open Burning Exemption for Reactive (Explosive) Hazardous Waste (Reference 1) contained specific justification, D&Z has compiled additional statements which support our request. These statements are listed below:

Elimination of open burning of reactive waste may result in:

1. Additional handling of reactive hazardous waste explosives and ammunition components by KSAAP employees for proper packaging to meet DOT regulations, increasing employee exposure to the risk;

2. Transportation on public highways will expose civilian personnel to the risk of possible release and/or detonation of reactive hazardous waste, especially in case of accidents;

3. Transportation on public highways will pose a greater risk of damage/detonation of the reactive hazardous waste due to additional and prolonged vibration/shaking;

4. A potential spill of reactive hazardous waste from an accident on the public highways could interrupt all flow along that route for an extended time period while spill response operations were performed;

23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

Kansas Division

Phone: 620-421-7400
Fax: 620-421-7477

Subject: Additional Justification to Support the Kansas Army Ammunition Plant (KSAAP) Exemption Request for Open Burning for Calendar Year 2007

5. Potential hijacking of reactive hazardous waste is possible during transportation on public highways;

6. Making it more difficult for the Environmental Engineering personnel to monitor and insure the reactive hazardous waste treatment is performed properly; and

7. Since there are no permitted treatment facilities in Kansas, we would be forced to send work out of the State.

In addition to these statements, which hinge primarily on the topic of safety, D&Z would also point out that the reactive hazardous wastes are generated during the production processes, and all efforts are made to recycle and/or reuse as much of the material as possible. The waste remains after the recycling/reuse has been implemented. Efforts are made to keep the waste at a minimum at all times.

Also, attached for your review are the conclusions of the risk assessment for the Open Burn and Open Detonation Units at KSAAP, which was prepared by an independent engineering firm, Tetra Tech EM, Inc. in 2004 as part of the KSAAP Part B Permit renewal application. The risk assessment was based on current U.S. Environmental Protection Agency (EPA) guidance and the protocol dated November 11, 2003 that was approved by the KDHE. These conclusions indicated the final amounts of wastes managed by each scenario (listed in conclusion) did not cause an unacceptable risk to human health and the environment. For comparison purposes, the reactive hazardous wastes open burned at KSAAP in 2006 are listed below:

Reactive HW	Explosive Treated by OB
TNT Wet Sumpage	8,430.2 Lbs.
PAX-21 Wet Sumpage	680 Lbs.
Fuze Assemblies	27,550 ea. @ .0034 = 93.67 Lbs.
Support Collar Assemblies	185 ea. @ .00018 = .0333 Lbs.

These totals represent the volume of reactive hazardous waste treated by open burning at KSAAP in 2006, much lower than the scenario quantities displayed in the risk assessment conclusion. Safety has been the most important aspect of all operations at KSAAP, and the open burning activities have always been performed to protect our employees, customers, and neighbors in the community. Therefore, D&Z sincerely requests your reconsideration of our exemption request because it is in the best interest of the KSAAP employees and the public.

Subject: Additional Justification to Support the Kansas Army Ammunition Plant (KSAAP) Exemption Request for Open Burning for Calendar Year 2007

If you have any questions concerning this request, our point of contact is Dean Cramer, telephone 620-421-7532.

Respectfully,

STEVE KOSMAN
Director of Engineering,
Programs & Projects

SWK/CJS/dmh

Attachment a/s

cf: Bret Raines (ACO)
Dean Cramer
Environmental File
Reading File

7.0 CONCLUSIONS

The objective of the risk assessment was to evaluate the potential impacts to both human and ecological receptors due to releases from the OB and OD units at KSAAP. This assessment was accomplished by a series of steps used to estimate releases from the units. The first step was to gather information about the types currently or potentially managed at the units. From this information, Tetra Tech using standard protocols estimated emissions from the various wastes managed in the OB and OD units. Tetra Tech divided the operations into 3 OB scenarios and 3 OD scenarios, each scenario was assumed to manage similar wastes.

OB/OD operations at KSAAP require a specialized dispersion model to address the unique dispersion characteristics associated with OB/OD activities. To accomplish this, the Open Burn/Open Detonation Dispersion Model (OBODM) was used—an EPA-approved model for evaluating impacts from OB and OD activities. The inputs to these model included information obtained from the OB and OD units standard operating procedures, which describe the maximum amount of material that could be managed by each unit. In addition, Tetra Tech identified locations of potential receptors, both human and ecological and included this data within the model, to ensure that all likely receptor's exposure would be modeled. The final step in the modeling was to use the meteorological data to estimate maximum deposition at specific locations within KSAAP and near the facility. This model output was then subject to post-processing before it was entered in the IRAP-H View and EcoRisk View programs used to estimate risks associated with these releases. The output from the OBODM had to be post-processed because the model does not take into account the operational limits imposed by KSAAP, such as the number of days for normal operation, days not operating due to weather limits as prescribed by the standard operating procedure. The post-processed data along with the other required data concerning site conditions and receptors, based on health protective assumptions, were input to IRAP-h View and EcoRisk View to estimate risk to human and ecological receptors.

The IRAP-h View model results showed slight human health hazards under the acute exposure scenario. The acute hazards were all driven by lead. A slight chronic hazard was identified from the ingestion of produce due to antimony. No significant carcinogenic risks were observed in either the acute or chronic exposures. Due to the conservative nature of the assumptions used in the model, it is believed that the risks and hazards associated with the modeled releases are acceptable. The initial results of EcoRisk View model showed an unacceptable risk due to exposures associated with predominantely lead as well

as antimony, copper, and barium. These unacceptable risks were associated with OB scenario 3 and OD scenario 3. Through additional post-processing of the input data, Tetra Tech determined that if the amount of waste managed under OB scenario 3 was set at 84,000 lbs/ year and OD scenario 3 was set at 14,000 lbs/year this would reduce the hazard quotient to 17 and 20 for each unit. Tetra Tech believes due to the limited area impacted by these releases, and the conservative nature of the assumptions associated with the bioavailability and uptake of these metals that these values do not pose an unacceptable risk to the ecological receptors. The final amounts of wastes managed by each scenario that did not cause an unacceptable risk to human health and the environment are given below.

OB Scenario 1: 2,160 lb/day, 69,120 lb/yr
OB Scenario 2: 2,160 lb/day, 139,320 lb/yr
OB Scenario 3: 2,800 lb/day, 84,000 lb/yr

OD Scenario 1: 2,000 lb/day, 102,600 lb/yr
OD Scenario 2: 2,000 lb/day, 102, 600 lb/yr
OS Scenario 3: 2,000 lb/day, 14,000 lb/yr

TABLE 2-2
OPEN BURNING TREATMENT SCENARIOS
KSAAP

Item	Scenario	Item Constituents	Source of Emission Factor
Dry Sumpage	1	TNT, RDX, coal, dirt, and absorbent material	Bang Box Test Data - Manufacturers waste, diesel fuel and dunnage, and M43 tests containing wood, paper, RDX, and diesel fuel (Tests 2 and 7)
Wet Sumpage			
Absorbent Material			
M223 Fuze	2	RDX, Lead Azide, Lead Styphnate, antimony, barium, and lead	Bang Box Test Data OB short list for all energetic materials tested (Mitchell and Suggs, Table 7.1), plus selected KSAAP Items
XM236 Self Destruct Fuze Bomblet			
BLU-97 Fuzes			
Support Collars			
Propellants	3	Double and Triple Based Propellants containing nitrocellulose, nitroglycerine, nitroguanidine, and ethyl cellulose	Bang Box Test Data - M1, M9, M31A1E1, double based, and triple based propellants tests containing nitrocellulose, nitroglycerine, nitroguanidine, and ethyl cellulose and one KSAAP item containing chlorine (amonium perchlorate) (Tests 4 and 6)
M1			
M2			
M5			
M6			
M7			
M8			
M9			
M10			
M12			
M13			
M14			
M15			
M16			
M17			
M18			
M26			
M26E1			
M30A1			
M30			
M31			
T2			
T8			
IMRA1			
M30A2			
M31A1			
T23			

Day & Zimmermann
We do what we say.®

December 6, 2006
EE:DH060100.OB Exempt Request.CDC.doc

Kansas Department of Health and Environment
Bureau of Air & Radiation
Air Compliance and Planning Section
1000 SW Jackson, Suite 310
Topeka, Kansas 66612-1366

Attention: Mr. Scott Nightingale

Dear Mr. Nightingale:

Subject: Open Burning Exemption Request

Day & Zimmermann (D&Z) hereby submits the annual Request of Open Burning Exemption for Explosive Hazardous Waste for Kansas Army Ammunition Plant for calendar year 2007. The request was prepared in accordance with Kansas Air Regulation 28-19-647(c). Please note that one additional explosive has been included in the types of explosive wastes requiring open burning. A copy of the extra explosive's MSDS is included as an attachment for your information.

Your consideration and approval of this request will be appreciated. If you have any questions regarding this subject, our point of contact is Dean Cramer, telephone 620-421-7532.

Respectfully,

STEVE KOSMAN
Director of Engineering,
Programs & Projects

SWK/CJS/dmh

Atachment a/s

cf: Bret Raines – ACO
Dean Cramer – DZI
Environmental File
Reading File

23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

Kansas Division

Phone: 620-421-740[illegible]
Fax: 620-421

Request for Open Burning Exemption for Reactive (Explosive) Hazardous Waste

1. **Name, address, and telephone number of the person responsible for open burning operations.**

Owner: Donald D. Dailey
Commander's representative
Kansas Army Ammunition Plant
Parsons, Kansas 67357
620-421-7449

Operator: Sally Boulanger
General Manager
Day & Zimmermann, Inc.
Kansas Division
Parsons, Kansas 67357
620-421-7500

2. **Location and type of open burning operation involved.**

All open burning operations will be conducted on Pad No. 5 of the Kansas Army Ammunition Plant's (KSAAP's) Open Burning Area to thermally treat explosive hazardous wastes with the potential to detonate.

3. **Reasons why the proposed operation is in the public interest and no alternative method is feasible.**

With exception of the propellants, all of the following explosive hazardous wastes contain high explosives with the potential to detonate. The majority of the wastes are of such sensitivity that strict safety measures must be maintained at all times to ensure that the explosives remain damp or in liquid to prevent uncontrolled detonations from occurring. Propellants that are of no further use require treatment before they deteriorate to the condition that they become a safety concern. Only KSAAP personnel that have been trained in proper management procedures, i.e. transportation, storage, and thermal treatment of explosive, are allowed to handle these wastes. In addition, KSAAP has emergency response and disaster control plans that will be placed into effect in the event that an incident involving these items occurs on site. Open burning of these explosive wastes at KSAAP, under strict control procedures, will be in the public's best interest. Each open burning operation will involve the use of eight burning pans. No more than 150 pounds of explosive hazardous waste will be open burned in each pan at one time. It is essential to keep the quantities of unstable explosives handled to a minimum. The effects of incidents involving large quantities of unstable explosives cannot be accurately predicted.

No alternative method of management for these wastes is feasible. KSAAP's explosive waste incinerator is not capable of injecting semi-solid wastes into the rotary kiln. Outshipment of the explosive hazardous wastes is unfeasible due to lack of adequate treatment facilities operated by other Army installations or commercial vendors.

4. **Description of the open burning operation including the estimated amount and nature of material to be burned each time; the proposed frequency, duration, and schedule of such burning; the size of the area to which the burning will be confined; and the method of igniting the material.**

KSAAP requests an exemption to open burn, daily as weather conditions permit and quantities dictate, explosive hazardous waste twice per day. All open burning operations will be conducted on weekdays only in 16 elevated burning pans located on Pad No. 5 of KSAAP's Burning Grounds Area. The burning pans measure approximately 4' x 4' x 1' and the pad measures approximately 100' x 300'. Pad No. 5 is located in the middle east portion of the installation (see enclosed drawing). Eight of the pans will be utilized to burn waste in the morning and the remaining eight pans will be utilized in the afternoon. Hazardous waste inspections will be performed daily as the area is utilized to ensure that no wastes are released during open burning operations. Copies of the inspection reports will be maintained in the Environmental Engineering Office for review.

As mandated by KSAAP's Standing Operating Procedures (SOP) and Technical Programs for open burning operations, no more than 150 pounds of explosive hazardous waste will be placed in each burning pan. The maximum quantity of explosive hazardous waste that will be burned each day will be 2,400 pounds. Approximate burn times for KSAAP's explosive hazardous waste range from 30 minutes to four hours which includes smoldering time. The majority of KSAAP's explosive hazardous waste will burn within 30 minutes of ignition.

To ignite and burn the waste, the following procedures will be conducted. One or two wooden pallets will be placed in the bottom of each burn pan and wooden dunnage will be placed around the edges of each pan. The waste to be open burned will be placed on top of the wooden pallet(s). Excelsior will be placed over the waste and used to form an ignition train from the waste to the lid of the pan which will be placed upside down on the ground adjacent to the pan. Wooden dunnage will be placed on top of the excelsior inside the pan. An electrical match with a four-ounce explosive charge will be inserted in the train of excelsior located in the pan lid. The match will be connected to an electrical wire attached to an ignition control box located approximately 500 yards from the burning pad. All personnel will be evacuated from the burning pad area and the burn initiated from the ignition control box.

Descriptions of the nature of the explosive hazardous waste that will be open burned are as follows:

Comp A-5 and A3 Wet Sumpage and Sump Sludge – Wastewater that contains Comp A-5 explosive and is generated from washdown on the 300 Area

Production Line facilities is transferred to collection sumps prior to being pumped to a holding tank for treatment through a diatomaceous earth filter and carbon columns. Wire baskets lined with cheesecloth are positioned on the influent side of the collection sumps to remove solids from the wastewater prior to its entry into the sumps. The solids removed from the wastewater are normally comprised of large particles of explosives, but may contain small metal fragments from component parts of the grenades produced on the 300 Line. The wet sumpage may also contain small amounts of lint and dirt from employee's clothes and shoes. The typical appearance of the Comp A-5 wet sumpage is that of wet (damp) grayish clay. The Comp A-5 wet sumpage and cheesecloth are removed from the wire baskets at least once a week, but may be removed more often depending on production schedules. The Comp A-5 wet sumpage is packaged and managed as high explosive hazardous waste with the potential to detonate. Additional explosive solids (sump sludge) may accumulate in the bottom of the sumps. When the sump sludge has accumulated to a depth dictated by safety, it is removed, packaged, and managed as high explosive hazardous waste with the potential to detonate. The Comp A-3 is generated from washdown operations from production of some munitions in the 700 Area. The wastewater is then transported to the 300 Area for treatment through the diatomaceous earth filter and carbon columns, also.

Cyclotol, Octol, Comp B, TNT, PAX, and OSX-CAN Wet Sumpage and Sump Sludge – Wastewater that contains Cyclotol, Octol, Comp B, or TNT explosive is generated from building washdown and bomb body sumpout procedures conducted on the 900 and/or 1100 Area Production Line. The wastewater flows through a settling area to remove the larger solid particles of explosives. The solids collected in the settling area are designated as wet sumpage which has the normal appearance of wet reddish brown clay. The major component of wet sumpage is cyclotol, Octol, Comp B, or TNT, but it may contain metal parts and lint/dirt from employee's clothes/shoes generated during washdown of the facilities. The wet sumpage is removed from the settling area, packaged, and managed as high explosive hazardous waste with the potential to detonate.

Wet sumpage and sump sludge containing the OSX-CAN and PAX family of explosives will be generated from building washdown and sumpout/facing operations in the 1000 Area. (See attached MSDS for description of OSX-CAN explosive.)

The wastewater then flows into sumps which are used for additional removal of explosive solids (sump sludge). When the sump sludge has accumulated to a depth dictated by safety, it is removed, packaged, and managed as high explosive hazardous waste with the potential to detonate.

Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, TNT, PAX, and OSX-CAN Scrap – Scrap high explosives are generated from

floor sweeping and vacuum operations conducted in the 300, 700, 900, 1000, and 1100 Production Line facilities. The main component of the floor sweepings is explosive, but they may also contain small metal parts such as lead cups and lint/dirt from employee's clothing/shoes. Small quantities of bulk waste high explosives are generated when the explosives are rejected for use due to quality analyses performed by the KSAAP Chemistry Laboratory. When generated, floor sweepings, vacuum wastes, and bulk explosive are packaged and managed as high explosive hazardous waste with the potential to detonate.

Absorbent Materials from Cleanup of Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX, TNT, PAX, and OSX-CAN Wastewater Spills – In the event of a spill of wastewater contaminated with Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX, TNT, PAX, and/or OSX-CAN, hay, straw, and/or other types of absorbent material are used to soak up the spill. The used hay, straw, or absorbent is then placed in drums and managed as high explosive hazardous waste with the potential to detonate.

Propellants and Propellant Charges – Waste propellants and propellant charges are generated when the propellants are rejected for use due to quality analyses performed by the KSAAP Chemistry Laboratory or upon receipt of orders from the Department of the Army stipulating that the propellants be thermally treated. Waste propellant and propellant charges are packaged and managed as propellant explosive hazardous waste with the potential to detonate. If any of the propellant charges contain a bag lined with lead foil, the bag will be detached and opened to allow the propellant to be poured into a receptacle. The container of propellant will be managed as propellant explosive hazardous waste with the potential to detonate. The bag lined with lead foil will be placed in a separate receptacle and managed as hazardous waste until TCLP analyses can be performed.

Support Collars – Waste support collars are generated when rejected from use due to their inability to meet production specifications. The support collars consist of a plastic collar containing an M55 Stab Detonator. The reject support collars are managed as hazardous waste due to the ability of the M55 Stab detonator to detonate.

Three layers of the explosive support collars will be placed in each pan with diesel fuel and wood used to initiate and maintain the combustion necessary to complete the treatment process. The amount of diesel fuel will be minimized to the amount possible. The maximum number of support collars placed in each burn pan will be 720.

Various Fuzes – Several types of waste fuzes, such as M223, BLU-97, XM236 Self Destruct Fuze, etc., will be open burned when necessary to comply with safety concerns that override routine open detonation.

5. **Sketch indicating the location of the open burning with respect to all public roadways and dwellings within 1,500 feet or less of the proposed operations, and the names and mailing addresses of all heads of households occupying such dwellings.**

A drawing annotated in red to reflect the location of KSAAP's Open Burning Pad No. 5 is enclosed. The burning pad is located approximately 3,500 feet from the nearest boundary of KSAAP. Therefore, no public roadways and/or dwellings are located within 1,500 feet of the proposed operations.

6. **Evidence that such open burning has been approved by any official fire control authority having jurisdiction over the area.**

KSAAP's Fire Department has jurisdiction over all fire operations conducted at the installation. The Fire Department is manned 10 hours per day each regular workday of the year. Walton Township Fire Department is responsible for responding to fires during off-hours.

BAE SYSTEMS
ORDNANCE SYSTEMS INC.

MATERIAL DATA SHEET

Manufacturer: ORDNANCE SYSTEMS INC. 4509 WEST STONE DRIVE KINGSPORT, TN 37660-9982	HOLSTON MSDS NUMBER: 6389

For Emergency Call CHEMTREC® 800-424-9300
For more information about this MSDS, call (423) 578-6345
The notation N/A is used to indicate that a section or item of information is not applicable for the chemical or ingredient.

SECTION I MATERIAL IDENTIFICATION

EFFECTIVE DATE: July 18, 2006 **LABEL NAME:** OSX-CAN Type II	**OSI CHEMICAL NUMBER:** N/A **UN NUMBER**

CHEMICAL NAME:
TRADE, COMMON NAMES, OTHER:
CHEMICAL FORMULA:
MOLECULAR WEIGHT: NA

HAZARD CODES/RATINGS: Fire – 4 , Chemical Reactivity – 3, Skin – 2, Respiratory – 2 (See SECTION X for Hazard Rating Scales)

SECTION II HAZARDOUS INGREDIENTS OF MIXTURE

CHEMICAL NAMES	COMMON NAME(S)	WEIGHT %	ACGIH TLV (UNITS)
2,4-Dinitroanisole	DNAN	38.5-48.5	Not established
3-Nitro-1,2,4-Triazol-5-one	NTO	8.0-18	Unknown
Nitroguanidine *CAS 556-88-7	NQ	38.5-48.5	Not established

SECTION III PHYSICAL DATA

BOILING POINT (°C): N/A **MELTING POINT (°C):** 90 **VAPOR PRESSURE (mm Hg):** NA	**VAPOR DENSITY (AIR = 1):** NA **PERCENT VOLATILES (WT.%):** 0 **SPECIFIC GRAVITY (H_2O = 1):** N/A **EVAPORATION RATE:**

SOLUBILITY IN WATER: Sparingly
APPEARANCE AND ODOR: yellow flake or powder following grinding. No odor

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (°C): Unknown **METHOD USED:**	**FLAMMABLE LIMITS (VOL %)** **LEL:** N.A. **UEL:** N.A.

EXTINGUISHING MEDIA: Foam or chemical fire extinguisher

FIRE FIGHTING PROCEDURES: Do not attempt to manually extinguish fires. Burning explosives may accelerate to a detonation at any time when subjected to confinement, shock, or other sufficient initiation source.
DO NOT ATTEMPT TO PUT OUT FIRE. If material ignites or there is a fire within the immediate area, EVACUATE PERSONNEL FROM AREA IMMEDIATELY AND TAKE SHELTER. .

FIRE AND EXPLOSION HAZARDS: Must not be confined if burning. Confinement can cause deflagration or transition to detonation with extremely violent results. Explosives may be retained in fissures, cracks, and crevices of structures, equipment, and containers which have been exposed to explosives. Property which may be contaminated by explosives must not be subjected to heat, sparks, or flame. Detonation can occur. Thermal decontamination under controlled conditions is the recommended method for complete decontamination. Thermal decontamination must be preceded by washing/steaming and chemical neutralization or dissolution. Contaminated property must not be buried. an explosion can occur with this material. The exhaust products are toxic and should not be inhaled or ingested.

SECTION V REACTIVITY DATA

STABILITY: This is a military high explosive. It has been assigned the United Nations Organization Classification of Class 1, Division 1 (mass detonating) based on the Department of Defense Explosives Hazard Classification Procedures, Army Technical Bulletin 700-2.

CONDITIONS TO AVOID: Avoid shock, heat electrostatic discharge, impact, impingement and friction. High explosive will detonate when exposed to sufficient energy level. Keep material from heat or flame.

MATERIALS TO AVOID: Avoid alkalis, particularly at elevated temperatures, strong acids and physical sensitizers such as glass, sand, and metal fragments.

HAZARDOUS DECOMPOSITION PRODUCTS: During decomposition toxic oxides of nitrogen are emitted.

HAZARDOUS POYLMERIZATION: Will not occur

SECTION VI HEALTH HAZARD DATA

TOXICOLOGY: Exposure of personnel should be minimized until health effects are determined. Follow accepted laboratory and industry safety practices. Absorption into the body leads to formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2-4 hours.

CARCINOGENICITY: Effects unknown, minimize exposure

EFFECTS OF EXPOSURE:

SKIN AND EYES: May cause skin irritation.

INHALATION AND INGESTION: Chronic exposure to some explosive dusts has been reported to cause convulsions or unconsciousness. Chronic local and systemic effects are not fully known. Inhalation and ingestion can result in systemic poisoning, usually affecting the bone marrow (blood-cell-producing system) and the liver. Avoid inhalation and ingestion of dust.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: In case of contact, flush thoroughly with large amounts of low pressure water for at least 15 minutes. Get medical attention.

SKIN: Wash with soap and warm running water. Get medical attention for rash or irritation.

INHALATION (Dried solids or decomposition gases): Remove to fresh air, treat any irritation symptomatically. If breathing is difficult, give oxygen. Get medical attention.

INGESTION: If conscious, induce vomiting immediately by giving 1 or 2 glasses of water and touching back of throat with finger or blunt object or by giving syrup of ipecac. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION VII SPECIAL PROTECTION INFORMATION

RESPIRATION PROTECTION: Use NIOSH approved respirator for dusts and particulates if exposed to dusting.

VENTILATION:

LOCAL EXHAUST: Hoods for dusty operations are required. **SPECIAL:** NA

MECHANICAL: General, moderate **OTHER:** N/A

PROTECTIVE GLOVES: If prolonged or repeated skin contact may occur, impervious gloves are recommended.

EYE PROTECTION: Industrial safety goggles as a minimum are recommended for any type of industrial chemical handling.

OTHER PROTECTIVE EQUIPMENT: Wash hands thoroughly after handling.

SECTION VIII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN THE EVENT MATERIAL IS RELEASED OR SPILLED:
Follow Local, State and Federal Regulations.

WASTE DISPOSAL METHOD: Disposal should comply with all applicable federal, state, and local regulations.

Transport in accordance with the Department of Transportation regulations. Obtain approval from appropriate Safety Agency before disposal.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN STORAGE AND HANDLING: High explosives should be stored in approved explosives magazines in accordance with AMCR 385-100. Storage and handling must be carried out in accordance with appropriate Safety Agency regulations concerning quantity distance, barricading, personnel exposure and material handling equipment. Recycle or dispose of used containers in accordance with appropriate Safety Agency regulations. In buildings and locations where explosives with spark energies for initiation not greater than 0.02 Joules are handled, the relative humidity should be 50% or greater. Dust generated by handling must be cleaned up on a continuing basis.

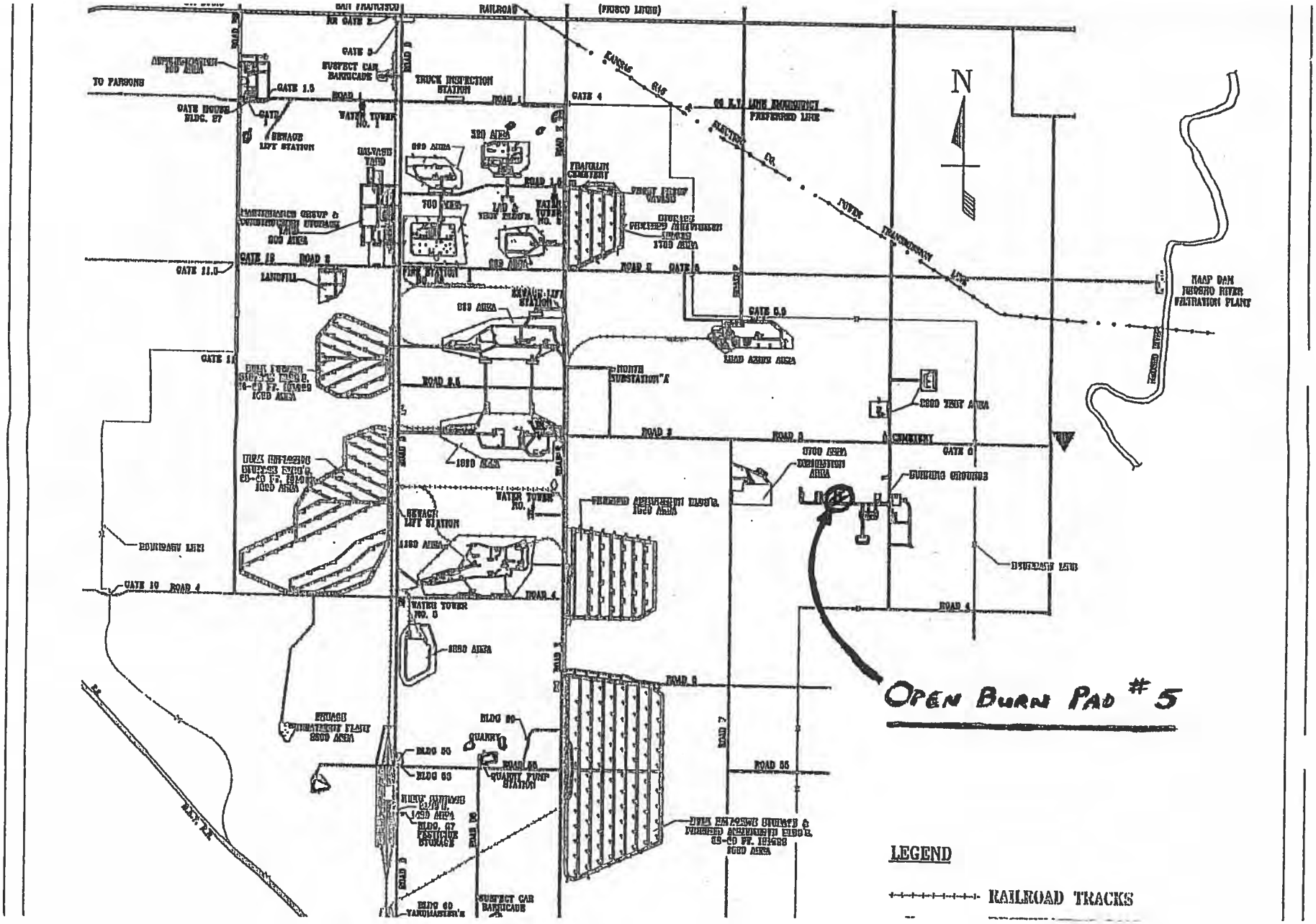
OTHER PRECAUTIONS: Explosives must be tested for compatibility with any materials which they contact. Materials include other explosives, solvents, adhesives, metals, plastics, paints, cleaning compound, floor and table coverings, packing materials, and other similar materials and equipment. Keep container closed. Wash thoroughly after handling. Wash contaminated clothing before reuse. Extreme care should be exercised during maintenance of explosive contaminated equipment. Decontamination procedures include washing/steaming, chemical decontamination, and thermal decontamination. Decontamination should be performed prior to welding, cutting or grinding metal parts. Penetrating oil should be used liberally on nuts, bolts, and all threaded connections to aid in desensitizing hidden explosives prior to disassembly. Refer to AMCR 385-100, paragraph 16-18.

SECTION X MISCELLANEOUS

HAZARD CODES/RATINGS:

FIRE HAZARD:	0 – Noncombustible; 1 – Low; 2 – Moderate; 3 – Severe; 4 – High
CHEMICAL REACTIVITY:	0 – Stable; 1 – Low; 2 – Moderate; 3 – Severe; 4 – High
SKIN HAZARD:	1 – Low; 2 – Moderate; 3 – High
RESPIRATORY HAZARD:	1 – Low; 2 – Moderate; 3 - High

OTHER:


N
TO PARSONS
GATE 1.5
GATE HOUSE BLDG. 27
SEWAGE LIFT STATION
WATER TOWER NO. 1
TRUCK INSPECTION STATION
SUSPECT CAR BARRICADE
320 AREA
800 AREA
700 AREA
FRANKLIN CEMETERY
WATER TOWER NO. 2
1700 AREA
GATE 11.0
LANDFILL
FIRE STATION NO. 2
GATE 5.0
1200 AREA
ROUTE SUBSTATION "A"
2000 TEST AREA
ROAD 2
ROAD 3
ROAD 4
ROAD 5
ROAD 6
ROAD 7
ROAD 55
GATE 6
CEMETERY
BURNING GROUNDS
0700 AREA DESTRUCTION AREA
1000 AREA
WATER TOWER NO. 4
SEWAGE LIFT STATION
1100 AREA
WATER TOWER NO. 5
2800 AREA
BOUNDARY LINE
GATE 10
SEWAGE TREATMENT PLANT 2600 AREA
BLDG 56
QUARRY
BLDG 58
BLDG 59
QUARRY PUMP STATION
BLDG 67 EXPLOSIVE STORAGE
BLDG 60 YARDMASTER'S
SUSPECT CAR BARRICADE
RAILROAD
(PUSCO LINE)
TUNNEL 615
ELEC. DR.
TUNNEL TRANSMISSION LINE
NAAP DAM
NAAPO RIVER FILTRATION PLANT
OPEN BURN PAD #5
LEGEND
RAILROAD TRACKS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

22 NOV 2006

RECEIVED
NOV 27 2006
BUREAU OF WASTE MANAGEMENT

Carolyn Smalley
Environmental Engineering Manager
Kansas Army Ammunition Plant
23018 Rooks Road
Parsons, Kansas 67357

Dear Ms. Smalley:

RE: Kansas Army Ammunition Plant
Parsons, Kansas
EPA RCRA ID No. KS0213820467

On September 26-28, 2006, a representative of the U. S. Environmental Protection Agency (EPA) inspected the facility. The inspection was conducted under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA). A copy of that inspection report is enclosed.

A Notice of Violation (NOV) was issued to your company during the inspection. I have reviewed your October 12, 2006, response to the NOV and determined that it adequately addresses the violation listed in the NOV. Therefore, no further submittals are required at this time. Please note that EPA reserves its right to pursue appropriate enforcement actions, including penalties, for violations discovered as a result of this inspection, regardless of whether the violations were subsequently corrected.

I encourage you to contact the Kansas Department of Health and Environment (KDHE) at (785) 296-1600 to obtain a copy of their hazardous waste regulations or to ask any questions you may have regarding the regulations. If you have any questions regarding this letter, please feel free to contact Bob Anslyn working under a grant for EPA at (913) 551-7935.

Sincerely,

Edwin G. Buckner, PE
Compliance Officer
RCRA Enforcement and State Programs Branch

Enclosure

cc: Jim Rudeen
KDHE

REPORT OF RCRA COMPLIANCE INSPECTION

AT

KANSAS ARMY AMMUNITION PLANT
23018 Rooks Road
Parsons, Kansas 67357
(620) 421-7434

EPA ID Number: KS0213820467

ON

September 26-28, 2006

BY

U.S. ENVIRONMENTAL PROTECTION AGENCY
Region VII
Environmental Services Division

INTRODUCTION

At the request of the Air, RCRA, and Toxics Division (ARTD), A Resource Conservation and Recovery Act (RCRA) compliance evaluation inspection was performed at Kansas Army Ammunition Plant in Parsons, Kansas on September 26-28, 2006. The inspection was conducted under the authority of Section 3007(a) of RCRA, as amended. This inspection was conducted as a Level B Multi-Media Inspection and the Multi-Media Screening Checklist is included as attachment 1.

PARTICIPANTS

Kansas Army Ammunition Plant (KSAAP):
- Dean Cramer, Environmental Engineer
- Carolyn Smalley, Environmental Engineering Manager
- Donald Daily, Army Site Manager (Opening Conference Only)
- Bret Raines, Environmental Specialist (Opening and Closing Conferences Only)
- Steve Kosman, Director of Engineering, (Closing Conference Only)
- Sally Boulinger, Acting General Manager (Closing Conference Only)
- Dan Langerot, Director of Production Warehousing (Closing Conference Only)

U.S. Environmental Protection Agency (EPA):
- Jamal Lewis, Environmental Protection Specialist

INSPECTION PROCEDURES

The Kansas Army Ammunition Plant (KSAAP) is located in Parsons, Kansas. Prior to the inspection, I was not able to drive completely around the facility. From the reconnaissance that I conducted, I did not observe any storage or disposal areas that would be of specific concern for this inspection. I arrived unannounced at the KSAAP guard post on the morning of Tuesday, September 26, 2006. I introduced myself to the guard on duty, presented my credentials, and informed him of the nature of my visit. He informed me that he would contact Mr. Dean Cramer to assist me. I remained at the guard station and Mr. Cramer arrived shortly after. I introduced myself to him, presented my credentials, and informed him of the nature of my visit. We proceeded to the administration building where the inspection began. Mr. Cramer introduced me to Ms. Carolyn Smalley, Environmental Engineering Manager, Mr. Donald Dailey, Army Site Manager, and Mr. Bret Raines, Environmental Specialist. I presented my credentials to the facility representatives and stated the nature of my visit. Ms. Smalley, Mr. Cramer, and Mr. Raines are responsible for all waste management activities at KSAAP. I explained the purpose and procedures of the inspection and the right to make confidentiality claims to the facility representatives. I informed them that there would be a Confidentiality Notice provided at the end of the inspection to make these claims if they so desired. I provided them with a copy of U.S. Federal Code 1001 and 1002 concerning false statements and false documents. They were also provided with a copy of Sec. 3007 of the Resource Conservation and Recovery Act, as amended, that defines the authority to conduct this type of inspection. Ms. Larsen, Messers, Cramer, Dailey, and Raines read these and returned them to me.

During the inspection, discussions consisted of facility operations, wastes generated, and waste management practices. During my review of the on-site records, I reviewed several Uniform Hazardous Waste Manifests from 2003 to the present that listed several characteristic wastes. I took selected copies of manifests to aid me during my visual inspection, ***see Attachment 7***. After a description of the activities conducted on-site by Mr. Cramer, I conducted a visual inspection of the facility. Mr. Cramer accompanied me during the entire visual inspection. I was provided with a copy of the site map to aid me during the inspection, ***see Attachment 6 for plant layout***. At the conclusion of the inspection on September 28, 2006, my findings and recommendations were summarized with Ms. Smalley, Salley Boulinger, Acting General Manager, Messers. Cramer, Raines, Steve Kosman, Director of Engineering, and Dan Langerot, Director of Production Warehousing. I provided Mr. Kosman with a Confidentiality Notice, a Document of Receipt, and a Notice of Violation (NOV). Mr. Kosman did not make a confidentiality claim on behalf of KSAAP at that time. The Document of Receipt, Confidentiality Notice, and NOV were signed and dated by Mr. Kosman as acknowledgment of receipt, ***see Attachments 3-5***.

FINDINGS AND OBSERVATIONS

1. Facility Description

KSAAP is a treatment, storage, and disposal facility (TSDF) that produces 60mm mortars, M795 projectile, and other classified weapons. The plant also conducts miscellaneous research and development for possible business. The plant was built in 1941 as the Kansas Ordinance Plant. In 1970, the name of the plant became KSAAP. The plant occupies 13,727 acres and 108 acres in easements. The plant houses 12 hazardous waste storage areas, an open burn area, an open detonation area, and an explosive waste incinerator (EWI), that is no longer in operation. The plant employs 250 employees and operates from 6:30AM to 5:00PM, Monday through Thursday. The guards operate 24 hours per day, seven (7) days per week.

2. RCRA Status

During the opening conference, I provided Mr. Cramer with a copy of the Handler Information Report to review, ***see Attachment 2***. He verified that the information was accurate. He stated that the hazardous wastes generated on-site are related to the production of explosive munitions. He stated that KSAAP generates over 2,200 pounds K044, K045, K047, D001/F003, and D006 hazardous waste per month. I asked Mr. Cramer how hazardous waste determinations are made at KSAAP. He stated that when possible, user knowledge is method for waste determinations. Otherwise, the plant uses a waste analysis plan. The waste sampling data is logged in a book, separated by year. The samples are identified by a sample number, name, date, sample site, type, color, layers, amount, collector, type of analysis, receiving laboratory, the date the sample is sent, the results, purchase order, and comments. This is followed with a waste log that tracks what is in storage and its disposal status.

3. Facility Processes and Waste Streams

The waste generated, stored, and treated by KSAAP are associated with explosive waste. While all hazardous and non-hazardous waste streams were investigated, I focused this inspection on permitted storage and treatment areas.

3.1 Pink Water and Waste Water Treatment System (K044, K045, K047)

As stated above, the focus of the inspection was on storage, open burn, and open detonation areas. During the visual inspection, I observed a waste water treatment system. The waste water treatment system is used while processing explosives. Mr. Cramer stated that the explosives are melted and fed to an injector. The explosives are then injected into casings. Throughout this process, the explosives are cooled with water. The water becomes pink from the contact with the explosives and is identified as "pink water." After melting and injection, any residue is washed out into a sump with the pink water.

While the pink water cools the explosives, solids are picked up from the explosive. To remove the solids, the pink water is filtered in carbon columns. The spent carbon in the filters is shipped to Clean Harbors as K045 hazardous waste. Approximately 5,000 pounds of spent carbon are generated per month. The spent carbon is picked up by Clean Harbors for incineration.

As stated above, solids are picked up from the explosive by the pink water. Any overflow of pink water goes to a sump. Once the sump is full, the pink water is pumped to a waste water treatment system. The resulting sludge from the waste water treatment system is K044 hazardous waste. The sludge is placed in a 55-gallon drum and shipped off-site as hazardous waste to Clean Harbors for incineration. The cleaned water is recirculated into the pink water. The solids are referred to as wet sumpage and dry sumpage, depending on the amount of liquid is collected with the solid. The sumpage, wet and dry, are stored in storage area 1813. The wet sumpage is burned on-site in the permitted open burn area. The dry sumpage is detonated on-site in the permitted open detonation area.

In the event of a spill, the pink water is shoveled up and stored in a permitted storage area on-site as K047 hazardous waste pink water residue. Mr. Cramer stated that the pink water residue is primarily soil. He also stated that the soil is sampled and a TCLP test is done. He added that the pink water residue is usually non-hazardous, but has been found to be K047 hazardous waste.

3.2 Aerosol Cans D001

Mr. Cramer stated that KSAAP generates aerosol cans from various products ranging from paint, to bug spray, to WD40 from all areas of the plant. He stated that all aerosol cans are treated as hazardous waste, regardless of how much product they contain. The aerosol cans are placed in a 55-gallon drum, closed, and labeled as D001 hazardous waste. Mr. Cramer stated that approximately 800 pounds of aerosol cans are generated per year. The aerosol cans are stored on-site in a permitted storage area.

3.3 Hazardous Waste Storage Areas

During the visual inspection, Mr. Cramer escorted me to the 12 active storage areas maintained by KSAAP.

The first storage area I inspected was 1813. I observed 66, 55-gallon drums of hazardous waste in storage. The hazardous wastes in storage were aerosol cans, pink water residue, fuse assemblies, and spent carbon. I inspected all drums for hazardous waste labels, dates, the condition of the drum, and aisle space. I observed eight (8), 55-gallon drums with no accumulation date. I asked Mr. Cramer if he knew how long the drums were placed in storage. He stated that the operation plan at KSAAP would allow him to track when the drums were filled and placed in the storage area. I witnessed Mr. Cramer identify the date the drums were placed in storage as August 22, 2006. He added the accumulation start date on each of the drums. I informed him that the permit requires the

drums to be dated. I did not cite this as a violation because I was satisfied with the effectiveness of the operating plan. The remaining storage areas had no concerns. Several storage areas were empty or were being used to store useable materials.

Mr. Cramer stated that some of the storage areas were in "idling status." I asked him to explain "idling status." He stated that KSAAP was granted permission by the Kansas Department of Health and Environment (KDHE) to exclude these igloos from the requirements of the permit. The conditions for these exclusions are to have a standard operation procedure for idling the igloos, verifying the igloos contain no hazardous waste, and have no visible signs of contamination. These conditions are to be met prior to sealing the igloos. There is no requirement for permit modification to place storage areas in idling status with KDHE's approval of the idling plan. While in idling status, KSAAP will not need to conduct weekly inspections. All other permit requirements will still apply, ***see Attachment 8, page 1 for idling requirements***. I asked Mr. Cramer if he had documentation of KDHE's approval of the idling plan. He said "yes," but he could not locate it at the time of the inspection. He did provide me with correspondence between KSAAP and KDHE that indicates that KDHE accepted the plan, ***see Attachment 8 for igloo idling correspondence.*** I requested that Mr. Cramer fax a copy of KDHE's approval of the idling plan to me once it is located. At the time this report was written, Mr. Cramer had not attained a copy of the approval letter. There are currently seven (7) igloos in idling status. They are 1705, 1709, 1711, 1712, 1717, 1721, and A019. The igloo identified as 2709 was in idling status and became active again in April, 2006, ***see Attachment 8 page, 2 for igloos in idling status.***

Mr. Cramer stated that inspections are only done on active storage areas. The inactive storage areas are sealed and are inspected every six (6) months, per the agreement with the state. The active storage areas are inspected weekly. I asked Mr. Cramer if he maintained a log of the inspections of the hazardous waste storage areas and he said "yes." I reviewed logs of inspections from 2003 to the present. I observed that during the week of September 6, 2006 there was only an inspection log for one (1) storage area (2709). I asked Mr. Cramer if he had the logs for storage areas 1813, 1914, 1915, 1916, 1917, 1958, 1961, 1974, 1978, 2707, and 2708 and he said "no." He stated that the crews responsible for those storage areas failed to schedule someone to conduct an inspection during the Labor Day holiday.

> **NOV #1 – Failure to conduct inspections of storage areas 1813, 1914, 1915, 1916, 1917, 1958, 1961, 1974, 1978, 2707, and 2708 is in violation of the Permit Section I.J.3 → 40 CFR 264.15(d).**

3.4 Explosive Waste Incinerator (EWI)

During the opening conference, I asked Mr. Cramer if KSAAP was currently operating its EWI and he said "no." He stated that the EWI is in idling status. The conditions for idling the EWI are that KSAAP is to provide a plan to KDHE that includes procedures for shut-down and start-up, a maintenance plan during idling period, record keeping, personnel responsibilities, and closure of the unit, ***see Attachment 9, page 3 for EWI***

idling plan compliance. Mr. Cramer provided me with a copy of the plans for idling the EWI, ***see Attachment 9, pages 21-38 for idling plan.*** Upon visual inspection of the EWI, I observed that the incinerator was not in operation and had no power.

3.5 Open Burn and Open Detonation Areas

During the visual inspection of the Open Burn Area, I observed eight (8) burn sites, each with two (2) burn pans. Mr. Cramer stated that wet sumpage TNT is burned in the pans. The burn pans can handle no more than 150 pounds at a time. Ash and burn residue is placed in a 55-gallon drum, closed, and labeled as D008 hazardous waste. The ash and residue is sampled to verify if hazardous for labeling, shipping, and costs. Mr. Cramer stated that most often, the ash and residue contain cadmium from metal parts of fuses.

During the visual inspection of the Open Detonation Area, I observed 20 detonation sites. Mr. Cramer stated that explosives are placed in a hole, fixed with a charge, and detonated from a remote location. Each hole is limited to 50 pounds of explosives to reduce noise and blast shock. Mr. Cramer stated that no residue exists after detonation.

3.6 Maintenance Area

During the inspection of the Maintenance Area, I observed a locomotive shop, forklift shop, and an automotive area. Mr. Cramer stated that the Maintenance Area handles receiving materials and contains a salvage yard and gas station. I observed a 55-gallon satellite accumulation drum 1/4th filled with waste paint. The drum was closed and labeled as D001 hazardous waste. While inspecting the forklift shop, I asked Mr. Cramer if KSAAP services the forklifts on-site and he said "yes." I asked him what is done with the used oil. He stated that the used oil is placed in a 55-gallon drum. The filled drums are stored in building 1508 and picked up by Thermo Fluids, Inc. for recycling, ***see Attachment 10 for service quote and agreement.*** I also observed that the used oil filters are punctured and hot-drained, after which the filter are disposed of in the general trash.

3.7 Universal Wastes

During the inspection of the Maintenance Area, I observed several spent fluorescent bulbs packaged in their original boxes. I asked the Mr. Cramer what is done with the spent bulbs. He stated that the bulbs are returned to the vendor for recycling. I asked him what is done with the spent batteries from the forklifts. He stated that the forklift batteries are picked up for recycling by Trotnic Recycling along with KSAAP's scrap metal. I asked Mr. Cramer how many fluorescent bulbs are generated per month. He stated that approximately 30 bulbs are generated per month.

4. Records Review

During the records review, I reviewed the contingency plan, training plan, and manifests from 2003 to the present. I took copies of the emergency coordinator list, training program outline, and manifests, ***see Attachments 11, 12, and 7.*** No concerns were noted.

5. Other Observations

During the opening conference, Mr. Cramer stated that there is an area that produces classified weapons. I asked him if any hazardous wastes are generated there and he said "no." I did not inspect the classified area based on that information to avoid issues with clearance. I completed the Region 7 Multi-Media Screening Checklist, ***see Attachment 1***. The checklist is to be forwarded to the Emergency Planning and Community Right to Know Act, Underground Injection Control, Public Water Systems, and Underground Storage Tank Branches. I reviewed all other applicable permit requirements and no additional concerns were noted. The KSAAP permit was used as a checklist and is included as attachment 13.

CONCLUSION

The RCRA Compliance Evaluation Inspection for KSAAP concluded on September 28, 2006. Mr. Steve Kosman, Director of Engineering, was provided with information concerning; Compliance Assistance, Small Business Resources, Aerosol Cans, Solvent Rags, Closed Containers, and various Security Awareness publications. I also provided him with a copy of the Confidentiality Notice, a Document of Receipt, and NOV. Mr. Kosman did not make any confidentiality claims on behalf of KSAAP at that time. The Document of Receipt and NOV was signed and dated by Mr. Kosman as acknowledgement of receipt, ***see Attachments 3-5***.

Jamal Lewis
Environmental Protection Specialist
Date: October 18, 2006

Attachments:

1. Multi-Media Inspection Checklist (2 pages)
2. Handler Information Report (1 page)
3. Confidentiality Notice (1 page)
4. Document of Receipt (1 page)
5. Notice of Violation (1 page)
6. Plant Layout (1 page)
7. Manifests (3 pages)
8. Igloo Idling Status Correspondence (31pages)
9. EWI Idling Status Correspondence (38 pages)
10. Service Quote and Agreement (1 page)
11. Emergency Coordinator List (2 pages)
12. Training Program Outline (9 pages)
13. KSAAP Permit (63 pages)

Day & Zimmermann
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FEB 16 2006

BUREAU OF WASTE MANAGEMENT

February 13, 2006
EE.SS060027.Request for Temporary Authorization.doc

Kansas Department of Health and Environment
Bureau of Waste Management
Hazardous Waste Section
1000 SW Jackson, Suite 320
Topeka, Kansas 66612-1366

Attention: Mr. Mostafa Kamal, Section Chief

Dear Mr. Kamal:

Subject: Request for Temporary Authorization (TA) KSAAP 06-02
To allow for Open Detonation of Reactive Hazardous Waste in quantities greater than permit limits (KS0213820467)

Day & Zimmermann, Inc. (DZI), contractor-operator of the Kansas Army Ammunition Plant (KSAAP), hereby requests a Temporary Authorization (TA) No. KSAAP 06-02, to allow for open detonation of some reactive hazardous waste in quantities greater than the limits established in KSAAP permit KS0213820467. The permit allows for open detonation of reactive hazardous waste with a limit of 50 pounds per shot. Normally the 50 pound limit is not a problem. However, a determination has recently been made that a quantity of the Tetryl explosive currently stored on-plant, is no longer useable, dangerous to handle and must be treated to eliminate the hazard.

A total of 952 pounds of Tetryl requires open detonation treatment. Routine permitted procedures allow for a quantity of 45 pounds of reactive hazardous waste with a 5-pound initiating charge, for a maximum total of 50 pounds to be open detonated per shot. However, the old Tetryl to be open detonated is packaged in 20 boxes, most of which have 50 pounds of Tetryl per box. The Tetryl has been determined to be too hazardous to handle for re-packaging, but placing the 50 pound boxes of the waste in the open detonation holes with a 5-pound initiating charge, would make the total explosive quantity 55 pounds per shot.

Therefore, DZI requests this TA to perform the detonation of the Tetryl in quantities of 55 pounds per shot, rather than the permit limit of 50 pounds per shot, to eliminate the need to repackage the hazardous waste. This deviation of the permit limits would provide for the safety of the personnel responsible for the open detonation activities, and should not affect any other operations in-plant or surrounding the facility.

23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

Kansas Division

Phone: 620-421-7400
Fax: 620-421-7477

Subject: Request for Temporary Authorization

Your prompt response to this request will be appreciated. If you have any questions concerning this subject, our point of contact is Dean Cramer, telephone 620-421-7532.

Respectfully,

JIM MAHER
Director of Human Resources, Safety,
Plant Protection & Environment

JRM/CJS/dmh

cf: Bret Raines (ACO)
Dean Cramer
Environmental File
Reading File

US Army Ammunition plant - Parsons Blue File.

KANSAS

RODERICK L. BREMBY, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

DEPARTMENT OF HEALTH AND ENVIRONMENT

December 5, 2005

Ronny Galloway
Day & Zimmerman, Inc.
Kansas Division
23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

Source ID #0990010

Dear Mr. Galloway:

The Kansas Department of Health and Environment (KDHE) has reviewed your request for an exemption from K.A.R. 28-19-645, **Open Burning Prohibited** received on December 2, 2004. The request listed three specific open burning activities that will be conducted through December 31, 2006. These burning activities are as follows: comp A-5 and A-3 wet sump age and sump sludge, cyclotol, octol, comp B, and TNT wet sumpage and sump sludge, comp A-5, comp A-3, comp B, comp CH-6, PBX, cyclotol, octol, RDX, and PAX scrap, absorbent materials from cleanup of comp A-5, comp A-3, comp B, cyclotol, octol, RDX, and TNT wastewater spills, propellants and propellant charges, support collars, and various fuzes.

DIVISION OF ENVIRONMENT
BUREAU OF AIR AND RADIATION
ADMINISTRATION UNIT
CURTIS STATE OFFICE BUILDING, 1000 SW JACKSON ST., STE. 310, TOPEKA, KS 66612-1366
Voice 785-296-6024 Fax 785-296-7455 http://www.kdhe.state.ks.us/

Based on the information submitted on the behalf of Kansas Army Ammunition Plant (KSAAP), KDHE considers the requested burning activities are in the public interest. KDHE is granting conditional approval for Exemptions for Open Burning in accordance with K.A.R. 28-19-647(b) and K.A.R. 28-19-647(d) for the following activities:

1. Comp A-5 and A-3 Wet Sumpage and Sump Sludge
2. Cyclotol, Octol, Comp B, and TNT Wet Sumpage and Sump Sludge
3. Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, and PAX scrap
4. Absorbent Materials from Cleanup of Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX, and TNT Wastewater Spills
5. Propellants and Propellant Charges
6. Support Collars
7. Various Fuzes

All burning to be conducted in accordance with the guidelines at forth in K.A.R. 28-19-647(e) and is only applicable for materials generated on-site. Should this facility be considered to be used as a disposal site for material from other locations, a separate open burning request will need to be submitted and an approval granted for each material prior to conducting this activity. This exemption expires December 31, 2006 and supersedes any current exemptions. This exemption shall be revocable upon thirty days notice at KDHE's discretion. A monthly report will need to be submitted to KDHE indicating the dates and types of open burning activities that have been conducted at KSAAP.

If you have any questions about this exemption, please contact me at (785) 296-1574.

Sincerely,

Cheryl Evans

Cheryl Evans
Environmental Scientist
Compliance and Enforcement Section
Bureau of Air and Radiation

CEE: kw
C: SEDO
Bureau of Waste Management

KANSAS ARMY AMMUNITION PLANT
PARSONS, KANSAS
MAY 18 AND 19, 2005 RCRA COMPLIANCE INSPECTION REPORT
EPA I.D. KS0213820467

May 18 and 19, 2005 a routine hazardous waste compliance inspection was conducted at the Kansas Army Ammunition Plant (KAAP), EPA Identification Number KS0213820467, by Kansas Department of Health and Environment (KDHE) Bureau of Waste Management Engineer Charles Bowers. Mr. Dean Cramer, Senior Environmental Specialist, was the KAAP representative throughout the inspection. Messrs. Glen Parish, Jerry Winker, Dean Cramer, and Ms. Caroline Smalley, all of Day and Zimmerman, Inc. (DZI), plus Mr. Don Dailey of the U.S. Army represented KAAP at the inspection closeout.

SITE BACKGROUND INFORMATION

KAAP, located at 23018 Rooks Road occupies approximately 13,700 acres immediately south of Highway 400 and approximately one mile east of the Parsons, Kansas city limits. DZI is the site's contract operator, and all facility personnel mentioned in this report with the exception of Don Daily (U.S. Army) are DZI employees. KAAP assembles munitions (typically 60 and 81- millimeter mortar rounds, artillery rounds, and sensor-fused weapons; a cluster-type smart bomb) for the United States military. The facility holds a KDHE-issued permit to store hazardous wastes related to munitions manufacturing and to treat off-specification, outdated, or surplus munitions in a explosive waste incinerator (EWI). EWI treatment occurred from 1997 though December 1999. Subsequently, the EWI has been idle. To restart the EWI would require bringing the EWI into conformance with the national emission standards for hazardous air pollutants (NESHAP) standards for hazardous waste combustors presented in 60 CFR Part 63 Subpart EEE which became effective during its idle period..

KAAP's permit to treat and store hazardous wastes was originally issued November 7, 1989 and expired December 7, 1994. Permit Condition I.E.3 allows KAAP to continue TSD operations while the Permit is being renewed.

KAAP also open burns and open detonates explosive wastes at open burn and open detonation sites, and combusts non-hazardous explosive-contaminated wastes at a contaminated waste incinerator (CWI). These burning activites are regulated by KDHE's Bureau of Air and Radiation.

The week prior to the inspection the Base Realignment and Closing Commission (BRCC) announced that KAAP was included on the current list of military bases scheduled for closure. Per Mr. Cramer, if KAAP is closed, the closing process will take at least two years.

INSPECTION SCOPE

Because the EWI has not operated since 1999, this inspection's scope was limited to hazardous waste generation and TSD-permitted storage at KAAP. Except for a visual inspection to confirm that the EWI was still idle and no wastes were present, EWI activities were not reviewed. Inspection day the EWI was partially disassembled, with ducts removed and blind flanges installed over duct openings.

At the CWI two drums marked "hazardous waste" are attached to the CWI's air pollution control (APC) equipment. These drums are part of the APC train not subject to RCRA regulation until the are detached from the APC equipment. The CWI waste drums are immediately transferred to permitted storage when full, sampled to determine if they are hazardous and typically shipped off site as non-hazardous waste. Please note that the wastes disposed in the CWI are not hazardous wastes.

Hazardous waste generation areas inspected were: the maintenance (200) area, the site's water treatment plants where drums of diatomaceous earth and spent carbon were present, the explosives laboratory, and production buildings and satellite accumulation container sheds in Areas 300, 700, 1000 and 1100, with the exception of Building 1139. I could not access Building 1139 where sensor-fused weapon assembly was taking place because I lacked proper security clearance.

Active permitted hazardous waste storage areas were inspected and the seals on the inactive hazardous waste storage igloos were checked.

Because KAAP's industrial waste landfill, KDHE Permit 401, is inspected by Bureau of Environmental Field Services personnel, it was not included in this inspection.

WASTE GENERATION AND STORAGE

Waste Generation

Wastes Typically Generated at KAAP

KAAP generates wastes related to munitions manufacturing and plant maintenance. These wastes include nonhazardous purge water from monitoring wells and wastes generated by remediation of areas impacted by munitions manufacturing. Explosive hazardous wastes (including dry and wet sump bottoms from explosives pouring areas) are open burned or open detonated on-site at KDHE Bureau of Air and Radiation permitted open burn and open detonation sites. With the exception of office trash and nonhazardous impacted soils from drilling and remedial activities which go to local subtitle D landfills, and silver cartridges which are recycled, both hazardous and nonhazardous

wastes are typically shipped off site through the Defense Reutilization and Marketing Office (DRMO).

Hazardous wastes generated and shipped or treated (at the open burn or open detonation sites) since the January 2004 are presented on Appendix I, HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 1. Wastes on site May September 7, 2003 are presented on Appendix I, HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 2.

Silver Recycling

KAAP recycles silver. Silver is recovered from cartridges where it is collected when x-ray film is developed. Silver to be recycled is stored in Building 1415 prior to shipping to Oklahoma Industrial Silver, Inc. in Edmond Oklahoma. Adequate records to meet 40 CFR 266.70(c)'s record keeping requirement are kept. KAAP is contractually required to keep the exposed x-rays for 30 years, so although a considerable amount of film is in storage, it is not a waste.

Universal Wastes

KAAP is a small quantity generator of universal waste flourescent lamps which are stored in the northwest corner room in Building 203. In the past KAAP has shipped these off for recycling. However, because this cost more than disposal through the DRMO, KAAP will dispose them through the DRMO in the future.

KAAP also collects batteries, but handles them as a hazardous waste and disposes them through the DRMO, which recycles them as appropriate. Mr. Cramer recently discovered that the batteries need sorted by type and size if they are to be recycled, so inspection day several containers of various types of batteries were present in Building 1813.

<u>Hazardous Waste Storage</u>

Satellite Containers

Satellite containers were checked in the maintenance (200) area, at the water treatment plants where drums of diatomaceous earth and activated carbon could be present, at the laboratory building, the administrative (101) building where battery and aerosol can satellite accumulation drums are present, and at production facilities. Production facility hazardous waste satellite containers are generally located in a locked shelter outside the building where the waste is generated, however, satellite drums may be present in the buildings. This inspection production area satellite container shelters were checked at the 200 Area, 300 Area, 1000 Area, and the 1100 Area. Satellite containers were also checked at the areas' water treatment plants and in production buildings. Satellite container

sheds associated with inactive production buildings were empty. As stated previously, I could not check waste generation or satellite containers inside building 1139 because I do not have a security clearance.

In Building 202 the partially full satellite drum containing paint chips generated in the 1000 area that was present during the last (September 2004) inspection was still present. Pursuant to the 2004 inspection it was decided that at the TSD the drum did not have to be in the area where the waste was generated. Also, two satellite accumulation containers (P2 degreaser in water and "Explosive PAX 21 w/water" - water impacted by explosives) were located in Building 1006. These drums will be sampled to determine if their contents are nonhazardous. Please note that during the 2002 and 2004 inspection two drums with the same markings/wastes were in the same area.

At the CWI two drums marked "hazardous waste" are attached to the CWI's air pollution control (APC) equipment. The CWI waste drums are immediately transferred to permitted storage when full, sampled to determine if they are hazardous and typically shipped off site as non-hazardous waste. Please note that the wastes disposed in the CWI are not hazardous wastes.

Laboratory Building 58 houses two separate laboratories, a general laboratory and an explosive laboratory. The general laboratory wastes are divided into four waste stream depending on comparability; Groups 1,2, and 3 plus "COD, D002, D007, D009, D011, AA." Groups 1, 2, and COD, etc. are collected in 55-gallon drums. Group 3 is collected in a small, approximately 5-gallon metal carboy. The satellite containers are located in a storeroom accessible only through the laboratory. The transfer containers used to collect the laboratory wastes and are marked "hazardous waste" and "empty daily."

Three satellite containers were present in the explosives laboratory, mixed liquid wastes, mixed dry wastes, and RDX wet wastes. The mixed liquid wastes goes to permitted storage, the other wastes are treated (open burned or detonated).

At KAAP satellite containers are moved to permitted storage when full. KAAP has no 90-day storage areas.

Permitted Storage

Appendix A's HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 2, HAZARDOUS WASTE LOG - 2003 presents wastes in permitted storage on September 9, 2003. KAAP has permitted storage in 18 "igloo" structures in the 1700 Area, 1900 Area, and 2700 Area, and one magazine building in the 1800 Area. Inspection day all 1700 Area waste storage igloos (Igloos 1705, 1709, 1711, 1712, 1717, and 1721) were empty and idle with seals on their locks. Per Mr. Cramer, he cannot remember these igloos being used for hazardous waste while he has worked at KAAP, approximately 30 years. In the 2700 (open detonation) Area, Igloo

2707 was being used for hazardous waste storage, Igloo 2708 was being used for non-waste explosive storage, and Igloo 2709 was idled and sealed. Igloo A019 in the open burn area was empty and sealed. In the 1900 Area permitted Igloos 1915, 1916, and 1976 were being used for hazardous waste storage, Igloos 1914, 1917, 1958, 1961, and 1974 were either empty or held non-waste explosives. Drums were placed on secondary containment pads. Note that per the HAZARDOUS WASTE LOG, no igloos contained large waste quantities. Inspection day Magazine 1813 primarily held drums containing pinkwater spill residues, CWI APC train residues, waste batteries, and 1000 Area paint chips.

PREVIOUS KAAP INSPECTIONS:

JUNE 16, 17, AND 18, 2000 INSPECTION

KAAP was inspected June 16, 17, and 18, 2000 by KDHE inspectors Douglas Cole and myself. Mr. Cole was the lead on the hazardous waste generation and TSD portion of the inspection and I performed the EWI inspection. Seven violations related to waste generation and TSD storage were cited at the inspection closeout. The violations were corrected by August 10, 2000.

The June 2000 EWI inspection's objective was to determine if the EWI was operated per permit requirements since a 1998 inspection. The EWI was physically checked while on site, but as the EWI was not operating, the inspection was primarily a data review. After data review (which included August 22 and 23, 2000 follow-up visits to the site), I notified KAAP of the following four additional violations in October 23, 2000, January 25, 2001, and March 20, 2001 follow-up letters

1. K.S.A. 65-3441(a)(3), kiln shroud vacuum less than 0.10 inches of water column without automatic waste feed cutoffs;
2. K.S.A. 65-3441(a)(3), operating with the rotary kiln internal pressure outside permitted limits;
3. K.S.A. 65-3441(a)(3), operating the cyclone, high temperature gas cooler, and low temperature gas cooler with differential pressures outside the permit limits; and
4. K.S.A. 65-3441(a)(3), instrument required by permit condition III.E.1 not installed.

These violations require equipment modification and must be corrected prior to reinitiating EWI operations, i.e., they were still outstanding as of May 19, 2005.

SEPTEMBER 23 AND 24, 2003 AND SEPTEMBER 7 AND 8, 2004 INSPECTION RESULTS

No permit, regulatory, or statutory violations were discovered pursuant to these two inspections.

MAY 18 AND 19, 2005 INSPECTION RESULTS

Two violations were cited pursuant to the inspection. They are presented below.

1. K.A.R. 28-31-4(j)(1)(B), Hazardous Waste Satellite Accumulation drum not marked "Hazardous Waste" - spray paint can satellite container in satellite container building by Building 1139.

Inspection day an active satellite container for aerosol paint cans in Building 1139's satellite container shed was not marked "hazardous waste" as required by the cited regulation. Mr. Cramer immediately corrected the violation. Images 1 and 2 present the drum before and after Mr. Cramer applied a hazardous waste label on the drum.

2. K.A.R. 28-31-4(j)(2), Accumulation Start Date not placed on satellite accumulation containers when they became full (3 cosmoline and water drums in Building 1005).

In Building 1005 steam is used to remove cosmoline (a shipping grease) from parts. Three full drums and one partially full drum marked "hazardous waste" and "cosmoline and water" were at the cleaning station. The cleaning station was not active during the inspection, but per Mr. Cramer the drums had been generated the previous day. The three full drums did not have an accumulation start date. The cited regulation requires that drums be marked with an accumulation start when they are full and moved to storage within three days. This violation was also corrected during the inspection and the drums moved to permitted storage on inspection day. Images 3, and 4 present the drums without the accumulation start dates. Attachment 2 presents the paperwork that was completed to move the drums to storage.

FILE: \KAAP\KAAP2005\KAAP05-rprt.cmb.WPD

Charley Bowers 06/22/2005

KANSAS ARMY AMMUNITION PLANT
PARSONS, KANSAS
SEPTEMBER 7 AND 8, 2004 RCRA COMPLIANCE INSPECTION REPORT
EPA I.D. KS0213820467

September 7 and 8, 2004 a routine hazardous waste compliance inspection was conducted at the Kansas Army Ammunition Plant (KAAP), EPA Identification Number KS0213820467, by Kansas Department of Health and Environment (KDHE) Bureau of Waste Management Engineer Charles Bowers. Mr. Dean Cramer, Senior Environmental Specialist, was the KAAP representative throughout the inspection. Messrs. Glen Parish, Steve Kosman, Jerry Winker, William Shin, Dean Cramer and Ms. Caroline Smalley, all of Day and Zimmerman, Inc. (DZI), plus Mr. Don Dailey of the U.S. Army represented KAAP at the inspection closeout.

SITE BACKGROUND INFORMATION

KAAP, located at 23018 Rooks Road occupies approximately 13,700 acres immediately south of Highway 400 and approximately one mile east of the Parsons, Kansas city limits. Day & Zimmerman, Inc. (DZI) is the site's contract operator, and all facility personnel mentioned in this report with the exception of Don Daily (U.S. Army) are DZI employees. KAAP manufactures munitions (typically 60 and 81- millimeter mortar rounds and sensor fused weapons - a cluster-type smart bomb) for the United States military. The facility holds a KDHE-issued permit to store hazardous wastes related to munitions manufacturing and to treat off-specification, outdated or surplus munitions in a explosive waste incinerator(EWI). EWI treatment occurred from 1997 though December 1999. Subsequently, due to a lack of contracts to treat munitions the EWI has been idle. Prior to restarting the EWI, KAAP would have to bring the EWI into conformance with the national emission standards for hazardous air pollutants standards for hazardous waste combustors presented in 60 CFR Part 63 Subpart EEE.

KAAP's permit to treat and store hazardous wastes was originally issued November 7, 1989 and expired December 7, 1994. Permit Condition I.E.3 allows KAAP to continue TSD operations while the Permit is being renewed.

KAAP also open burns and open detonates explosive wastes at open burn and open detonation sites, and combusts non-hazardous explosive-contaminated wastes at a contaminated waste incinerator (CWI) regulated by KDHE's Bureau of Air and Radiation.

INSPECTION SCOPE AND SITE STATUS

Because the EWI has not operated since 1999, this inspection's scope was limited to hazardous waste generation and TSD-permitted storage at KAAP. Except for a visual inspection to confirm that the EWI was still idle and no wastes were present, the EWI activities were not reviewed. Inspection day the EWI was partially disassembled, with ducts removed and blind flanges installed over duct openings.

At the CWI waste hazardous waste accumulation drums were attached to the CWI's air pollution control equipment and part of the combustion process. The CWI ash is sampled to determine that it is nonhazardous and disposed through the Defense Reutilization and Marketing Office (DRMO). At the CWI, approximately a one year supply of contaminated waste (the burner room floor area stacked with trash bags and contaminated debris to about a 4-ft to 5-ft depth) had been stockpiled for a trial burn. Please note that the wastes disposed in the CWI are not hazardous wastes.

Production area hazardous waste generation was only inspected at areas that have been active since the last inspection. Checked were the maintenance (200) area, the site's water treatment plants where drums of diatomaceous earth and spent carbon were present, the laboratory, and active and to-be-active production facilities.

Inspection day limited production (bomb assembly) activity was taking place in two 1100 area buildings. While I was the 1100 Area these buildings' access gates were shut and the area's red lights that indicate production were flashing. I could not check these buildings because I lacked a security clearance. I also could not check the buildings' outside satellite container shelter because access to the buildings' area is generally restricted during production for safety and security reasons.

Since the last inspection the practice of sealing permitted hazardous waste storage areas (igloos) that are not in use was initiated. The seals on the unused igloos were checked pursuant to this inspection.

Because KAAP's industrial waste landfill, KDHE Permit 401, is inspected by Bureau of Environmental Field Services personnel, it was not included in this inspection.

WASTE GENERATION AND STORAGE

Waste Generation

Wastes Typically Generated at KAAP

KAAP generates wastes related to munitions manufacturing and plant maintenance. These wastes include nonhazardous purge water from monitoring wells and wastes generated by remediation of areas impacted by munitions manufacturing. Explosive hazardous wastes are open burned or open detonated on-site at KDHE Bureau of Air and Radiation permitted open burn and open detonation sites. Other hazardous wastes are shipped to the DRMO contractor.

Wastes generated and shipped or treated since the August 2003 are presented on Appendix I, HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 1. Wastes on site September 7, 2003 are presented on Appendix I, HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 2.

Silver Recycling

KAAP recycles silver. Silver is recovered from cartridges where it is collected when the film is developed, and from the film itself, when the film's contractual retention time is completed. No cartridges were generated since the last inspection, and although film was generated, none was shipped off site for recycling. Records presenting film generation and storage are presented on Appendix I, HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 3. These records which present the dates the film enters storage and the date the film leaves storage are adequate to meet 40 CFR 266.70(c)'s record keeping requirement. Silver to be recycled is stored in Building 1415 prior to shipping to Oklahoma Industrial Silver, Inc. in Edmond Oklahoma.

Universal Wastes

KAAP is a small quantity generator of universal waste flourescent lamps which are stored in the northwest corner room in Building 2003. In the past KAAP has shipped these off for recycling. However, because this cost more than disposal through the DRMO, KAAP will dispose them through the DRMO in the future.

KAAP also collects batteries, but handles them as a hazardous waste. They are shipped through the DRMO

Waste Storage

Satellite Containers

Satellite containers were checked in the maintenance (200) area, at the water treatment plants where drums of diatomaceous earth and activated carbon are present, at the laboratory, the administrative (101) building where a battery drum and an aerosol can drum are present, and at active and to-be-active production facilities. Production facility hazardous waste satellite containers are generally located in locked shelter outside the building where the waste is generated. My 2003 inspection had confirmed that satellite container shelters in areas where production was not occurring were empty. This inspection satellite container shelters were checked at Buildings 203, 1109, 1113, 1136, 1139, 1144 and several unrecorded locations. All shelters except the shelter at shop Building 203 and Building 1139 were empty were associated with building where no current activity was taking place and were empty.

Two temporary satellite accumulation containers (P2 degreaser in water and waste, and "Explosive PAX 21 w/water" - water impacted by explosives) were located in Building 1006 which was being refurbished for possible 60-millimeter mortar shell production. These drums will be sampled to

determine if their contents are nonhazardous. Please note that during the 2002 inspection two drums with approximately the same wastes were in the same building.

Building 58 has two laboratories, a general laboratory and an explosive laboratory. The general laboratory wastes are divided into four waste stream depending on comparability; Groups 1,2, and 3 plus "COD, D002, D007, D009, D011, AA." Groups 1, 2, and COD, etc. are collected in 55-gallon drums. Group 3 is collected in a small, approximately 5-gallon metal carboy. The satellite containers are located in a storeroom accessible only through the laboratory. The transfer containers used to collect the laboratory wastes and are marked "hazardous waste" and "empty daily."

Three satellite containers were present in the explosives laboratory, mixed liquid wastes, mixed dry wastes, and RDX wet wastes. The mixed liquid wastes goes to permitted storage, the other wastes are treated (open burned or detonated).

In administration Building 101 two satellite drums were present, one for aerosol cans and one for batteries.

At KAAP satellite containers are moved to permitted storage when full.

Satellite Containers in Building 202

Two satellite containers were present in Building 202's locomotive ship. One drum contained locomotive shop wastes and the other was about half full of paint chips from the 1100 area. This presented an apparent repeat of a violation cited during the site's 2000 inspection when KDHE inspector Douglas Cole cited a K.A.R. 28-31-4(j)(1) violation (satellite container not at or near point of generation). The violation involved a drum of paint chips generated in a production area that was being stored in the 200 Area.

Permitted Storage

Appendix A's HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 2, HAZARDOUS WASTE LOG - 2003 presents wastes in permitted storage on September 9, 2003. KAAP has permitted storage in 18 "igloo" structures in the 1700 Area, 1900 Area, and 2700 Area, and one magazine building in the 1800 Area. Inspection day all 1700 Area igloos (1705, 1709, 1711, 1712, 1717, and 1721) were empty and idle with seals on their locks. Per Mr. Cramer, he cannot remember these igloos being used for hazardous waste while he has worked at KAAP, approximately 30 years. In the 2700 (open detonation) Area, Igloo 2707 and 2708 were being used for non-waste explosive storage, and Igloo 2709 was idled and sealed. Igloo A019 in the open burn area was empty and sealed. In the 1900 Area permitted Igloo 1917 was storing classified materials from the 1100 Area operations and not inspected. Igloo 1974 was being used to store non-waste TNT. Igloos 1958, 1961, and 1976 were empty, and Igloos 1914 and 1916 held explosive

wastes to be open burned or open detonated. Igloo 1915 held hazardous wastes to go to DRMO, including the explosive liquid wastes from the explosives laboratory. Drums were placed on secondary containment pads. Note that per the HAZARDOUS WASTE LOG, no igloos contained large waste quantities. Magazine 1813 primarily held drums containing spent carbon, waste batteries, waste aerosol cans and nonhazardous open burn residues.

TWO PREVIOUS KAAP INSPECTIONS: JUNE 16, 17, AND 18, 2000 AND SEPTEMBER 23 AND 24, 2004

JUNE 16, 17, AND 18, 2000 INSPECTION

KAAP was last inspected June 16, 17, and 18, 2000 by KDHE inspectors Douglas Cole and myself. Mr. Cole was the lead on the hazardous waste generation and permitted storage portion of the inspection and I performed the EWI inspection.

June 16, 17, and 18, 2000 Inspection Hazardous Waste Generation and Permitted Storage Related Deficiencies

Deficiencies Mr. Cole presented on his Notice of Noncompliance (NON) presented to KAAP at the July 11, 2000 inspection closeout interview are presented below.

1. Kansas Administrative Regulation (K.A.R.) 28-31-4(c)(1), inaccurate notification (waste codes);
2. K.A.R. 28-31-4(j)(1), satellite container not at or near point of generation;
3. K.A.R. 28-31-4(j)(1)(A), five open satellite containers;
4. K.A.R. 28-31-4(j)(1)(B), three satellite containers not marked "Hazardous Waste;"
5. K.A.R. 28-31-4(j)(1), greater than one satellite accumulation container per wastes stream;
6. K.A.R. 28-31(g)(4), A person involved with hazardous waste management had not received hazardous waste training; and
7. K.A.R. 28-31-8(a), the contingency plan was not current.

Violations 3 and 4 were corrected during the inspection. The remaining violations were corrected by August 10, 2000.

June 16, 17, and 18, 2000 Inspection EWI-related Deficiencies

The EWI inspection's objective was to determine if the EWI was operated per permit requirements since a 1998 inspection. The EWI was physically checked while on site, but as the EWI was not operating, the inspection was primarily a data review. After data review (which included August 22 and 23, 2000 follow-up visits to the site), I notified KAAP of the following four additional violations in an October 23, 2000, January 25, 2001, and March 20, 2001 follow-up letters

8. K.S.A. 65-3441(a)(3), kiln shroud vacuum less than 0.10 inches of water column without automatic waste feed cutoffs;
9. K.S.A. 65-3441(a)(3), operating with the rotary kiln internal pressure outside permitted limits;
10. K.S.A. 65-3441(a)(3), operating the cyclone, high temperature gas cooler, and low temperature gas cooler with differential pressures outside the permit limits; and
11. K.S.A. 65-3441(a)(3), instrument required by permit condition III.E.1 not installed.

These violations require equipment modification and must be corrected prior to reinitiating EWI operations, i.e., they were still outstanding as of September 7, 2004.

ACTIONS TAKEN PURSUANT TO THE 2000 INSPECTION

On May 3, 2002 KDHE issued KAAP an $17,100 administrative penalty. KAAP met with KDHE, and resultant to the meeting the portion of the fine associated with Violation 2 was not assessed in the eventual $7,100 penalty issued pursuant to on the Consent Agreement and Final Order signed September 16, 2002.

SEPTEMBER 23 AND 24, 2003 INSPECTION RESULTS

No permit, regulatory, or statutory violations were discovered pursuant to this inspection.

SEPTEMBER 7 AND 8, 2004 INSPECTION RESULTS

No permit, regulatory, or statutory violations were cited at the closeout inspection. Because I was aware that the portion of the penalty to assessed in 2000 that related to K.A.R. 28-31-4(j)(1) was withdrawn, I did not cite the apparent K.A.R. 28-31-4(j)(1) violation for the 1100 Area satellite container being in the 200 Area, i.e., not at or near point of generation. Prior to citing the penalty I wished to determine if the violation had been withdrawn when the penalty associated with the violation not assessed.. A copy of my e-mail traffic with Topeka staff regarding this matter is presented on Appendix I, Attachment 4. Pursuant to the discussion presented, I did not cite a violation. My follow-up letter to KAAP is presented in this reports Attachment 1.

DEPARTMENT OF THE ARMY
KANSAS ARMY AMMUNITION PLANT
23018 ROOKS ROAD, SUITE AA
PARSONS, KANSAS 67357-8403

REPLY TO
ATTENTION OF

16 August 2004

Environmental Office
(200-1d)

SUBJECT: Groundwater Monitoring Purge water, Kansas Army Ammunition Plant (KSAAP) - Parsons, Kansas

Mr. Karl Mueldener
Kansas Department of Health & Environment
Director, Bureau of Water
1000 SW Jackson, Suite 420
Topeka, Kansas 66612-1366

Dear Mr. Mueldener

Kansas Army Ammunition Plant is currently in a long-term groundwater monitoring program at several sites on the Installation. It is estimated that 25 to 30 drums of purge water will be collected per year from these monitoring wells. Kansas AAP seeks your assistance in obtaining permanent disposition for disposal of these purge waters.

At Enclosure (1) is a copy of the groundwater summary report and analytical results from the March 2004, sampling event for various locations of the Installation. We request your permission to place the purge waters generated from these sites in the Sewage treatment Plant (STP) NPDES outfall 004. At enclosure (2) is groundwater monitoring results from the draft final report for June 2004 sampling event of the 700 Area. We also seek permission to place this purge waters at the STP. At Enclosure (3) are analytical results from the 1100 Area Supplemental Groundwater Investigation Report dated April 2004. We would request permission to place this purge water in the 1100 Area Industrial Wastewater Treatment System NPDES Outfall 011.

The groundwater at the 700 has been monitored since June 1992 and the results have been consistent over the years. Mr. Brad Roberts, KDHE, Bureau of Waste Management maintains copies of Groundwater monitoring reports generated for this Area should additional information be required for this site. The remaining

Mr. Mueldener 16 August 2004

Subject: Groundwater Monitoring Purge Water, Kansas Army Ammunition Plant (KSAAP) Parsons, Ks. 67357, EPA I.D. # KS0213820467

sites have had the groundwater monitored as part of RCRA Corrective actions and have shown consistency in monitoring results. Mr. Dan Gravatt in the Bureau of Remediation at KDHE maintains reports for these sites and has knowledge of groundwater issues at Kansas AAP. The Kansas City District Corps of Engineers are charged with the groundwater monitoring program at Kansas AAP. If additional technical information on groundwater or purge water issues is required Mr. Andy Gosnell from the Corps of Engineers can be contacted at 816-983-3891.

Your assistance in obtaining permanent disposition for the purge waters generated at Kansas AAP is appreciated.

The point of contact is Glen Parish, 620-421-7596.

Sincerely,

ORIGINAL SIGNED BY

Donald D. Dailey
Commander's Representative

ENCLOSURES

Copy Furnished:
KDHE/BWM/Mr. Brad Roberts
KDHE/BER/Mr.Dan Gravatt
CEMRK/Mr. Andy Gosnell
DZI/D.Cramer

ENVIRONMENTAL CHEMICAL CORPORATION

Memorandum

Date: May 28, 2004

To: Glenn Tisdale (USACE-KCD)

From: Brady Bigelow (ECC)

Subject: Summary Report - March 2004 Sampling Event
Analytical Results for Site-Wide Groundwater Monitoring
Kansas Army Ammunition Plant (KSAAP), Parsons, Kansas

Environmental Chemical Corporation (ECC) is providing this Summary Report as a preliminary evaluation of the analytical data from the March 2004 sampling event (March 9 – April 14, 2004) for the KSAAP Site-Wide groundwater monitoring. The following table presents the sample locations and frequency according to Storage Waste Management Unit (SWMU) for those wells scheduled for March sampling:

Facility Designation or Name	SWMU Group	Sampling Frequency	Sampling Locations (Monitoring Wells)
300 Area Wastewater Sumps	5	Semiannual	1-7, 2-5, 3-5, 4-1
500 Area Wastewater Sumps	6	Semiannual	3-7, 5-5, 6-5, 7-5
800 Area Wastewater Sumps	7	Semiannual	8-5, 9-5, 10-5, 11-5
900 Area Wastewater Sumps	8	Annual	12-5, 13-5, 15-3, 15-5, 21-3, 22-3
1000 Area Wastewater Sumps	9	Annual	2-3, 3-3, 4-3, 4-7S, 5-7D, 16-5, 17-5, 18-5
Open Burn Pads 1-4	11	Annual	11-3, 12-3, 13-3, 19-6, 24-3
Closed / Inactive Landfill near Quarry Ponds	13	Semiannual	25-6, 27-6
Closed / Inactive Landfill	14	Semiannual	7-6, 10-7, 11-6, BH-2, BH-3
Active Landfill	15	Semiannual	8-1, 9-1, 11-7, 30-6, 31-6, 32-6
Closed / Inactive Landfill	16	Annual	13-6, 14-6, 15-6, BH-5, BH-6
Active Open Detonation Fields	17	Annual	10-1, 11-1, 17-3, 18-3, 19-3, 20-3

This memorandum presents results for the following: detections of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and explosive compounds addressed by Environmental Protection Agency (EPA) Maximum Contaminant Levels (MCLs), EPA Region 9 Preliminary Remediation Goals (PRGs), and Kansas Department of Health and the Environment Risk-Based Standards for Kansas (RSKs); detections of 1,1,2-trichlorotrifluoroethane (freon) significantly above the reporting limit; and detections of total and dissolved metals above MCLs. Analytical results included in this memorandum have not been validated.

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ENCL (

300 Area Wastewater Sumps - SWMU Group 5

No metals detections were above associated MCL values. No VOCs or explosive compounds were detected in samples collected from the 300 Area. SVOCs were not requested for analysis.

500 Area Wastewater Sumps - SWMU Group 6

VOCs

- Tetrachloroethene (PCE) was only detected in the sample from well 3-7 (0.56 micrograms per liter [µg/L]) below the MCL (5 µg/L), PRG (0.659 µg/L), and RSK (5 µg/L).

Metals

- Total beryllium was only detected in the sample from well 3-7 (0.0066 milligrams per liter [mg/L] J) above the MCL and RSK (both at 0.004 mg/L), but below the PRG (0.073 mg/L).

Explosive Compounds

- HMX (octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine) was only detected in the sample from well 7-5 (0.13 µg/L J) below the RSK (780 µg/L). No MCL or PRG values are available for HMX.
- RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine) was only detected in the sample from well 3-7 (0.080 µg/L J) below the PRG (0.611 µg/L) and RSK (8 µg/L). No MCL is available for RDX.
- Tetryl was only detected in the sample from well 3-7 (0.18 µg/L J) below the RSK (160 µg/L). No MCL or PRG values are available for tetryl.

SVOCs were not requested for analysis of samples from the 500 Area.

800 Area Wastewater Sumps - SWMU Group 7

VOCs

- 1,1-Dichloroethene (1,1-DCE) was detected in the duplicate sample (but not the original sample) from well 10-5 (0.27 µg/L J) below the MCL (7 µg/L), PRG (339 µg/L), and RSK (7 µg/L). This analyte was not detected in any other 800 Area wells.
- *cis*-1,2-Dichloroethene (*cis*-1,2-DCE) was detected from the initial analysis and reanalysis of the original (36.29 µg/L and 33.63 µg/L, respectively) and duplicate (36.87 µg/L and 35.24 µg/L, respectively) samples from well 10-5 below the MCL (70 µg/L), PRG (60.83 µg/L), and RSK (70 µg/L).
- *trans*-1,2-Dichloroethene (*trans*-1,2-DCE) was detected in the original (2.35 µg/L) and duplicate (2.41 µg/L) samples from well 10-5 below the MCL (100 µg/L), PRG (121.7 µg/L), and RSK (100 µg/L).
- PCE was detected in the samples from well 10-5 above the calibration range of the instrument. PCE was detected from the diluted reanalysis of the original sample (219.54 µg/L) and duplicate sample (205.36 µg/L) from well 10-5 above all three screening levels.

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- Trichloroethene (TCE) was detected in the samples from well 10-5 above the calibration range of the instrument. TCE was detected from the diluted reanalysis of the original sample (78.9 µg/L) and duplicate sample (77.14 µg/L) from well 10-5 above the MCL (5 µg/L), PRG (0.028 µg/L), and RSK (5 µg/L).

Explosive Compounds

- HMX was only detected in the sample from well 9-5 (0.13 µg/L J) above the RSK.
- RDX was only detected in the sample from well 9-5 (0.70 µg/L J) above the PRG, but below the RSK.

No metals detections were above associated MCL values. SVOCs were not requested for analysis of samples from the 800 Area.

900 Area Wastewater Sumps - SWMU Group 8

Explosive Compounds

- 1,3-Dinitrobenzene was only detected in the sample from well 13-5 (0.92 µg/L J) below the PRG (3.65 µg/L). No MCL or RSK values are available for 1,3-dinitrobenzene.
- HMX was only detected in the sample from well 13-5 (0.16 µg/L J) below the RSK.
- RDX was only detected in the sample from well 13-5 (0.10 µg/L J) below the PRG and RSK.
- Tetryl was only detected in the sample from well 13-5 (0.12 µg/L J) below the RSK.

No metals detections were above associated MCL values. No VOCs were detected in samples collected from the 900 Area. SVOCs were not requested for analysis.

1000 Area Wastewater Sumps - SWMU Group 9

VOCs

- 1,1,2-Trichlorotrifluoroethane was only detected in the sample from well 3-3 (3724 µg/L J). No screening levels are available for 1,1,2-trichlorotrifluoroethane.

Explosive Compounds

- HMX was detected in the samples from wells 2-3 (1.63 µg/L), 17-5 (2.14 µg/L), 18-5 (10.44 µg/L), and the duplicate sample from well 18-5 (10.24 µg/L) below the RSK.
- Nitrobenzene was only detected in the sample from well 17-5 (0.59 µg/L) below the PRG (3.40 µg/L) and RSK (1 µg/L). No MCL value is available for nitrobenzene.
- RDX was detected in the samples from wells 3-3 (0.079 µg/L J), 4-3 (0.16 µg/L J) and 17-5 (0.60 µg/L) below the PRG and RSK.
- Tetryl was detected in the samples from wells 3-3 (0.33 µg/L J) and 17-5 (0.39 µg/L) below the RSK.

No metals detections were above associated MCL values. SVOCs were not requested for analysis of samples from the 1000 Area.

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Open Burn Pads 1-4 - SWMU Group 11

Explosive Compounds

- RDX was only detected in the sample from well 24-3 (0.47 µg/L J) below the PRG and RSK.

No metals detections were above associated MCL values. VOCs and SVOCs were not requested for analyses of samples from the Open Burn Pads.

Closed / Inactive Landfill Near Quarry Ponds - SWMU Group 13

SVOCs

- *bis*(2-Ethylhexyl)phthalate was only detected in the sample from well 27-6 (1.37 µg/L J) below the PRG (4.8 µg/L) and RSK (6 µg/L). No MCL value is available for *bis*(2-ethylhexyl)phthalate.

No metals detections were above associated MCL values. No VOCs or explosive compounds were detected in samples collected from SWMU Group 13.

Closed / Inactive Landfill - SWMU Group 14

VOCs

- Chlorobenzene was only detected in the sample from well 11-6 (4.35 µg/L) below the PRG (106.1 µg/L) and RSK (100 µg/L). No MCL value is available for chlorobenzene.
- *cis*-1,2-DCE was detected from the initial analysis and the reanalysis of the original (23.83 µg/L and 20.22 µg/L, respectively) and duplicate (24.18 µg/L and 21.27 µg/L, respectively) samples from well BH-3 below the MCL, PRG, and RSK.
- *trans*-1,2-DCE was detected in the original (0.34 µg/L J) and duplicate (0.35 µg/L J) samples from well BH-3 below the MCL, PRG, and RSK.
- TCE was detected from the initial analysis and reanalysis of the original (5.85 µg/L and 4.76 µg/L J, respectively) and duplicate (6.61 µg/L and 5.7 µg/L, respectively) samples from well BH-3. With the exception of the detection from the initial analysis of the original sample, all detections of TCE were above the MCL, PRG, and RSK.

SVOCs

- 1,4-Dichlorobenzene was only detected in the sample from well 11-6 (0.66 µg/L) above the PRG (0.50 µg/L), but below the MCL and RSK (both at 75 µg/L).

Explosive Compounds

- Nitrobenzene was only detected in the sample from well 7-6 (0.085 µg/L J) below the PRG and RSK.

No metals detections were above associated MCL values.

1746 Cole Blvd., Bldg. 21, Suite 350 • Lakewood, Colorado 80401 • Tel (303) 298-7607 • Fax (303) 298-7837

Active Landfill - SWMU Group 15

VOCs

- 1,1-Dichloroethane (1,1-DCA) was only detected in the sample from well 32-6 (0.25 µg/L J) below the PRG (811 µg/L). No MCL or RSK values are available for 1,1-DCA.

Explosive Compounds

- 1,3-Dinitrobenzene was only detected in the sample from well 31-6 (0.083 µg/L J) below the PRG.

No metals detections were above associated MCL values. No SVOCs were detected in samples collected from SWMU Group 15.

Closed / Inactive Landfill - SWMU Group 16

VOCs

- 1,1-DCA was detected in the original (5.59 µg/L) and duplicate (5.83 µg/L) samples from well 13-7 below the PRG.
- 1,1-DCE was detected in the original (2.92 µg/L) and duplicate (3.02 µg/L) samples from well 13-7 below the MCL, PRG, and RSK.
- 1,1,1-Trichloroethane was detected in the original (2.8 µg/L) and duplicate (2.83 µg/L) samples from well 13-7 below the MCL (200 µg/L), PRG (3172 µg/L), and RSK (200 µg/L).
- *cis*-1,2-DCE was detected in the original (7.64 µg/L) and duplicate (7.76 µg/L) samples from well 13-7 below the MCL, PRG, and RSK.
- PCE was detected in the original (12.2 µg/L) and duplicate (11.14 µg/L) samples from well 13-7 above the MCL, PRG, and RSK.
- TCE was detected in the original (9.52 µg/L) and duplicate (9.17 µg/L) samples from well 13-7 above the MCL, PRG, and RSK.
- Vinyl chloride was detected in the original (1.48 µg/L) and duplicate (1.51 µg/L) samples from well 13-7 below the MCL and RSK (both at 2 µg/L). No PRG value is available for vinyl chloride.

No metals detections were above associated MCL values. No SVOCs or explosive compounds were detected in samples collected from SWMU Group 16.

Active Open Detonation Fields – SWMU Group 17

No metals detections were above associated MCL values. No VOCs, SVOCs, or explosive compounds were detected in samples collected from SWMU Group 17.

***

Analytical results from the most recent 2003 sampling event were similar to those from the Site-Wide March 2004 sampling event, with the following exceptions.

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August 11, 2004
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AUG 1 2004
BUREAU OF WASTE MANAGEMENT

Mostafa Kamal
Chief, Hazardous Waste Permits Section
Bureau of Waste Management
Kansas Department of Health and Environment
1000 SW Jackson, Suite 320
Topeka, Kansas 66612-1366

Dear Mr. Kamal:

Subject: Submittal of RCRA Part B Permit Application Kansas Army Ammunition Plant – Parsons, Kansas

Enclosed are three copies of the RCRA Part B Application for Open Burning/Open Detonation at Kansas Army Ammunition Plant. The document is complete only to the Sections D – Procedures to Prevent Hazards, Section E – Contingency Plan, Section I – Protection of Surface Water, and Section J – Other Applicable Regulations.

Also enclosed are three copies of the completed Checklist for Review of Federal RCRA Permit Applications.

If you have any questions concerning this application, feel free to contact Carolyn Smalley, 620-421-7434.

Respectfully,

STEVE KOSMAN
Director of Engineering

SWK/CJS/dmh

Attachments a/s

cf: Glen Parish – ACO
Dean Cramer
Environmental File
Reading File

23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

Kansas Division

Phone: 620-421-7
Fax: 620-421-7

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION D. PROCESS INFORMATION - MISCELLANEOUS TREATMENT

	Section and Requirement	Federal Regulation	Review Consideration[a]	Location in Application[b]	See Attached Comment Number[c]
D-8	Miscellaneous Units	270.23; 264.601	Identify all miscellaneous units that treat, store, or dispose of hazardous waste at facility, but do not fit current definition of container, tank, surface impoundment, etc. These units may include: • geologic repositories • deactivated missile silos • thermal treatment units other than incinerators, boilers, or industrial furnaces • units open burning and open detonating explosive waste • certain chemical/physical/biological treatment units.	Section B, B-1a Section C C-1g Section Specific Information (SI) A-1, A-2, A-3	
D-8a	Description of Miscellaneous Units	270.23(a)		SI A-1 through A-3	
D-8b	Waste Characterization	270.23; 264.601(a)(1), (b)(1),(c)(1)	Provide information on volume and concentration of waste in order to determine release potential.	Section C-1 SI-B-1	
D-8c	Treatment Effectiveness	270.23(d)		SI-B-1	
D-8d	Environmental Performance Standards for Miscellaneous Units		Environmental performance standards must be established and maintained to protect human health and environment.	Table SI-B-1a Table SI-B-1b	
D-8d(1)	Protection of Groundwater and Subsurface Environment	270.23(b),(c); 264.601(a)		SI-B-3 Section H	
D-8d(1)(a)	Environmental Assessment	270.23(b),(c); 264.601(a)	Applicant must conduct assessment of potential for releases to groundwater or the subsurface	SI-B-3	

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION D. PROCESS INFORMATION - MISCELLANEOUS TREATMENT

Section and Requirement		Federal Regulation	Review Consideration[a]	Location in Application[b]	See Attached Comment Number[c]
			environment. Both saturated and unsaturated zones must be considered in evaluating potential for subsurface migration.		
D-8d(1)(b)	Performance Standards	270.23(b); 264.601	Based on assessments, performance standards must be developed and maintained.	Table SI-B-1a Table SI-B-1b	
D-8d(2)	Protection of Surface Water, Wetlands, and Soil Surfaces	270.23(b),(c); 264.601(b)		SI-B-4 Section I	
D-8d(2)(a)	Environmental Assessment	270.23(b),(c); 264.601(b)	Applicant must conduct assessment of potential for releases to surface water, wetlands, or soil surface.	Section SI-B-5	
D-8d(2)(b)	Performance Standards	270.23; 264.601	Based on assessments, performance standards must be developed and maintained.	Table SI-B-1a Table SI-B-1b	
D-8d(3)	Protection of the Atmosphere	270.23(b),(c); 264.601		SI-B-5 Section H Section I	
D-8d(3)(a)	Environmental Assessment	270.23(b),(c); 264.601(c)	Applicant must conduct assessment of potential for release to air.	SI-B-5	
D-8d(3)(b)	Performance Standards	270.23; 264.601	Based on assessments, performance standards must be developed and maintained.	Table SI-B-1a Table SI-B-1b	
D-8e	Monitoring, Analysis, Inspection, Response, Reporting, and Corrective Action	270.23(a); 264.602		SI-B-5 Section D	
D-8e(1)	Elements of a Monitoring Program	270.23(a); 264.602	Monitoring program must include procedures for sampling, analysis, and evaluation of data, suitable response procedures, and a regular inspection schedule.	SI-B-5 Appendix SI-B-1 through SI-B-3 Section D	

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION D: PROCESS INFORMATION - MISCELLANEOUS TREATMENT

Section and Requirement		Federal Regulation	Review Consideration[a]	Location in Application[b]	See Attached Comment Number[c]
D-8e(2)	Air Monitoring Alternatives	270.23(a); 264.602	For situations in which ambient air monitoring would be unsafe or impractical, possible alternatives may include analysis of waste, emissions measurements, and periodic monitoring with portable detectors.	SI-B-5 Section D Section H Section I	

Notes:

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December 17, 2003
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RECEIVED
DEC 18 2003
BUREAU OF WASTE MANAGEMENT

Mostafa Kamal
Chief, Hazardous Waste Permits Section
Bureau of Waste Management
Kansas Department of Health and Environment
1000 SW Jackson, Suite 320
Topeka, Kansas 66612-1366

Dear Mr. Kamal:

Subject: Submittal of RCRA Part B Permit Application Kansas Army Ammunition Plant – Parsons, Kansas

Enclosed are three copies of the RCRA Part B Application for Open Burning/Open Detonation at Kansas Army Ammunition Plant. The document is complete only to the Sections A – Part A Permit Application, Section B – Facility Description, Section C – Waste Characteristics, Section F – Personnel Training, Section G – Closure and Post-Closure Plans, Section Specific Information A – Process Information, and Section Specific Information B – Environmental Performance Standards.

Also enclosed are three copies of the completed Checklist for Review of Federal RCRA Permit Applications.

Section D – Procedures to Prevent Hazards, Section E – Contingency Plan, Section H – Protection of Groundwater, Section I – Protection of Surface Water, and Section J – Other Applicable Regulations will be submitted by August 17, 2004.

If you have questions concerning this application, feel free to contact Carolyn Smalley, 620-421-7434.

Respectfully,

STEVE KOSMAN
Director of Engineering

SWK/CJS/dmh

Attachment a/s

cf: Dean Cramer – DZI
Glen Parish – ACO
Environmental File
Reading File

23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

Kansas Division

Phone: 620-421-7400
Fax: 620-421-7477

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION D. PROCESS INFORMATION - MISCELLANEOUS TREATMENT

Section and Requirement		Federal Regulation	Review Consideration[a]	Location in Application[b]	See Attached Comment Number[c]
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D-8a	Description of Miscellaneous Units	270.23(a)		SI-A-1 through A-3	
D-8b	Waste Characterization	270.23; 264.601(a)(1), (b)(1),(c)(1)	Provide information on volume and concentration of waste in order to determine release potential.	Section C-1 SI-B-1	
D-8c	Treatment Effectiveness	270.23(d)		SI-B-1	
D-8d	Environmental Performance Standards for Miscellaneous Units		Environmental performance standards must be established and maintained to protect human health and environment.	Table SI-B-1a Table SI-B-1b	
D-8d(1)	Protection of Groundwater and Subsurface Environment	270.23(b),(c); 264.601(a)		SI-B-3 to be included in Section H	
D-8d(1)(a)	Environmental Assessment	270.23(b),(c); 264.601(a)	Applicant must conduct assessment of potential for releases to groundwater or the subsurface	SI-B-3	

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION D. PROCESS INFORMATION - MISCELLANEOUS TREATMENT

Section and Requirement		Federal Regulation	Review Consideration[a]	Location in Application[b]	See Attached Comment Number[c]
			environment. Both saturated and unsaturated zones must be considered in evaluating potential for subsurface migration.		
D-8d(1)(b)	Performance Standards	270.23(b); 264.601	Based on assessments, performance standards must be developed and maintained.	Table SI-B-1a Table SI-B-1b	
D-8d(2)	Protection of Surface Water, Wetlands, and Soil Surfaces	270.23(b),(c); 264.601(b)		SI-B-4 to be included in Section I	
D-8d(2)(a)	Environmental Assessment	270.23(b),(c); 264.601(b)	Applicant must conduct assessment of potential for releases to surface water, wetlands, or soil surface.	Section SI-B-5	
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D-8d(3)	Protection of the Atmosphere	270.23(b),(c); 264.601		SI-B-5 to be included in Sections H & I	
D-8d(3)(a)	Environmental Assessment	270.23(b),(c); 264.601(c)	Applicant must conduct assessment of potential for release to air.	SI-B-5	
D-8d(3)(b)	Performance Standards	270.23; 264.601	Based on assessments, performance standards must be developed and maintained.	Table SI-B-1a Table SI-B-1b	
D-8e	Monitoring, Analysis, Inspection, Response, Reporting, and Corrective Action	270.23(a); 264.602		SI-B-5 to be included in Section D.	
D-8e(1)	Elements of a Monitoring Program	270.23(a); 264.602	Monitoring program must include procedures for sampling, analysis, and evaluation of data, suitable response procedures, and a regular inspection schedule.	SI-B-5 Appendix SI-B-1 through SI-B-3 to be included in Section D.	

CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS SECTION D. PROCESS INFORMATION - MISCELLANEOUS TREATMENT					
	Section and Requirement	Federal Regulation	Review Consideration[a]	Location in Application[b]	See Attached Comment Number[c]
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Notes:

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CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

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D-8d(3)(a)	Environmental Assessment	270.23(b),(c); 264.601(c)	Applicant must conduct assessment of potential for release to air.	SI-B-5	
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CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION D. PROCESS INFORMATION - MISCELLANEOUS TREATMENT

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CHECKLIST FOR REVIEW OF FEDERAL RCRA PERMIT APPLICATIONS

SECTION D. PROCESS INFORMATION - MISCELLANEOUS TREATMENT

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K A N S A S

RODERICK L. BREMBY, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

DEPARTMENT OF HEALTH AND ENVIRONMENT

November 24, 2003

Carolyn J. Smalley
Environmental Engineering Manager
Day & Zimmermann, Inc. - Kansas Division
23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

RE: OB/OD Risk Assessment Protocol
Kansas Army Ammunition Plant - Parsons
EPA I.D. Number KS0213820467

Dear Ms. Smalley:

The Kansas Department of Health and Environment (KDHE) has reviewed and approved the Final Human Health and Ecological Risk Assessment Protocol for the Open Burning and Open Detonation Units received on November 12, 2003. The Final Protocol satisfactorily addresses the comments from KDHE and the Environmental Protection Agency dated October 6, 2003. Please submit the written report per the schedule.

If you have any questions, please call me at 785-296-6562.

Sincerely,

Shawn A. Howell, P.E.
Chief, Operating Facilities Unit
Hazardous Waste Permits Section

cc: Bill Bider - KDHE/BWM
Dan Gravatt - KDHE/BER
David Stutt - DEA/SEDO/Waste Programs
Demetra Salisbury - EPA Region VII - ARTD/RCAP
Ken Herstowski - EPA Region VII - ARTD

Tetra Tech EM Inc.

8030 Flint Street ♦ Lenexa, Kansas 66214 ♦ (913) 894-2600 ♦ FAX (913) 894-6295

November 11, 2003

Mr. Shawn A. Howell, PE,
Chief, Operating Facilities Unit
Kansas Department of Health and Environment
Bureau of Waste Management
1000 SW Jackson, Suite 320
Topeka, KS 66612-1366

Subject: **Final Human Health and Ecological Risk Assessment Protocol for the Open Burning and Open Detonation Unit**
Kansas Army Ammunition Plant, Parsons, Kansas

Dear Mr. Howelll:

Tetra Tech Inc. (Tetra Tech) is submitting the final human health and ecological risk assessment protocol for the open burning and open detonation unit at Kansas Army Ammunition Plant in Parsons, Kansas. Tetra Tech is submitting this protocol on behalf of Day & Zimmerman Munitions and Government Services, Inc. The protocol is based on current U.S. Environmental Protection Agency (EPA) guidance and reflects the comments from Kansas Department of Health and Environment and EPA dated October 6, 2003. Attached to the final protocol is a response to comments document outlining all changes made to the protocol document.

If you have any questions concerning the protocol, please contact me at (913) 495-3908.

Sincerely,

David Homer

David Homer, Ph.D.
Project Manager

Enclosure

cc: Mostafa Kamal, PE, CHMM, Kansas Department of Health and Environment
Ken Herstowski, EPA Region 7
Steve Kosman, Day & Zimmerman Munitions and Government Services, Inc. (letter only)
Carolyn Smalley, Day & Zimmerman Munitions and Government Services, Inc.
Eric Morton, Tetra Tech
William Desmond, Tetra Tech
Eric Farstad, Tetra Tech
Joe Lucas, Tetra Tech
Karen Bollinger, Tetra Tech
File

K A N S A S

RODERICK L. BREMBY, SECRETARY

DEPARTMENT OF HEALTH AND ENVIRONMENT

KATHLEEN SEBELIUS, GOVERNOR

October 21, 2003

Certified Mail No. 7000 0520 0017 4475 6343
Return Receipt Requested

Carolyn J. Smalley
Environmental Engineering Manager
Day & Zimmermann, Inc. - Kansas Division
23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

RE: **NOTICE OF DEFICIENCY** - OB/OD Permitting Issues
Kansas Army Ammunition Plant - Parsons
EPA I.D. Number KS0213820467

Dear Ms. Smalley:

The Kansas Department of Health and Environment (KDHE) received your email on September 24, 2003, requesting additional time to submit the Part B permit application for the OB/OD unit. The stated reason for the extension is to coordinate the application with the SPCC reporting deadline.

The hazardous waste permit for the Kansas Army Ammunition Plant (KAAP) expired on December 7, 1994. An application was submitted by Day & Zimmermann, Inc. (DZI) and KDHE provided an initial comment letter. KDHE requested a revised application by June 6, 2000, which would include all of DZI's hazardous waste units. The application was delayed twice and DZI informed KDHE that the OB/OD unit could not be incorporated. The application for the other units was submitted on April 6, 2001. DZI proposed a September 30, 2002, deadline for submitting the application for the OB/OD unit. In April 2002, DZI requested a year extension to enable the facility to hire a contractor to complete the application. On Jan 23, 2003, DZI and KDHE met to discuss the progress of the application. DZI informed KDHE that they were unable to hire a contractor and would complete the application internally by the September 30, 2003 deadline. In support of the application, DZI has progressed in conducting a risk assessment on the OB/OD unit. The risk assessment will be complete by the end of the year.

KDHE is hesitant to grant yet another extension to the deadline for the OB/OD application. There is no apparent connection between the OB/OD application and DZI's SPCC plan since the OB/OD unit

contains no storage. However, the application may be delayed for the completion of the risk assessment until the end of this year.

KDHE understands that DZI believes that more time may be required to complete the application. Therefore, KDHE will allow DZI to delay submitting specific sections if DZI submits a Part B Application with the sections required for KDHE to start its review. DZI has previously submitted an outline to the OB/OD application. Following that outline, the following sections need to be complete prior to the end of the year: General Information - (A) Facility Description, (B) Waste Characteristics, (E) Personnel Training, (F) Closure and Post-Closure Plans; Specific Information - (A) Process Information, and (B) Environmental Performance Standards. These sections will allow KDHE to continue with the permitting process. The missing sections must then be submitted by August 17, 2004.

Failure to submit an application with the above required sections by December 31, 2003 may result in a compliance order against DZI including fines and a loss of interim status (per 270.10(e)(5)). Should the OB/OD unit loses interim status, DZI will have to close the unit within 180 days.

If you have any questions, please call me at 785-296-1609. For specific questions regarding the requirements of the Part B Application or other technical issues, please call Shawn Howell at 785-296-6562.

Sincerely,

M. Kamal

Mostafa Kamal, P.E., CHMM
Chief, Hazardous Waste Permits Section

cc: Bill Bider - KDHE/BWM
Dan Gravatt - KDHE/BER
David Stutt - DEA/SEDO/Waste Programs
Demetra Salisbury - EPA Region VII - ARTD/RCAP
Ken Herstowski - EPA Region VII - ARTD

K A N S A S

RODERICK L. BREMBY, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

DEPARTMENT OF HEALTH AND ENVIRONMENT

October 6, 2003

Steve Kosman
Director of Engineering
Day & Zimmermann, Inc. - Kansas Division
23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

RE: Risk Assessment Protocol for the OB/OD units
Kansas Army Ammunition Plant - Parsons
EPA I.D. Number KS0213820467

Dear Mr. Kosman:

The Kansas Department of Health and Environment (KDHE) has reviewed the above referenced document, received August 8, 2003. The EPA has also performed a technical review and their comments are found at the end of this letter. Please address the following comments and respond to KDHE by November 12, 2003.

General Comment:

1. Assumptions on operation of the OB/OD unit are provided throughout the Risk Assessment Protocol. KSAAP should be aware that these assumptions, such as hours of operation, loading rates, etc., may be converted to permit limits when this unit is permitted.

Specific Comments:

Section 2, Waste and Emission Characterization

2. **2.1, Waste Characterization, page 2.** The risk assessment report must include a detailed description of the waste streams. An estimate of the maximum annual amount of off-site waste disposed in the OB/OD unit must also be included.

3. **2.2, Emission Characterization, page 4.** It is not clear from the discussion on dioxins/furans emissions if dioxins/furans emissions will be quantitatively evaluated. KDHE expects that dioxins/furans emissions will be evaluated.

4. **2.3, Chemicals of Potential Concern, page 4.** The Protocol did not present a basis for the exclusion of essential nutrients and pollutants related to the National Ambient Air Quality Standards from quantitative evaluation. These exclusions are too broad and may be unjustified. Provide a basis for these exclusions and a list of affected pollutants or remove these exclusions.

Section 3, Emission Source Input Data

5. **3.3, Emission Source Input Data, page 7-10.** Please ensure that the descriptions of the open burn and open detonation units are consistent with the descriptions in the RCRA Part B permit application. The maximum operation of the open burn unit needs to be clarified. Two burns per day in 16 pans would seem to indicate 32 burns not 16. In addition, provide total annual waste disposal amounts for each operation.

6. **3.3.1, Open burning, page 9.** The appropriate value for particle density must be determined during modeling. It is not certain that the greatest particle density will be the most conservative considering the different pathways found onsite versus offsite. Alternatively, the greatest particle density may be used if no plume depletion is assumed.

Section 4, Human Health Risk Assessment Procedures

7. **4.2, Land Use and Demographic Information, page 13.** The Protocol identifies special subpopulation and surface water diversions out to 20 km from the unit. Locations outside of the receptor grid should be modeled as discrete receptors. The risk assessment report must discuss the potential risk to receptors between 20 and 69 km.

8. **4.3.1, Exceptions to Default Assumptions, page 18.** Since fish tissue concentration will be modeled, the on-site subsistence fisher receptor must use the fish tissue concentration based on the most highly exposed single pond.

Section 5, Ecological Risk Assessment Procedures

9. **5.2, Habitats and Receptors, page 21.** Figure 6 only presents a radius of 10 km not 50 km as indicated in the text. Major habitats must be identified to a radius of 20 km. Habitat locations outside of the receptor grid should be modeled as discrete receptors. The Neosho Waterfowl

Area must be included. The risk assessment report must discuss the potential risk to ecological receptors between 20 and 69 km.

The following comments were provided by Ken Herstowski, US EPA, Region VII:

10. Use a 200 meter spacing for the receptor grid. Slice off one column of receptors on the west side of the grid so that you can locate all 100 of the discrete receptor points at areas of interest.

11. Include "incidental ingestion of soil" to the onsite subsistence farmer pathway. It is my understanding that "acute inhalation" is the evaluation of direct inhalation of vapors and particulates as described in the guidance.

If you have any questions, please contact me at 785-296-6562.

Sincerely,

Shawn Howell, P.E.
Chief, Operating Facilities Unit
Hazardous Waste Permits Section

cc: Bill Bider - KDHE / BWM
David Stutt - DEA/SEDO/Waste Programs
Ken Herstowski - EPA Region VII - ARTD/RCAP
Demetra Salisbury - EPA Region VII - ARTD/RCAP
David Homer - Tetra Tech, Inc.

KANSAS ARMY AMMUNITION PLANT
PARSONS, KANSAS
SEPTEMBER 23 AND 24, 2003 RCRA COMPLIANCE INSPECTION REPORT
EPA I.D. KS0213820467

September 23 and 24, 2003 a routine hazardous waste compliance inspection was conducted at the Kansas Army Ammunition Plant (KAAP), EPA Identification Number KS0213820467, by Kansas Department of Health and Environment (KDHE) Bureau of Waste Management Engineer Charles Bowers. Mr. Dean Cramer, Senior Environmental Specialist, was the KAAP representative throughout the inspection. Messrs. Glen Parish, Steve Kosman, Jerry Winker, Dean Cramer AND Ms. Caroline Smalley, all of Day and Zimmerman, Inc. (DZI), plus Mr. Don Dailey of the U.S. Army represented KAAP at the inspection closeout.

SITE BACKGROUND INFORMATION

KAAP, located at 23018 Rooks Road occupies approximately 13,700 acres immediately south of Highway 400 and approximately one mile east of the Parsons, Kansas city limits. Day & Zimmerman, Inc. (DZI) is the site's contract operator, and all facility personnel mentioned in this report with the exception of Don Daily (U.S. Army) are DZI employees. KAAP manufacture munitions (recently 81 millimeter mortar rounds and sensor fused weapons - a cluster-type smart bomb) for the United States military. The facility holds a KDHE-issued permit to store hazardous wastes related to munitions manufacturing and to treat off-specification, outdated or surplus munitions in a explosive waste incinerator. EWI treatment occurred from 1997 though December 1999. Subsequently, due to a lack of contracts to treat munitions the EWI has been idle. KAAP's permit treat and store hazardous wastes was originally issued November 7, 1989 and expired December 7, 1994. Permit Condition I.E.3 allows KAAP to continue TSD operations while the Permit is being renewed.

KAAP also open burns and open detonates explosive wastes at a open burn and open detonation sites, and combusts explosive-contaminated wastes at a contaminated waste incinerator (CWI) regulated by KDHE's Bureau of Air and Radiation.

INSPECTION SCOPE

Because the EWI has not operated since the last inspection, this inspection's scope was generally limited to hazardous waste generation and TSD-permitted storage at KAAP. Except for a visual inspection to confirm that the EWI was still idle and no wastes were present, the EWI activities were not reviewed. Inspection day the EWI was partially disassembled, with ducts removed and blind flanges installed over duct openings. The discharge conveyor had been removed, scraped to remove possible lead contamination, and stored by the kiln's discharge end. No wastes were present at the EWI. At the CWI waste accumulation drums were attached to the CWI's air pollution control equipment and part of the combustion process.

This inspection's scope did not address the October 11, 2001 shipment of six drums of D008 hazardous waste (paint chips) to under Manifest P1011 by an unpermitted transporter to Clean Air Environmental an unpermitted TSD site. KDHE investigated this issue in 2002 and appropriate enforcement actions were taken.

Inspection day very limited production activity was taking place at the site (per Mr. Cramer, of the facilities approximately 150 personnel, only about ten were production workers). This sensor fused weapons production activity was in buildings 1139 and 1140. I could not check these buildings because I lacked a security clearance. I also could not check the buildings' outside satellite container shelter because access to the buildings' area is generally restricted during production for safety reasons. While I was the Building 1139's and 1140's access gates were shut and the area's red lights that indicate production were flashing.

Because the KAAP's construction and demolition waste landfill, KDHE Permit 401, had been inspected by Douglas Cole on July 21, 2003, it was not included in this inspection.

WASTE GENERATION AND STORAGE

Waste Generation

Wastes Typically Generated at KAAP

KAAP generates wastes related to munitions manufacturing and plant maintenance. These wastes include nonhazardous purge water from monitoring wells and wastes generated by remediation of areas impacted by munitions manufacturing. Explosive hazardous wastes are open burned or open detonated on-site at KDHE Bureau of Air and Radiation permitted open burn and open detonation sites. Other hazardous wastes, with the exception of six drums of pain chips shipped to Clean Air Environmental on October 11, 2001 were/are shipped to the Defense Reutilization and Marketing Office (DRMO) contractor.

Wastes generated and shipped or treated since the November 2000 are presented on Appendix I, HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 1. Wastes on site September 23, 2003 are presented on Appendix I, HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 2.

D039 Waste Generation

Recently, in a drum of explosive liquid wastes, laboratory analyses detected a 97 milligram per liter (mg/L) tetrachloroethylene (TCE) concentration, above the 0.70 mg/L concentration at which TCE is

regulated as a D039 hazardous waste. D039 wastes are not listed on KAAP's NOTIFICATION OF REGULATED WASTE ACTIVITY. KAAP notified Shawn Howell with the Bureau of Waste Management's Permit Section and Mr. Howell instructed the facility to ship the waste as D039 waste, and monitor closely in the future to see if the facility's Permit needed modification. Concurrent with the permit application modification, the facilities NOTIFICATION OF REGULATED WASTE ACTIVITY would need modified. Per Mr. Cramer, TCE (a degreaser/solvent) is not used at KAAP and he did not know the TCE's source. Additional discussion of D039 waste generation is presented in the Appendix I, the HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST's comments section. The HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST's Attachment 3 presents Mr. Howell's correspondence. A copy of Manifest P3005 used to ship the D039 waste to the DRMO contractor is presented in HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 4.

Silver Recycling

KAAP recycles silver. Silver is recovered from cartridges where it is collected when the film is developed, and from the film itself, when the film's contractual retention time is completed. Approximately three weeks prior to the inspection 148 boxes of film were removed from storage to be recycled (i.e., became a recyclable material) and were moved from the 900 Area storage to Building 1415 prior to shipping to Oklahoma Industrial Silver, Inc. in Edmond Oklahoma. Additional discussion of silver recovery is presented on HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST's comments section.

Universal Wastes

Since the last inspection, the facility shipped 781 flourescent tubes as universal waste to a recycling facility in Pennsylvania. Recycling cost $0.20 per tube (≈$160 total), but shipping cost about $500. Resultantly, KAAP has decided to continue to handle the tubes as hazardous wastes. Because KAAP fits the small quantity universal waste handler classification, record keeping requirements do not apply

KAAP has also recently started to collect batteries, but intends to handle them as a hazardous waste.

Waste Storage

Satellite Containers

Production and maintenance-related hazardous wastes are generally stored in satellite containers located in locked sheds outside the building where the waste is generated. Satellite container shelters were checked at Buildings 203, 1109, 1136, and several unrecorded locations. All shelters except th

shelter at shop Building 203 were associated with building where no current activity was taking place and were empty of drums. Three temporary satellite accumulation containers (P2 degreaser, paint waste, and "Explosive PAX 28 w/water" - water impacted by explosives) were located in Building 1006 which was being refurbished for possible 60-millimeter mortar shell production.

Three laboratory waste streams were stored in three satellite containers in laboratory Building 58. Transfer containers used to collect the laboratory wastes are marked "empty daily."

In administration Building 100 two satellite drums are present, one for aerosol cans and one for batteries.

Permitted Storage

Appendix A's HAZARDOUS WASTE GENERATOR COMPLIANCE INSPECTION CHECKLIST Attachment 2, HAZARDOUS WASTE LOG - 2003 PRESENTS wastes in permitted storage on September 9, 2003. KAAP has permitted storage in 18 "igloo" structures in the 1700 Area, 1900 Area, and 2700 Area, and one magazine building in the 1800 Area. Inspection day all 1700 Area igloos (1705, 1709, 1711, 1712, 1717, and 1721) were empty. In the 2700 (open detonation) Area Igloo 2707 was being used for non-waste explosive storage, Igloo 2708 was being used to temporarily store explosive wastes that had been moved to the area for open detonation, and stored when the weather had changed. Igloos 2709 and A019 were empty. In the 1900 Area permitted Igloos 1917 and 1976 were empty. Permitted Igloo 1974 was being used for non-waste storage. Igloos 1914, 1915, 1916, 1958, and 1961 were being used for waste storage. Drums were placed on secondary containment pads. Note that per the HAZARDOUS WASTE LOG, no igloos contained large waste quantities.

PREVIOUS (JUNE 16, 17, AND 18, 2000) KAAP INSPECTION

KAAP was last inspected June 16, 17, and 18, 2000 by KDHE inspectors Douglas Cole and myself. Mr. Cole was the lead on the hazardous waste generation and permitted storage portion of the inspection and I performed the EWI inspection.

JUNE 16, 17, AND 18, 2000 INSPECTION HAZARDOUS WASTE GENERATION AND PERMITTED STORAGE RELATED DEFICIENCIES

Deficiencies Mr. Cole presented on his Notice of Noncompliance (NON) presented to KAAP at the July 11, 2000 inspection closeout interview are presented below.

1. Kansas Administrative Regulation (K.A.R.) 28-31-4(c)(1), inaccurate notification (waste codes);
2. K.A.R. 28-31-4(j)(1), satellite container not at or near point of generation;
3. K.A.R. 28-31-4(j)(1)(A), five open satellite containers;
4. K.A.R. 28-31-4(j)(1)(B), three satellite containers not marked "Hazardous Waste;"
5. K.A.R. 28-31-4(j)(1), greater than one satellite accumulation container per wastes stream;
6. K.A.R. 28-31(g)(4), A person involved with hazardous waste management had not received hazardous waste training; and
7. K.A.R. 28-31-8(a), the contingency plan was not current.

Violations 3 and 4 were corrected during the inspection. The remaining violations were corrected by August 10, 2000.

JUNE 16, 17, AND 18, 2000 INSPECTION EWI-RELATED DEFICIENCIES

The EWI inspection's objective was to determine if the EWI was operated per permit requirements since a 1998 inspection. The EWI was physically checked while on site, but as the EWI was not operating, the inspection was primarily a data review. After data review (which included August 22 and 23, 2000 follow-up visits to the site), I notified KAAP of the following four additional violations in an October 23, 2000 follow-up letter.

8. Kansas Statutes Annotated (K.S.A.) 65-3441(a)(3), waste introduced into the incinerator while kiln not rotating;
9. K.S.A. 65-3441(a)(3), kiln shroud vacuum less than 0.10 inches of water column without automatic waste feed cutoffs;
10. K.S.A. 65-3441(a)(3), baghouse differential pressure outside permitted limits without automatic waste feed cutoffs; and
11. K.S.A. 65-3441(a)(3), operating the cyclone, high temperature gas cooler, and low temperature gas cooler with differential pressures outside the permit limits

Subsequent to additional data review, because KAAP records did not present sufficient precision to determine with certainty that the kiln was not rotating when wastes were introduced, in a January 25, 2003 letter I rescinded Violation 8. Also, in that same letter Violation 9 was modified to "operating with the rotary kiln internal pressure outside permitted limits." These violations require equipment modification and will be corrected prior to reinitiating EWI operations, i.e., they are still outstanding. Additionally, after discussion with Topeka enforcement personnel, because KAAP was not monitoring shroud vacuum, the additional violation cited below was cited March 20, 2001.

12. K.S.A. 65-3441(a)(3), instrument required by permit condition III.E.1 not installed.

The above violation, similar to the other EWI deficiencies is currently outstanding and will be corrected prior to an EWI start up.

THIS SEPTEMBER 23 AND 24, 2003 INSPECTION RESULTS

VIOLATIONS

No permit, regulatory, or statutory violations were discovered pursuant to this inspection.

CONCERNS

Four concerns were cited on the Notice presented to KAAP at the inspection closeout.

1. Be conscious of the Permit's 3-ft aisle space requirement and store wastes per Drawing D-3. On 09/23/03 Igloo 1961's wastes were somewhat scattered.

2. Watch housekeeping at the 1100 area fuel oil tank. If a spill leaves the pad it is a "release to the environment."

3. Keep used oil drums closed. On 09/23/03 one of three used oil drums at the 1100 Area feel tank was open. (This was corrected during the inspection).

4. KAAP needs to start a waste silver recycling record keeping program per 40 CFR 266.70. Needs to be for both cartridges and film.

Concern 4 relates to waste generation and is discussed in Appendix I, the HAZARDOUS WASTE COMPLIANCE INSPECTION CHECKLIST. Concern 2 and 3 relate to used oil and are discussed in Appendix II, the USED OIL COMPLIANCE INSPECTION CHECKLIST. Concern 1 relates to permitted storage and is discussed in Appendix III, the HAZARDOUS WASTE T/S/D FACILITY COMPLIANCE INSPECTION CHECKLIST.

Tetra Tech EM Inc.
8030 Flint Street ◆ Lenexa, Kansas 66214 ◆ (913) 894-2600 ◆ FAX (913) 894-6295

August 4, 2003

Mr. Mostafa Kamal, PE, CHMM
Chief, Hazardous Waste Permits Section
Kansas Department of Health and Environment
Bureau of Waste Management
1000 SW Jackson, Suite 320
Topeka, KS 66612-1366

Subject: **Human Health and Ecological Risk Assessment Protocol for the Open Burning and Open Detonation Unit**
Kansas Army Ammunition Plant, Parsons, Kansas

Dear Mr. Kamal:

Tetra Tech Inc. (Tetra Tech) is submitting the human health and ecological risk assessment protocol for the open burning and open detonation unit at Kansas Army Ammunition Plant in Parsons, Kansas. Tetra Tech is submitting this protocol on behalf of Day & Zimmerman Munitions and Government Services, Inc. The protocol is based on current U.S. Environmental Protection Agency (EPA) guidance and reflects the input received during our meeting on July 15, 2003 at EPA Region 7.

If you have any questions concerning the protocol, please contact me at (913) 495-3908.

Sincerely,

David Homer, Ph.D.
Project Manager

Enclosure

cc: Shawn A. Howell, Kansas Department of Health and Environment
Ken Herstowski, EPA Region 7
Carolyn Smalley, Day & Zimmerman Munitions and Government Services, Inc.
Eric Morton, Tetra Tech
William Desmond, Tetra Tech
Eric Farstad, Tetra Tech
Joe Lucas, Tetra Tech
Karen Bollinger, Tetra Tech
File

K A N S A S

RODERICK L. BREMBY, SECRETARY — KATHLEEN SEBELIUS, GOVERNOR

DEPARTMENT OF HEALTH AND ENVIRONMENT

MEMORANDUM

TO: Kansas Army Ammunition Plant (KAAP) Green File

FROM: Akhter Hossain

DATE: January 23, 2003

RE: KAAP OB/OD RCRA Permit Application Meeting, January 22, 2003

ATTENDEES: KDHE - Mostafa Kamal, Shawn Howell, Akhter Hossain
DZI-Carolyn Smalley, Dean Cramer

AGENDA:
1. Discuss Requirements for Permit Application Preparation
2. Prepare Schedule for Milestones
3. Schedule Future Meeting to Review Progress

KAAP submitted a RCRA permit application for the OB/OD in 1988; however, the regulations have since changed and a new application must be submitted. Day and Zimmerman, Inc. (DZI) contractor-operator of the Kansas Army Ammunition Plant intended to subcontract the preparation of the OB/OD Part B Permit Application if funding becomes available from the government as a result of this facility's change from inactive to active status. DZI informed KDHE that funding for this effort was not available. DZI will make every effort possible to utilize in-house personnel to develop the application. KDHE asked for outline of the application.

DZI informed KDHE that it might hire the US Army Center for Health Promotion and Preventive Medicine (USACHPPM) to prepare a Health Risk Assessment (HRA) for its OB/OD facilities. The risk assessment will meet the requirements of KDHE and USEPA RCRA Part B permit application. USACHPPM will prepare a human and ecological health risk assessment of KAAP OB/OD based upon the most recent USEPA guidance.

To review the HRA for OB/OD permit application, KDHE will hire a consultant since no in-house expertise on HRA exist. DZI indicated that they will communicate with their upper

management to pay for the consultant's fee. DZI needs to sign a consent agreement with KDHE regarding this matter. KDHE provided a 'sample consent agreement' to DZI.

Milestones for submitting the complete Part B along with HRA for OB/OD facilities did not change. DZI will submit the complete Part B along with HRA by the end of September, 2003. In addition, DZI will submit the outline for the Part B by February 6, 2003.

DAY & ZIMMERMANN, INC.

KANSAS DIVISION

April 25, 2002
EE:DH020017.OB-OD Applic Delay.CDC.doc

RECEIVED
APR 2 6 2002
BUREAU OF WASTE MANAGEMENT

Kansas Department of Health and Environment
Bureau of Waste Management
Hazardous Waste Permits Section
1000 SW Jackson, Suite 320
Topeka, Kansas 66612-1366

Attention: Mr. Shawn Howell, P.E.

Dear Mr. Howell:

Subject: Supporting Information for OB/OD Application Delay at Kansas Army Ammunition Plant

Reference: Kansas Department of Health and Environment (Mr. Howell) letter dated March 26, 2002; subject: OB/OD Permitting Issues, Kansas Army Ammunition Plant – Parsons, EPA I.D. Number KS0213820467

In response to the referenced letter concerning OB/OD permit application delays and supporting documents, Day & Zimmermann, Inc. (DZI) contractor-operator of the Kansas Army Ammunition Plant (KSAAP), hereby offers the following information. As previously reported, DZI intends to subcontract the preparation of the OB/OD Part B permit application if funding becomes available from the government as a result of this facility's change from inactive to active status. However, if funding for this effort is not available, DZI will notify the KDHE of the situation and make every effort possible to utilize in-house personnel to develop the application. This situation would again affect the scheduled timeframe for completion, and these changes would be negotiated with your office. The OB/OD and EWI Milestones chart has been revised to reflect the new schedule (see Attachment I).

The OB grounds encompass approximately 705,000 square feet in surface area and are enclosed by a chain link (F3-6) fence. Warning signs for restricted entry are posted at all entrance locations. The site layout consists of one hazardous waste treatment unit surrounded by a nine-foot-high, horse-shoe-shaped earthen berm. Hazardous wastes are treated by OB in containment pans. The OB consists of thermal treatment utilizing a single-ignition process.

The OD grounds encompass approximately 1,070,900 square feet in surface area. The site layout consists of linear earthen mounds aligned in three east-west oriented rows separated by aisles of sufficient width to allow access by heavy earth-moving equipment. The OD grounds are also separately enclosed by a continuous chain link (F3-6) fence. Warning signs for restricted entry are posted at the entrance location. Reject munitions items, components, and PEP (propellants, explosives and pyrotechnics) materials are treated in this facility. The wastes are placed in pits excavated on the south side of the permanent mounds, covered with dirt, and detonated via an electrical train by a remote operator located in an earthen-protected bunker.

23018 ROOKS ROAD, SUITE A ◆ PARSONS, KANSAS 67357-8403 ◆ 620-421-7400 ◆ FAX 620-421-7518

Subject: Supporting Information for OB/OD Application Delay at Kansas Army Ammunition Plant

After detonations are complete, all scrap metal and other visible residues are removed, and the pits are backfilled and graded to the natural ground elevation.

Types of wastes scheduled for OB include Comp A-5, Comp A-3, Cyclotol, Octol, Comp B, and TNT wet sumpage and sump sludge; scrap Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, and TNT; absorbent materials from cleanup of wastewater spills with those explosives; propellants and propellant charges; and support collars. OD grounds are utilized to treat grenades, detonators, Cyclotol, Comp A-5, M-10 propellant, Lead Azide, Tetracene, lead assemblies, RDX scrap, M55 and booster pellets, lead cups, mixed explosives, expulsion charges, riser scrap, fuzes, warheads, and other explosive components.

Drawings of the OB/OD area have been enclosed to aid in the understanding of these operations (see Attachment 2).

Due to the low level of production activities at KSAAP at this time, the OB/OD grounds are only operated, as the need arises. At the present time these facilities are operated approximately four days per year.

The Standard Operating Procedure (SOP) for the OB operations is #KN-0000-H-002 (see Attachment 3). Also, OD operations are covered by SOP #KN-0000-G-004 (see Attachment 4). Another item associated with these SOPs are the inspection forms that are completed each time an OB/OD event occurs (see Attachment 5). These completed forms are retained in the reference files at KSAAP.

All waste residue generated from the OB operations is drummed, labeled as hazardous waste, and transported to a permitted storage facility in-plant. A sample of the waste is sent to an independent laboratory for analysis to determine if the waste has hazardous characteristics, while another sample is sent to the KSAAP laboratory for reactivity testing. Based on these analytical results, the waste is outshipped for treatment at a permitted treatment facility, or disposed as a non-hazardous waste.

There are currently no endangered species or threatened species located within the KSAAP facility, so this topic of natural resources is not an issue.

Subject: Supporting Information for OB/OD Application Delay at Kansas Army Ammunition Plant

The actual OB/OD Part B permit application addendum will provide all of this information and much more when it is professionally assembled for submittal. If you need additional preliminary information, our point of contact is Dean Cramer, telephone 620-421-7532.

Respectfully,

STEVE KOSMAN for
Director of Engineering

SWK/CJS/dmh

Attachments a/s

cf: Glen Parish
Dean Cramer
Environmental File
Reading File

KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

March 26, 2002

Carolyn J. Smalley
Environmental Engineering Manager
Day & Zimmermann, Inc. - Kansas Division
23018 Rooks Road, Suite A
Parsons, Kansas 67357-8403

RE: OB/OD Permitting Issues
Kansas Army Ammunition Plant - Parsons
EPA I.D. Number KS0213820467

Dear Ms. Smalley:

Thank you for meeting with us on March 20, 2002 to discuss permitting issues with the OB/OD units at the Kansas Army Ammunition Plant (KAAP). Currently, the OB/OD units are in interim status. Day & Zimmermann, Inc. (DZI) had previously submitted a schedule to submit a complete application for these units by October 2002.

It is our understanding that DZI would like to revise the schedule of the application to allow DZI to apply and receive additional funding to obtain a contractor to complete the application. New funding is anticipated since KAAP was recently approved to change its status from inactive to active. Please submit an updated OB/OD and EWI Milestones chart that reflects the new schedule. Also please discuss what course DZI will pursue if the requested funding is not available.

Since the OB/OD permit application will be delayed, the Bureau of Waste Management (BWM) requests that DZI provide detail operational requirements for the OB/OD units. Therefore, please submit the following to aid in BWM's understanding of the current conditions: (1) physical description of the units, (2) description and estimated quantities of the waste treated at the OB/OD units, (3) the Standard Operating Procedures (SOPs) of the units and (4) any other information such as inspection forms, etc. that you believe would be helpful.

If you have any questions, please call me at 785-296-6562.

Sincerely,

Shawn Howell, P.E.
Chief, Operating Facilities Unit
Hazardous Waste Permits Section

cc: David Stutt - DEA/SEDO/Waste Programs
Demetra Salisbury - EPA Region VII - ARTD/RCAP
Ken Herstowski - EPA Region VII - ARTD

DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY OPERATIONS SUPPORT COMMAND
1 ROCK ISLAND ARSENAL
ROCK ISLAND, IL 61299-6000

REPLY TO
ATTENTION OF:

07 MAR 2002

AMSOS-CS (210)

MEMORANDUM FOR All OSC Commanders, Commander's Representatives, Directors and Office Chiefs

SUBJECT: Change in Categories of Previous "Inactive" Army Ammunition Plants (AAPs)

1. The Commanding General of Headquarters, US Army Operations Support Command, has approved the change in categories for six Inactive AAPs to Active and Semi-active. Four of the plants, Kansas, Riverbank, Scranton, and Twin Cities, were changed to Active. The remaining two, Louisiana and Mississippi, were changed to Semi-active.

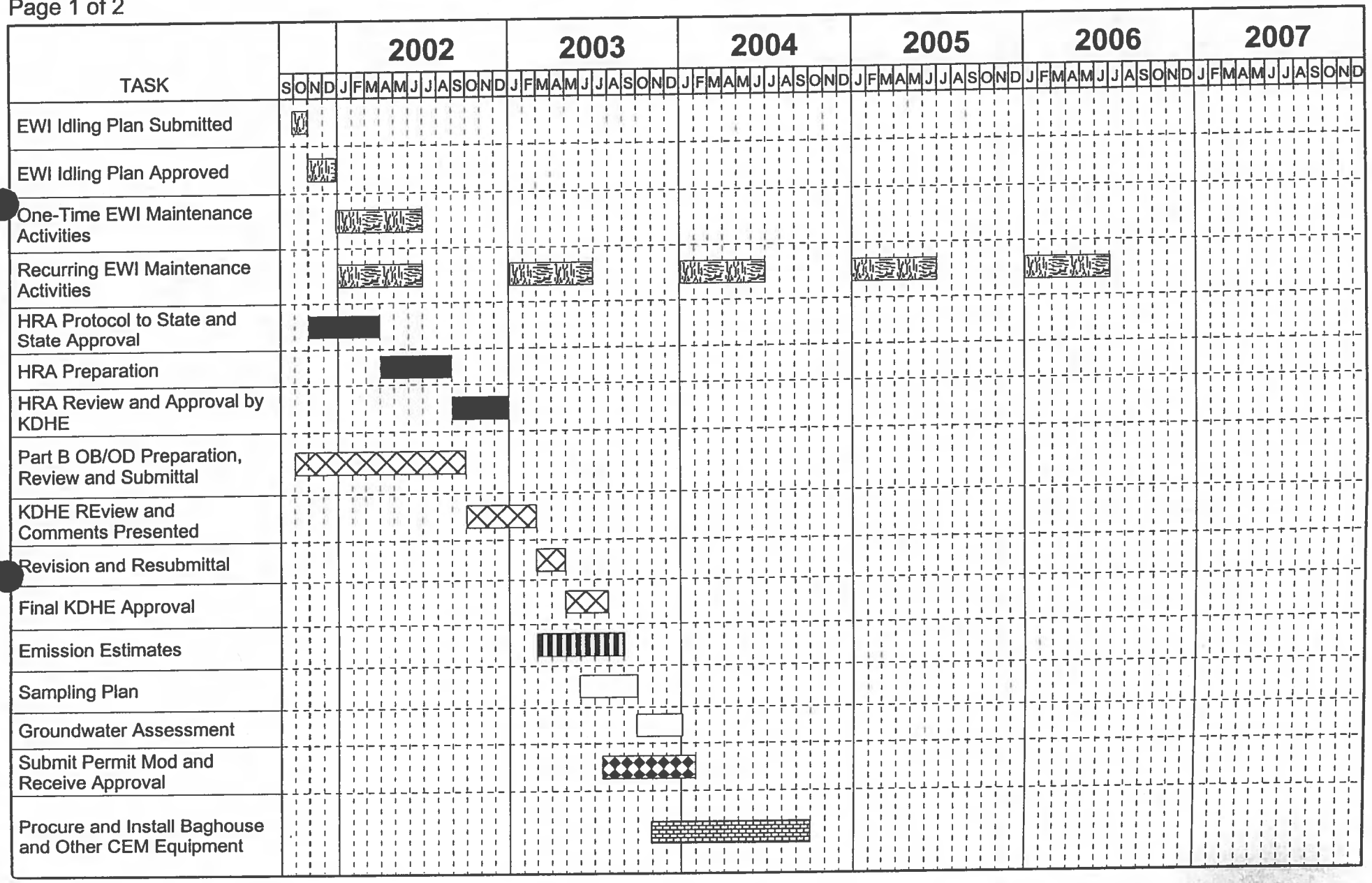
2. This information is furnished for your awareness and future use. The staff is working on the mechanics of instituting these changes. This is only the first step in changing the categories of the six "Inactive" AAPs. A request for change must be staffed and approved by AMC and HQDA. Permanent Orders will be requested. The six subject AAPs will remain under command and control of the Infrastructure Management Directorate and the Site Management Division for the immediate future.

3. The POC is Mr. C. A. (Chuck) Bean, AMSOS-ISM, DSN 793-4302, commercial (309) 782-4302, e-mail beanc@osc.army.mil.

C. R. HOBBY
Colonel, GS
Chief of Staff

KSAAP OB/OD and EWI MACT
Milestones

10/29/01



KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

December 18, 2001

Source ID No. 0990010

Mr. Steve Kosman, Director of Engineering
Day & Zimmerman, Inc.
23018 Rooks Road, Suite A
Parsons, KS 67357-8403

RE: Approval for Open Burning Exemption at Kansas Army Ammunition Plant (KAAP)

Dear Mr. Kosman:

On December 13, 2001, the Kansas Department of Health and Environment (KDHE) received your request to perform open burning of explosive hazardous wastes at the Kansas Army Ammunition Plant (KAAP) near Parsons, Kansas. Specifically, the request lists the following six waste streams generated at KAAP, to be burned as needed during calendar year 2002:

1. Comp A-5 and A-3 Wet Sumpage and Sump Sludge
2. Cyclotol, Octol, Comp B, and TNT Wet Sumpage and Sump Sludge
3. Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, and TNT scrap
4. Absorbent Materials from Cleanup of Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX, and TNT Wastewater Spills
5. Propellants and Propellant Charges
6. Support Collars

The information provided in the request letter from Day & Zimmerman, Inc. meets the requirements of K.A.R. 28-19-647(d). Therefore, pursuant to K.A.R. 28-19-647(b), KDHE hereby approves the open burning of these explosive hazardous wastes, provided KAAP conducts the burning in accordance with all applicable hazardous waste regulations. (Information regarding the appropriate proper treatment and/or disposal of hazardous wastes may be obtained from Shawn Howell, KDHE/Bureau of Waste Management, 785-296-6562.)

1000 SW Jackson, Suite 310
(785) 296-1570
Topeka, KS 66612-1366
FAX (785) 291-3953

This approval applies only to the wastes listed above; KAAP must request a separate approval to burn other types of waste, or wastes from off-site. KAAP must conduct all open burning in accordance with the provisions of K.A.R. 28-19-647(e).

KDHE appreciates your cooperation. If you have any questions regarding this letter, please contact me at 785-296-1581.

Sincerely,

Scott Nightingale
Air Operating Permit & Compliance Section
Bureau of Air and Radiation

SN:saw
c: C. Dean Cramer, DZI
c: Shawn Howell, KDHE/BWM ✓
c: Lynelle Stranghoner, KDHE/SEDO
c: Vick Cooper, KDHE/BAR

DAY & ZIMMERMANN, INC.

KANSAS DIVISION

November 1, 2001
EE:DH010053.Mod to Test Range.CJS.doc

Mostafa Kamal
Permit Unit Chief
Hazardous Waste Section
Kansas Department of Health and Environment
Topeka, Kansas 66620

Dear Mr. Kamal:

Subject: Modifications to 2700 Area Test Range at Kansas Army Ammunition Plant (KSAAP)

A copy of the modifications being made to the Test Range in the 2700 Area at KSAAP is enclosed for your files. The Test Area is located immediately north of the Open Detonation (OD) Grounds at KSAAP.

As discussed in earlier telephone conversations with Carolyn Smalley, the existing Test Range berm was extended south toward the OD Grounds. The OD Grounds fence will be located atop the new berm material and the back slope of the new berm will extend inside the OD facility fence. Dirt used in the berm construction will remain on the respective side of its origin; thus, eliminating new contamination on either side of the facility fence. A temporary fence is being constructed in order to maintain the integrity of the barrier to the OD Grounds during construction efforts. Completion of construction by November 22, 2001 is anticipated.

If you have any questions concerning this matter, please feel free to contact Carolyn J. Smalley, Environmental Engineering Manager, at 620-421-7434.

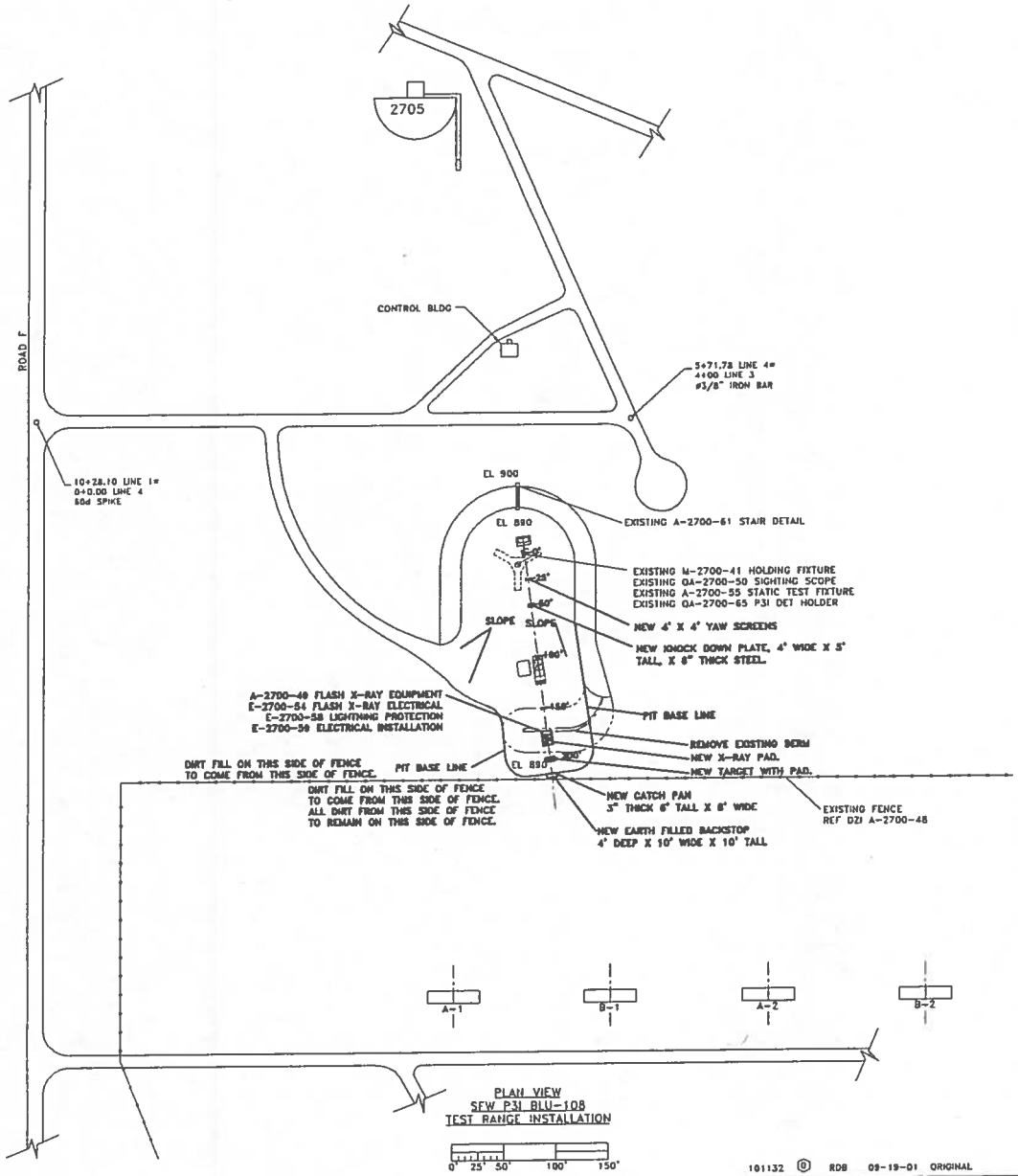
Respectfully,

STEVE KOSMAN
Director of Engineering

SWK/CJS/dmh

Enclosure a/s

23018 ROOKS ROAD, SUITE A ◆ PARSONS, KANSAS 67357-8403 ◆ 620-421-7400 ◆ FAX 620-421-7518



PLAN VIEW
SFW P3I BLU-108
TEST RANGE INSTALLATION

0' 25' 50' 100' 150'
GRAPHIC SCALE
1"=50'

DZI REF DRAWINGS
A-2700-12 AREA LAYOUT
A-2700-24 SAFETY SITE FOR SFW & CEM
A-2700-25 UNDERGROUND UTILITIES
A-2700-57 SAFETY SUBMISSION FOR SFW

NOTES;
1. SLOPE FROM PIT BASELINE TO BE 2" HORZ TO 1" VERTICAL TO EXISTING GRADE.
2. ALL NEW CONST ON PIT BASE SHALL BE COVERED WITH 4" MIN OF BASE ROCK ON COMPACTED CLAY AND TOP DRESSED WITH 4" MIN OF AB-3.
3. BERM TO BE 10' HEIGHT MIN FROM BASE OF PIT WITH A SLOPE OF 2" HORZ TO 1" VERTICAL.
4. EXISTING BERM TO BE REMOVED IS SHOWN IN PHANTOM LINE FOR REFERENCE ONLY.
5. AT 5' EITHER SIDE OF C-L OF FLIGHT, PITCH GRADE TO OUTSIDE PERIMETER OF BERM, NOT TO EXCEED 1/2" PER FOOT TO PIT BASE LINE
6. ALL DIRT SOUTH OF FENCE LINE MUST REMAIN INSIDE SOUTH SIDE OF FENCE LINE
7. ALL DISTURBED SOIL NOT IN PIT BASE SHALL BE COVERED WITH A MIN OF 4" OF TOP SOIL, GRADED, FERTILIZED AND SEEDED WITH FESCUE GRASS, WITH THE EXCEPTION OF SOIL SOUTH OF FENCE LINE.

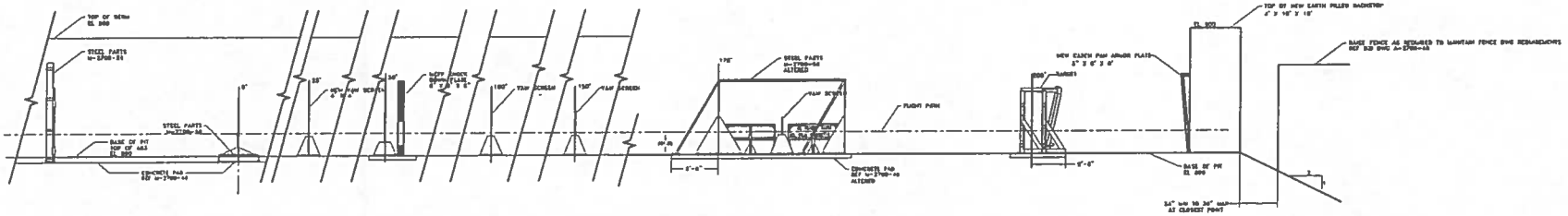
FOR INFORMATION ONLY

101132 B RDB 09-19-01 ORIGINAL

2700 AREA LAYOUT
FOR SFW
200 FOOT TEST RANGE

2700 NOTED

1 2 A-2700-66



ELEVATION VIEW
SFW P3I BLU-108
TEST RANGE INSTALLATION
EXISTING TARGET PAD OMITTED FOR CLARITY
SCALE: 1/4"=1'-0"
SEE SHT 1 FOR NOTES

GRAPHIC SCALE

FOR INFORMATION ONLY

2700 AREA LAYOUT
FOR SFW
200 FOOT TEST RANGE

2700 NOTED

2 2 A-2700-66

KDHE - BUREAU OF WASTE

CONVERSATION RECORD		DATE / TIME: November 6, 2001
TYPE: [ ] OFFICE [√] TELEPHONE [ ] CONFERENCE [ ] INCOMING ? [ ] FIELD [ ] OUTGOING		TELEPHONE NUMBER: 620-421-7434
PERSON(S) CONTACTED: Carolyn Smalley	NAME OF ORGANIZATION: KAAP	RCRA PERMIT NUMBER:

SUBJECT:

Modifications to northern fence line of Open Demolition (OD) area

SUMMARY:

KAAP is adding a berm to the test range in the 2700 area. The berm will have a 2:1 slope that will extend into the OD area. The size of the OD area will not change, only the elevation of the fence. The fill material for the berm on the OD side fo the fence will be collected from the OD area. The dirt will be scraped off the surface to avoid any areas that water will pond.

Ms. Smalley does not believe this modification affects any of the maps or sections in the Part B application.

ACTION REQUIRED:

None

PERSON DOCUMENTING CONVERSATION:	SIGNATURE:	DATE:
Shawn Howell	Shawn A Howell	November 6, 2001

C - File

DAY & ZIMMERMANN, INC.

KANSAS DIVISION

RECEIVED
OCT 2001
BUREAU OF WASTE MANAGEMENT

October 29, 2001
EE:DH010064.Idling Plan for EWI.CDC.doc

Kansas Department of Health and Environment
Division of Environment
Bureau of Waste Management
Hazardous Waste Permits Section
1000 SW Jackson
Topeka, Kansas 66612-1366

Attention: Mr. Shawn Howell, P.E.

Dear Mr. Howell:

Subject: Submittal of the Kansas Army Ammunition Plant (KSAAP) Idling Plan for the Explosive Waste Incinerator (EWI)

Reference: Kansas Department of Health and Environment (Mr. Howell) letter dated July 18, 2001; subject: EWI and OB/OD Permitting Issues, Kansas Army Ammunition Plant – Parsons, EPA ID Number KS0213820467

Day & Zimmermann, Inc. (DZI), Kansas Division, contractor-operator of the Kansas Army Ammunition Plant (KSAAP), has prepared and is hereby submitting an idling plan (Enclosure 1) for the KSAAP Explosive Waste Incinerator (EWI) as requested in the referenced letter. KDHE approval of this plan will enable DZI to idle the present EWI facilities until future demilitarization contracts become available, thus postponing the requirements for meeting the new Maximum Achievable Control Technology (MACT) standards recently promulgated until the facility is ready for operation.

The KSAAP EWI will initially comply with the MACT standards by not burning hazardous waste in the incinerator. A task chart is included in the idling plan to reflect the timeframe anticipated for the supporting activities leading to compliance with MACT.

Also submitted is a general milestone chart (Enclosure II) that reflects proposed activities and timeframes for compliance with MACT and OB/OD Part B permit submittal for inclusion with the original Part B permit renewal application. This OB/OD submittal will enable the KDHE to include all KSAAP RCRA facilities under one permit.

23018 ROOKS ROAD, SUITE A ◆ PARSONS, KANSAS 67357-8403 ◆ 620-421-7400 ◆ FAX 620-421-7518

epartment of Health and Environment
of Environment
.ion: Mr. Shawn Howell, P.E.
ge 2
ctober 29, 2001
ÉE:DH010064.Idling Plan for EWI.CDC.doc

Subject: Submittal of the Kansas Army Ammunition Plant (KSAAP) Idling Plan for the Explosive Waste Incinerator (EWI)

If you have any questions concerning this submittal, our point of contact is Dean Cramer, telephone 620-421-7532. Your cooperation and assistance in this matter are greatly appreciated.

Respectfully,

STEVE KOSMAN
Director of Engineering

SWK/CJS/dmh

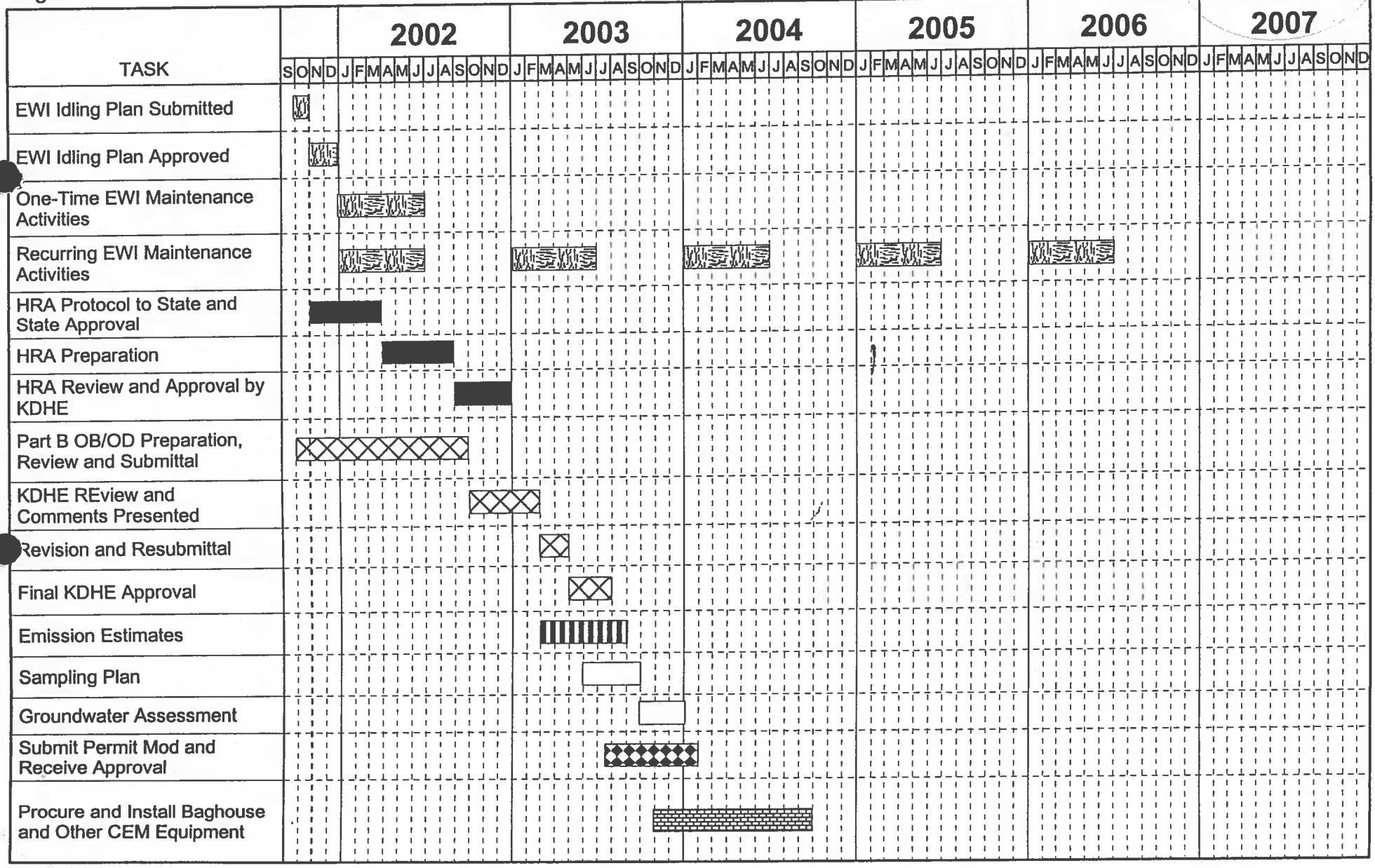
Enclosures a/s

cf: Glen Parish – ACO
Dean Cramer – DZI
Reading File
Environmental Engineering File

23018 ROOKS ROAD, SUITE A ◆ PARSONS, KANSAS 67357-8403 ◆ 620-421-7400 ◆ FAX 620-421-7518

KSAAP OB/OD and EWI MACT
Milestones

10/29/01



SIOKS-EO (200-1d) 17 October 2001

MEMORANDUM FOR Commander, HQ, U.S. Operations Support Command
ATTN: SOSMA-ISE-R/R. Whelove, Rock Island, IL
61299-6000

SUBJECT: Restoration Advisory Board Survey

1. Enclosure provides results from subject survey conducted 25 August - 30 September 2001. Kansas AAP has determined that there is not sufficient interest to form a Restoration Advisory Board at this time.

2. The POC is Glen Parish, SIOKS-EO, DSN 956-1596

ORIGINAL SIGNED BY

Glen Parish
Environmental Office

Enclosure

Copy Furnished:

EPA Region VII/ Ken Herstowski
✓KDHE/ Mostafa Kamal

SUMMARY
OF
RESTORATION ADVISORY BOARD
COMMUNITY CONCERNS
AND
PARTICIPATION INTEREST

Day & Zimmermann, Inc., using procedures outlined in the U.S. Army Restoration Advisory Board and Technical Assistance for Public Participation Guidance document, placed a Publication Notice in the Parsons Sun, a daily newspaper printed in Parsons, Kansas. The Notice was published on August 25, 2001. A copy of the Notice is attached (Attachment 1).

The Notice provided information about the purpose of a Restoration Advisory Board (RAB) and Kansas Army Ammunition Plant's (KSAAP) intent to determine the level of public interest in forming such a board. The Notice also provided information on how a copy of the Community Concerns and Participation Survey form could be acquired. A copy of the Survey is attached (Attachment 2).

Copies of the Survey forms were placed in the Parsons Public Library and also mailed to all individuals on the KSAAP Notification List. Copies of the Restoration Advisory Board Fact Sheet were also provided at the library and in the Notification List mailings. A copy of the RAB Fact Sheet is attached (Attachment 3).

Three completed Survey forms were returned to KSAAP. A copy of each returned Survey is attached (Attachments 4-6).

This was a re-evaluation of public interest in an RAB at KSAAP. The original survey was conducted in April 1997 and a re-evaluation was performed in June 1999. Those surveys indicated no significant public interest, and so the procedures outlined in the Army guidance document were followed. The guidelines establish that a re-evaluation should take place every two years.

DAY & ZIMMERMANN, INC.

KANSAS DIVISION

September 26, 2001
EE:DH010059.CDC

Kansas Department of Health and Environment
Bureau of Waste Management
Hazardous Waste Permits Section
Forbes Field, Building 740
Topeka, Kansas 66620-0001

Attention: Mr. Shawn Howell

Dear Mr. Howell:

Subject: Revised Schedule for Submittal of OB/OD and EWI MACT Milestones and EWI Idling Plan for Kansas Army Ammunition Plant (KSAAP)

Reference: Kansas Department of Health and Environment (Mr. Howell) letter dated July 18, 2001; subject: EWI and OB/OD Permitting Issues, Kansas Army Ammunition Plant – Parsons, EPA I.D. Number KS0213820467

Due to increased demands on personnel at the Kansas Army Ammunition Plant (KSAAP) as a result of increased security following the events in New York City and Washington, DC, the idling plan and milestone schedule have not been finalized. Per telephone conversations between yourself and Dean Cramer (DZI), these items will be completed and submitted to your department by October 30, 2001.

This additional thirty days will allow for proper completion of the plan and schedule. If you have any questions concerning this activity, our point of contact is Dean Cramer, telephone 620-421-7532. We appreciate your understanding and cooperation in this matter.

Respectfully,

STEVE KOSMAN
Director of Engineering

SWK/CJS/dmh

cf: Dean Cramer – DZI
Glen Parish – ACO
Environmental Engineering File
Reading File

23018 ROOKS ROAD, SUITE A ◆ PARSONS, KANSAS 67357-8403 ◆ 620-421-7400 ◆ FAX 620-421-7518

DAY & ZIMMERMANN, INC.

KANSAS DIVISION

August 30, 2001
EE DH010057 CDC Revised NIC doc

Kansas Department of Health and Environment
Division of Environment
Bureau of Waste Management
Hazardous Waste Permits Section
Forbes Field, Bldg. 740
Topeka, Kansas 66620-0001

Attention: Mr. Shawn Howell, P.E.

Dear Mr. Howell:

Subject: Submittal of Revised NIC for the Kansas Army Ammunition Plant (KSAAP) and MACT Compliance Progress Report

Reference: Kansas Department of Health and Environment (Mr. Howell) letter dated July 18, 2001; subject: EWI and OB/OD Permitting Issues, Kansas Army Ammunition Plant – Parsons, EPA I.D. Number KS0213820467

Attached for your review is a revised final Notice of Intent to Comply (NIC) with MACT standards for the Explosive Waste Incinerator (EWI) operations at the Kansas Army Ammunition Plant (KSAAP). The revised NIC has been prepared to reflect revised milestone dates for KSAAP's compliance activities. KSAAP will initially comply with the MACT by not burning hazardous waste in the incinerator.

Also attached for your review is KSAAP's MACT compliance progress report. Copies of this progress report and the revised NIC will be delivered to the Parsons Public Library to make them available for public review.

The schedule for Open Burn/Open Detonation (OB/OD) permitting requirements will be submitted to your office by September 30, 2001, along with the idling plan for the EWI. Projected completion dates for the required plans, assessments, and estimates are currently being assembled at this time.

If you have any questions concerning this information, our point of contact is Dean Cramer, telephone 620-421-7532.

Respectfully,

Steve Kosman

STEVE KOSMAN
Director of Engineering

SWK/CJS/dmh

Attachments a/s

cf: Glen Parish (ACO)
Dean Cramer
Environmental Engineering File
Reading File

23018 ROOKS ROAD, SUITE A ◆ PARSONS, KANSAS 67357-8403 ◆ 620-421-[redacted] ◆ FAX 620-421-7518

Green

KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

July 18, 2001

Certified Mail No. 7000 0520 0022 9118 0865
Return Receipt Requested

Carolyn J. Smalley
Environmental Engineering Manager
Day & Zimmermann, Inc. - Kansas Division
23018 Rooks Road
Parsons, Kansas 67357-8403

RE: EWI and OB/OD Permitting Issues
Kansas Army Ammunition Plant - Parsons
EPA I.D. Number KS0213820467

Dear Ms. Smalley:

Representatives of the Kansas Army Ammunition Plant (KAAP), the Bureau of Waste Management (BWM) and the Bureau of Air and Radiation (BAR) met on June 19, 2001. The topics discussed were the RCRA permit renewal, idling the EWI and MACT compliance issues.

RCRA Permit Renewal

The Bureau of Waste Management has received the Part B application dated March 2001 covering the Explosive Waste Incinerator (EWI) and the storage units at the facility. The application is currently being reviewed. The application does not include the required information on the Open Burning / Open Detonation (OB/OD) area.

KAAP submitted a RCRA permit application for the OB/OD unit in November 1988; however, there have been significant regulatory changes since then. Therefore, KAAP is required to submit a new application for this unit. The permit application must include the general application requirements of 40 CFR 270.14, the permit application requirements of 40 CFR 270.32 and a risk assessment protocol & sampling plan. BWM is expecting a schedule from KAAP to complete the Part B. If desired, the schedule can be itemized by key dates for completing the Part B application, preparing the emission estimate, designing the risk assessment protocol & sampling plan, ground water assessment and other relevant

milestones. A checklist for the technical review of Subpart X units (which includes OB/OD areas) is attached to assist KAAP in the development of the Part B permit application.

EWI Idling Plan and MACT Compliance

KAAP last operated the Explosive Waste Incinerator (EWI) in December 1999 and does not intend to operate the EWI until demil business is available, projected to be in 2007. In order for KAAP to idle the EWI, an approved idling plan must be in place. The plan must include procedures for shut-down and start-up, maintenance plan during the idling period, record keeping requirements, personnel responsibilities and closure of the unit. The idling plan's closure section may mirror the EWI section of the closure plan in the Part B application. KDHE will not allow the EWI to idle indefinitely; therefore, the idling plan must specify a date that the facility will begin closure of the incinerator. The idling plan must be submitted by September 30, 2001 and will be integrated to the facility's Part B RCRA application.

The Maximum Achievable Control Technology (MACT) standards for Hazardous Waste Combustors apply to the EWI. The facility plans on upgrading the EWI and meeting the MACT standards prior to burning hazardous waste, but not before the MACT compliance date for existing sources. Since this schedule is significantly different than the schedule proposed with the Notice of Intent to Comply (NIC), KAAP is required to revise the NIC per 40 CFR 1210(b)(1)(ii). The revised NIC shall also reflect any changes KAAP has made to their plans on complying with the MACT. KAAP should specify that the facility will initially comply with the MACT by not burning hazardous waste in the incinerator. Please submit the revised NIC by August 30, 2001. Since the first MACT compliance progress report is due October 1, 2001, the revised NIC and the progress report can be combined. The submission must then meet the progress report requirements of 40 CFR 63.1211(b). Both documents must be made available for public review.

Since KAAP will not be operating the EWI until after the effective date of the HWC MACT (September 30, 2002), the performance test may be postponed per 40 CFR 63.7(a)(2)(iii). Hazardous waste shall not be placed in the EWI prior to a successful performance test except for the purposes of pretesting or performance testing per 40 CFR 63.1206(b)(5)(i)(C) and the performance test plan. This startup/shakedown period may not exceed 720 hours, including the performance test. The facility may receive an additional 720 hours, if approved by KDHE, but KAAP must conduct the performance test within 180 days after startup.

The MACT requires a comprehensive performance test (CPT) plan be submitted one year prior to the scheduled performance test. If the incinerator were not idling, the compliance date for submitting the CPT plan would be March 29, 2002. Nevertheless, KAAP and KDHE agreed to schedule the submission date for the plan to be the midway point between now and the scheduled performance date. Therefore, KAAP must submit the CPT plan no later than March 29, 2004. The required content of the

plan is outlined in 40 CFR 1207(f). In addition, KAAP must have an approved risk assessment protocol and sampling plan prior to startup.

Timing may be critical when the decision is made to restart the EWI. KDHE has successfully used contractors when needed in the past to aid in reviewing documents and providing on-site support in similar time-critical situations. An agreement can be worked out now so lengthy delays may be avoided.

If you have any questions, please call me at 785-296-6562.

Sincerely,

Shawn Howell

Shawn Howell, P.E.
Chief, Operating Facilities Unit
Hazardous Waste Permits Section

Enclosure

cc: Julie Coleman - DEA/NEDO/Waste Programs
Gayle Hubert - EPA Region VII - ARTD/RCAP
Ken Herstowski - EPA Region VII - ARTD
Gary Miller - KDHE/BAR

KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

May 16, 2001

Mr. Steve Kosman, Director of Engineering
Day & Zimmerman, Inc.
23018 Rooks Road, Suite A
Parsons, KS 67357-8403

Source I.D. No. 0990010

RE: Approval for Open Burning Exemption, Kansas Army Ammunition Plant (KAAP)

Dear Mr. Kosman:

The Kansas Department of Health and Environment (KDHE) has received your request to perform open burning of explosive hazardous wastes at the Kansas Army Ammunition Plant (KAAP) near Parsons, Kansas. Specifically, the request lists the following six wastes, all generated at KAAP, to be burned as needed during calendar year 2001:

1. Comp A-5 and A-3 Wet Sumpage and Sump Sludge
2. Cyclotol, Octol, Comp B, and TNT Wet Sumpage and Sump Sludge
3. Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, and TNT scrap
4. Absorbent Materials from Cleanup of Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX, and TNT Wastewater Spills
5. Propellants and Propellant Charges
6. Support Collars

The information provided in the request letter from Day & Zimmerman, Inc. meets the requirements of K.A.R. 28-19-647(d). Therefore, pursuant to K.A.R. 28-19-647(b), KDHE hereby approves the open burning of these explosive hazardous wastes, provided KAAP conducts the burning in accordance with all applicable hazardous waste regulations. (Information regarding the appropriate proper treatment and/or disposal of hazardous wastes may be obtained from Shawn Howell, KDHE/Bureau of Waste Management, 785-296-6562.)

This approval applies only to the wastes listed above; KAAP must request a separate approval to burn other types of waste, or wastes from off-site. KAAP must conduct all open burning in accordance with the provisions of K.A.R. 28-19-647(e).

Division of Environment
Bureau of Air and Radiation
Air and Asbestos Compliance Section
(785) 296-1550

Forbes Field, Bldg, 283
Topeka, KS 66620-0001
FAX (785) 296-1545

DAY & ZIMMERMANN, INC.

KANSAS DIVISION

April 18, 2001
EE:RW010033.CDC

Kansas Department of Health and Environment
Bureau of Air & Radiation
Air Compliance and Planning Section
Forbes Field - Building 283
Topeka, Kansas 66620
ATTN: Scott Nightingale

Dear Mr. Nightingale:

Subject: Open Burning Exemption Request

Enclosed is a Request of Open Burning Exemption for Explosive Hazardous Waste for Kansas Army Ammunition Plant for calendar year 2001. The request was prepared in accordance with Kansas Air Regulation 28-19-47(c). Your consideration in approving this request will be appreciated.

Please contact Dean Cramer, (620) 421-7532, if you have any questions regarding this request.

Respectfully,

Steve Kosman

STEVE W. KOSMAN
Director of Engineering

SWK/CJS/raw

Enclosure a/s

cf: Glen Parish - ACO
C. Dean Cramer - DZI
Environmental File
Reading File

23018 ROOKS ROAD, SUITE A ◆ PARSONS, KANSAS 67357-8403 ◆ 620-421-7400 ◆ FAX 620-421-7518

REQUEST FOR
OPEN BURNING EXEMPTION
FOR REACTIVE (EXPLOSIVE) HAZARDOUS WASTE

1. **Name, address, and telephone number of the person responsible for open burning operations.**

Owner: Donald D. Dailey
Commander's Representative
Kansas Army Ammunition Plant
Parsons, Kansas 67357
(316) 421-7449

Operator: Willard L. Shinn II
General Manager
Day & Zimmermann, Inc.
Kansas Division
Parsons, Kansas 67357
(316) 421-7473

2. **Location and type of open burning operation involved.**

All open burning operations will be conducted on Pad No. 5 of the Kansas Army Ammunition Plant's (KSAAP's) Open Burning Area to thermally treat explosive hazardous wastes with the potential to detonate.

3. **Reason why the proposed operation is in the public interest and no alternative method is feasible.**

With exception of the propellants, all of the following explosive hazardous wastes contain high explosives with the potential to detonate. The majority of the wastes are of such sensitivity that strict safety measures must be maintained at all times to ensure that the explosives remain damp or in liquid to prevent uncontrolled detonations from occurring. Propellants that are of no further use require treatment before they deteriorate to the condition that they become a safety concern. Only KSAAP personnel that have been trained in proper management procedures, i.e. transportation, storage, and thermal treatment of explosive, are allowed to handle these wastes. In addition, KSAAP has emergency response and disaster control plans that will be placed into effect in the event that an incident involving these items occurs on site. Open burning of these explosive wastes at KSAAP, under strict control procedures, will be in the public's best interest. Each open burning operation will involve the use of eight burning pans. No more than 150 pounds of explosive hazardous waste will be open burned in each pan at one time. It is essential to keep the quantities of unstable explosives handled to a minimum. The effects of incidents involving large quantities of unstable explosives cannot be accurately predicted.

No alternative method of management for these wastes is feasible. KSAAP's explosive waste incinerator is not capable of injecting semi-solid wastes into the rotary kiln. Outshipment of the explosive hazardous wastes is unfeasible due to lack of adequate treatment facilities operated by other Army installations or commercial vendors.

4. **Description of the open burning operation including the estimated amount and nature of material to be burned each time; the proposed frequency, duration, and schedule of such burning; the size of the area to which the burning will be confined; and the method of igniting the material.**

KSAAP requests an exemption to open burn, daily as weather conditions permit and quantities dictate, explosive hazardous waste twice per day. All open burning operations will be conducted on weekdays only in 16 elevated burning pans located on Pad No. 5 of KSAAP's Burning Grounds Area. The burning pans measure approximately 4' x 4' x 1' and the pad measures approximately 100' x 300'. Pad No. 5 is located in the middle east portion of the installation (see enclosed drawing). Eight of the pans will be utilized to burn waste in the morning and the remaining eight pans will be utilized in the afternoon. Hazardous waste inspections will be performed daily as the area is utilized to ensure that no wastes are released during open burning operations. Copies of the inspection reports will be maintained in the Environmental Engineering Office for review.

As mandated by KSAAP's Standing Operating Procedures (SOP) and Technical Programs for open burning operations, no more than 150 pounds of explosive hazardous waste will be placed in each burning pan. The maximum quantity of explosive hazardous waste that will be burned each day will be 2,400 pounds. Approximate burn times for KSAAP's explosive hazardous waste range from 30 minutes to four hours which includes smoldering time. The majority of KSAAP's explosive hazardous waste will burn within 30 minutes of ignition.

To ignite and burn the waste, the following procedures will be conducted. One or two wooden pallets will be placed in the bottom of each burn pan and wooden dunnage will be placed around the edges of each pan. The waste to be open burned will be placed on top of the wooden pallet(s). Excelsior will be placed over the waste and used to form an ignition train from the waste to the lid of the pan which will be placed upside down on the ground adjacent to the pan. Wooden dunnage will be placed on top of the excelsior inside the pan. An electrical match with a four-ounce explosive charge will be inserted in the train of excelsior located in the pan lid. The match will be connected to an electrical wire attached to an ignition control box located approximately 500 yards from the burning pad. All personnel will be evacuated from the burning pad area and the burn initiated from the ignition control box.

Descriptions of the nature of the explosive hazardous waste that will be open burned are as follows:

Comp A-5 and A-3 Wet Sumpage and Sump Sludge - Wastewater that contains Comp A-5 explosive and is generated from washdown on the 300 Area Production Line facilities is transferred to collection sumps prior to being pumped to a holding tank for treatment through a diatomaceous earth filter and carbon columns. Wire baskets lined with cheesecloth are positioned on the influent side of the collection sumps to remove solids from the wastewater prior to its entry into the sumps. The solids removed from the wastewater are normally comprised of large particles of explosives, but may contain small metal fragments from component parts of the grenades produced on the 300 Line. The wet sumpage may also contain small amounts of lint and dirt from employee's clothes and shoes. The typical appearance of the Comp A-5 wet sumpage is that

of wet (damp) grayish clay. The Comp A-5 wet sumpage and cheesecloth are removed from the wire baskets at least once a week, but may be removed more often depending on production schedules. The Comp A-5 wet sumpage is packaged and managed as high explosive hazardous waste with the potential to detonate. Additional explosive solids (sump sludge) may accumulate in the bottom of the sumps. When the sump sludge has accumulated to a depth dictated by safety, it is removed, packaged, and managed as high explosive hazardous waste with the potential to detonate. The Comp A-3 is generated from washdown operations from production of some munitions in the 700 Area. The wastewater is then transported to the 300 Area for treatment through the diatomaceous earth filter and carbon columns, also.

Cyclotol, Octol, Comp B, and TNT Wet Sumpage and Sump Sludge - Wastewater that contains Cyclotol, Octol, Comp B, or TNT explosive is generated from building washdown and bomb body sumpout procedures conducted on the 900 and/or 1100 Area Production Line. The wastewater flows through a settling area to remove the larger solid particles of explosives. The solids collected in the settling area are designated as wet sumpage which has the normal appearance of wet reddish brown clay. The major components of wet sumpage is Cyclotol, Octol, Comp B, or TNT, but it may contain metal parts and lint/dirt from employee's clothes/shoes generated during washdown of the facilities. The wet sumpage is removed form the settling area, packaged, and managed as high explosive hazardous waste with the potential to detonate.

The wastewater then flows into sumps which are used for additional removal of explosive solids (sump sludge). When the sump sludge has accumulated to a depth dictated by safety, it is removed, packaged, and managed as high explosive hazardous waste with the potential to detonate.

Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, and TNT Scrap - Scrap high explosives are generated from floor sweeping and vacuum operations conducted in the 300, 700, 900, and 1100 Production Line facilities. The main component of the floor sweepings is explosive, but they may also contain small metal parts such as lead cups and lint/dirt from employee's clothing/shoes. Small quantities of bulk waste high explosives are generated when the explosives are rejected for use due to quality analyses performed by the KSAAP Chemistry Laboratory. When generated, floor sweepings, vacuum wastes, and bulk explosive are packaged and managed as high explosive hazardous waste with the potential to detonate.

Absorbent Materials from Cleanup of Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX, and TNT Wastewater Spills - In the event of a spill of wastewater contaminated with Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX, and/or TNT, hay, straw, and/or other types of absorbent material is used to soak up the spill. The used hay, straw, or absorbent is then placed in drums and managed as high explosive hazardous waste with the potential to detonate.

Propellants and Propellant Charges - Waste propellants and propellant charges are generated when the propellants are rejected for use due to quality analyses performed by the KSAAP Chemistry Laboratory or upon receipt of orders from the Department of the Army stipulating that the propellants be

thermally treated. Waste propellant and propellant charges are packaged and managed as propellant explosive hazardous waste with the potential to detonate. If any of the propellant charges contain a bag lined with lead foil, the bag will be detached and opened to allow the propellant to be poured into a receptacle. The container of propellant will be managed as propellant explosive hazardous waste with the potential to detonate. The bag lined with lead foil will be placed in a separate receptacle and managed as hazardous waste until TCLP analyses can be performed.

Support Collars - Waste support collars are generated when rejected from use due to their inability to meet production specifications. The support collars consist of a plastic collar containing an M55 Stab Detonator. The reject support collars are managed as hazardous waste due to the ability of the M55 Stab Detonator to detonate.

Three layers of the explosive support collars will be placed in each pan with diesel fuel and wood used to initiate and maintain the combustion necessary to complete the treatment process. The amount of diesel fuel will be minimized to the amount possible. The maximum number of support collars placed in each burn pan will be 720.

5. **Sketch indicating the location of the open burning with respect to all public roadways and dwellings within 1,500 feet or less of the proposed operations, and the names and mailing addresses of all heads of households occupying such dwellings.**

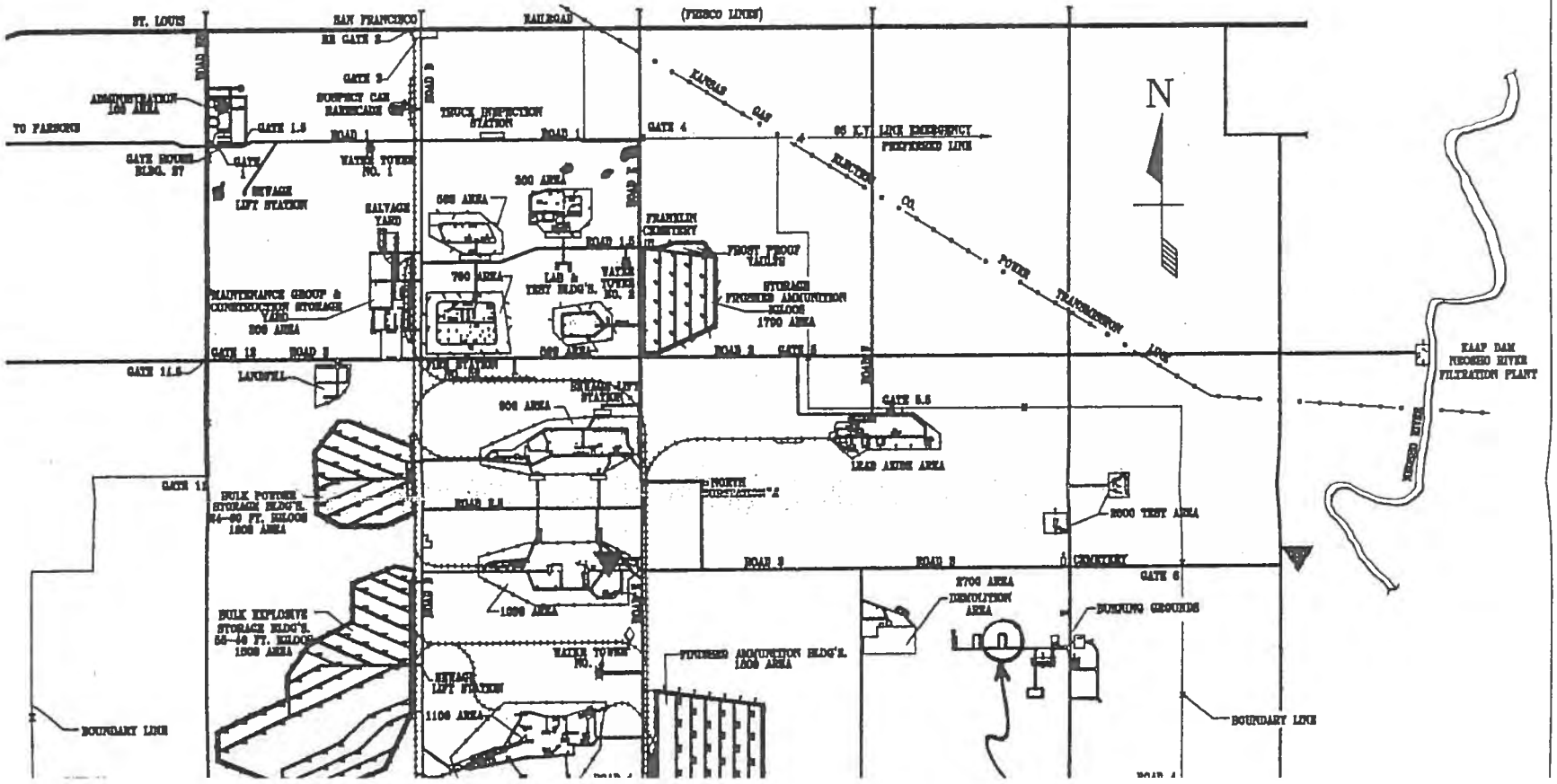
A drawing annotated in red to reflect the location of KSAAP's Open Burning Pad No. 5 is enclosed. The burning pad is located approximately 3,500 feet from the nearest boundary of KSAAP. Therefore, no public roadways and/or dwellings are located within 1,500 feet of the proposed operations.

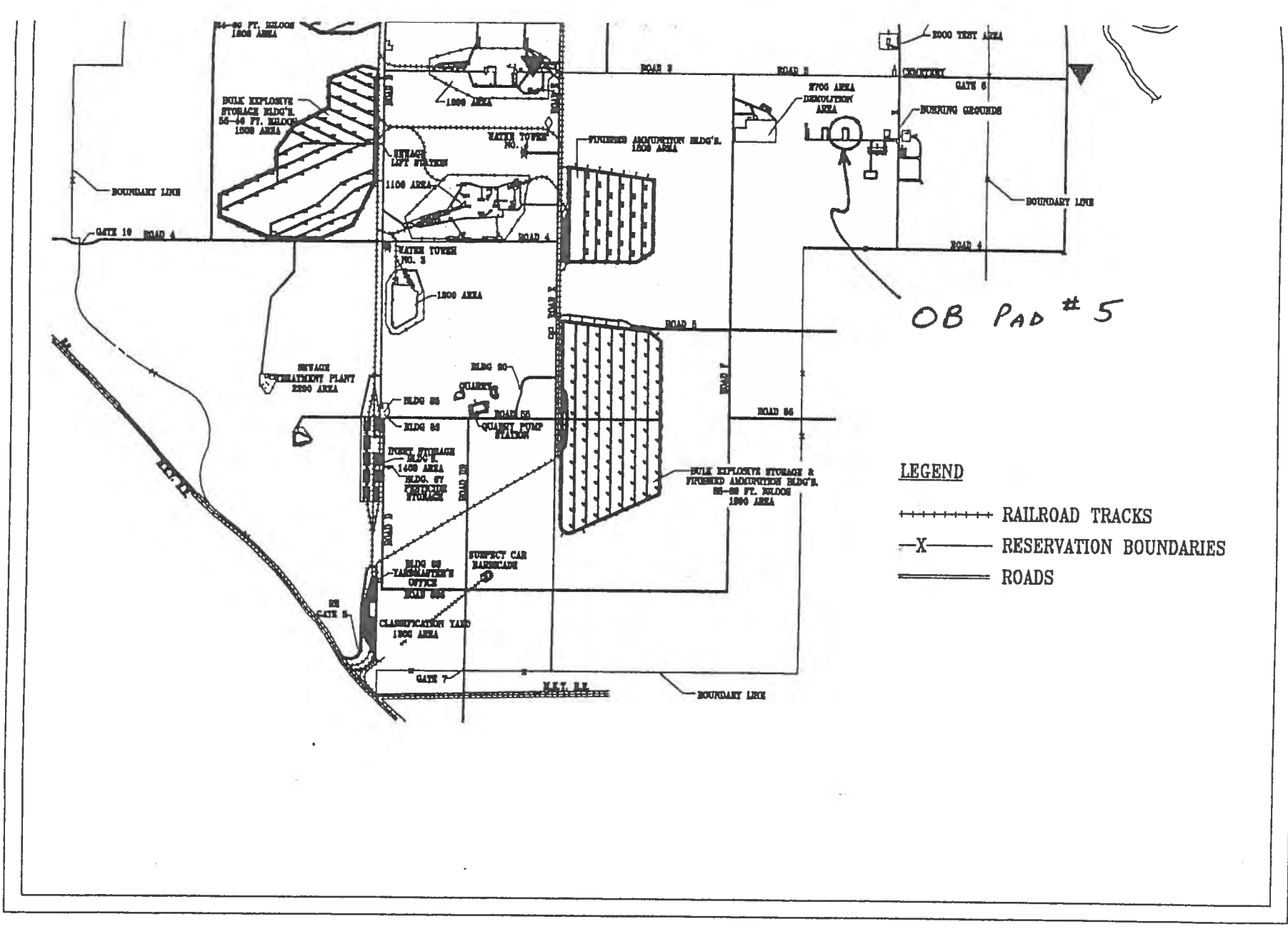
6. **Evidence that such open burning has been approved by any official fire control authority having jurisdiction over the area.**

KSAAP's Fire Department has jurisdiction over all fire operations conducted at the installation. The Fire Department is manned 10 hours per day each regular workday of the year. Walton Township Fire Department is responsible for responding to fires during off-hours.

DAY&ZIMMERMANN, INC.

KANSAS DIVISION




OB PAD #5
LEGEND
RAILROAD TRACKS
RESERVATION BOUNDARIES
ROADS
BOUNDARY LINE
GATE 10
ROAD 4
ROAD 3
ROAD 5
ROAD 6
ROAD 7
ROAD 8
ROAD 9
ROAD 10
ROAD 11
ROAD 12
ROAD 13
ROAD 14
ROAD 15
ROAD 16
GATE 6
GATE 7
GATE 8
BURNING GROUNDS
CEMETERY
SUSPECT CAR BARRICADE
CLASSIFICATION YARD
1500 AREA
1600 AREA
1100 AREA
1800 AREA
2000 TEST AREA
2200 AREA
1400 AREA
1900 AREA
M.K.T. R.R.

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DAY & ZIMMERMANN, INC.

KANSAS DIVISION

April 9, 2001

RECEIVED
APR 13 2001
BUREAU OF WASTE MANAGEMENT

Akhter Hossain
Kansas Department of Health & Environment
Bureau of Waste Management
Permits Section
Forbes Field, Building 740
Topeka, KS 66620-0001

Dear Mr. Hossain:

Reference: Response to February 8, 2000 Part B Permit Renewal Application Review Kansas Army Ammunition Plant Parsons, Kansas EPA I.D. Number KS0213820467

We have completed a revised Part B Renewal Application for the Parsons, Kansas hazardous waste combustion facility, based on your February 8, 2000 Comprehensive Review of the previous application submittal. Additionally, we have provided a response to each of the issues presented in the review as part of this letter. The revised permit application has been shipped under separate cover for your review and approval.

PART A INFORMATION - EPA's April 1997 Checklist Table I

1. The most recent edition of the part a permit application should be provided (a copy of which is enclosed). The application should identify what processes/units are used to conduct T04 activities. Table A-1 should indicate which [existing] facilities were included in the 1989 permit and which are proposed (facilities not previously used or not constructed) for hazardous waste management.

KDHE Determination: The information provided in Attachments I and II is inadequate. KSAAP completed only pages 3,4 and 6 of a 1999 version of EPA Form 8700-23. This form is newer than the 1990 version included in KDHE's version of the September 1997 Part B application. The correct process code for Open Burning/Open Detonation is X01, not T04 as indicated in Attachment II. Please complete and submit the entire form (including new signatures and dates) using the appropriate process codes and the most recent Form 8700-23.

KSAAP RESPONSE: *A revised Form 8700-23 has been completed and included in Section A of the revised permit application.*

23018 ROOKS ROAD, SUITE A ◆ PARSONS, KANSAS 67357-8403 ◆ 620-421-7400 ◆ FAX 620-421-7518

2. The Part A should indicate what the T03 & T04 units are, i.e., explosive waste incinerator, OB/OD, to show the capacity of these units. Note that the names used here should be consistent with the Part B permit.

KDHE Determination: The information provided in Attachments I and II is inadequate. KSAAP completed only pages 3,4 and 6 of a 1999 version of EPA Form 8700-23. This form is newer than the 1990 version included in KDHE's version of the September 1997 Part B application. The correct process code for Open Burning/Open Detonation is X01, not T04 as indicated in Attachment II. Please complete and submit the entire form (including new signatures and dates) using the appropriate process codes and the most recent Form 8700-23.

KSAAP RESPONSE: *A revised Form 8700-23 has been completed and included in Section A of the revised permit application.*

3. Please clarify if lines 4 & 5 are the same permit.

KDHE Determination: This will be addressed in the revised Part A submitted with your response.

KSAAP RESPONSE: *A revised Form 8700-23 has been completed and included in Section A of the revised permit application.*

4. Please submit a copy of the CD with topographic information being used for the RFI. Topographic maps of a smaller scale showing the features within the storage yards (1700, 1800, 1900, 2700) must be provided. Sufficient detail must be provided to show the pathways for spills, runoff from fire fighting activities or other surface releases from hazardous waste units.

KDHE Determination: KDHE does not have a copy of the CD used for the RFI.

KSAAP RESPONSE: *The topographic information used for development of the permit renewal was not digital. Hard copies of topographic maps and plant plot plans were reviewed for the application submittal and have been provided in Section B as Figure B-10 of the revised permit application.*

Part B Information - EPA's April 1997 Checklist Table II

GENERAL NOTE: The "List of Figures" describes figures B-5, B-9, B-11, B-12, B-13, B-14, B-15, B-16, B-18 & B-19 which are not included in the application. Note that figures B-13, B-14, B-15, B-19, B-20 & B-21 are not described in the "List of Figures." Please provide missing figures and update tables appropriately.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

1. Please include the date of the FEMA map upon which the figure is based. Note that because development can change the boundaries of the flood plain, the determination of whether the units may be affected by a 100-year flood must evaluate whether additional development since the date of the FEMA map has changed the flood plain area. Potential development plans must also be factored into the flood determinations.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

2. Please provide the referenced drainage maps for the hazardous waste management areas.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

3. Figure B-10 shows land use depicted on a 1973 USGS quadrangle map. Please update the land uses showing current municipal boundaries and any zoning or other local land use restrictions.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

4. Please revise area detail maps to show gates and other entrances for hazardous waste management areas.

KDHE Determination: Figure B-10 now includes gates and other entrances.

KSAAP RESPONSE: *No additional response needed.*

5. Please revise the figure to show septic systems at the facility (both current and historical). Note that the text states that no wells are utilized onsite for water supply. Show all existing wells regardless of their use or status including groundwater monitoring wells. Note that additional maps can be used to show these features.

KDHE Determination: This comment has been adequately addressed

KSAAP RESPONSE: *No additional response needed.*

6. Please show recreational areas, e.g., fishing ponds and other public access features, storm (including under road flumes), sanitary and process sewerage systems (including sumps), off-site waste acceptance and classification area(s), and fire control features. Note that additional maps can be used to show these features.

KDHE Determination: This comment has been adequately addressed

KSAAP RESPONSE: *No additional response needed.*

7. Please show the 2700 Area igloos, A019 igloo and the SRS location. In addition, please show the 700 area as a land disposal facility.

KDHE Determination: Please clarify exactly where this comment was addressed.

KSAAP RESPONSE: *Figure B-4 shows the 2700 Area, in addition to the other hazardous waste management areas. Additionally, Figure B-9 provides closer detail of the igloos located in the 2700 area. The A019 Igloo is located in the East section of the 2700 area, which is shown on Figure B-4. The actual location of A-019 is shown on Figure B-9 and Appendix I-2, Figure I-5. The 700 area is not being permitted as a land disposal unit. In regard to how this area is being handled, please refer to the letter sent to Mr. Dennis Degner at KDHE from Mr. Donald Dailey, on December 15, 1999.*

8. Appendix B contains standard operating procedures and is included as part of the general facility description (Section B). We recommend that all SOPs be removed from the Part B and reference instead. Any SOPs referenced must be submitted as separate supplemental information. We are evaluating whether we can provide for the modification of SOPs that will not require a permit modification. Note, however, that this will most likely require the permit to specify a procedure to revise SOPs. Therefore, please include a change procedure for SOPs in the revised application.

KDHE Determination: It does not appear that a response to this comment was included in your July 25, 1999 letter. While it is understood that the SOPs were moved to Volume 3 as supplemental information, please specify exactly where the change procedure for SOPs is located.

KSAAP RESPONSE: *All standard operating procedures (SOPs) referenced within the permit application have been moved to the supplemental information. All references within the permit application have also been changed to reflect this move. Included in the SOPs, now located in the supplemental information, is a procedure for modifying SOPs (SOP change procedure), MSP 100-0500.*

9. Several hazardous waste units are near the boundary of the 100-year rain event floodplain. The detail of the map provided is insufficient to show compliance. Please supplement the map by providing information that shows all hazardous waste management units are at an elevation above the 100-year flood elevation level. Note the comment above that requires you to consider development that has occurred since the date of the FEMA map and future development that has been planned in evaluating the 100-year rain event flood pool level.

KDHE Determination: Review of the FEMA maps provided in the updated application show compliance with the 100-year floodplain provisions.

KSAAP RESPONSE: *No additional response needed.*

GENERAL NOTE: Please provide all the waste characterization information in one location. This information is currently spread throughout the application in various sections and appendices. We recommend that military specifications for components or other materials that are being managed as hazardous wastes be removed from the application and provided as supplemental information. We also anticipate requiring their being maintained in an on-site mil-spec reference file available for review, i.e., during inspections. This file would also include complete breakdown drawings of munition items and sub-components of sufficient detail to determine compliance with feedrate limits or other permit requirements.

Throughout Section C of the application, the terms munition(s) or munition item(s) are used. EPA will be promulgating a definition of military munition in 40 CFR 260.10. Please revise your use of these terms in a manner that is consistent with the new definition. We intend to consider an item a "military munition" as long as the mil-spec is included in the mil-spec reference file to be kept in accordance with the permit.

KDHE Determination: A response to this comment is not included in your July 1999 letter. Please describe what revisions were made to account for this comment.

KSAAP RESPONSE: *The original permit application contained waste characterization information on military specifications and explosive compounds in various sections and appendices. For ease of review, all of this information has been moved to the supplemental information. All references within the permit application have also been changed to reflect this*

move. Summaries of the waste characterization are still contained in the permit application in Section C, Appendix C-1.

10. The waste characterization must include information on the treatment residues from incineration including those discharged from the kiln, baghouse, gas coolers and cyclone.

KDHE Determination: Attachment IX does not include the requested waste characterization information.

KSAAP RESPONSE: *A summary of the waste characterization information for the treatment residues from incineration has been added to Appendix C-1. Specifically, Table C-4 in Appendix C-1 presents information on the hazardous components, typical storage containers, storage area, and treatment method(s) for the EWI, APCS and OB residue.*

11. The waste characterization must include the applicable waste codes for each specific waste generated on-site (e.g., those listed in Table C-l). The information must include whether it contains free liquids as-generated or if liquids are added as a management practice.

KDHE Determination: Attachment X does not include the requested waste characterization information.

KSAAP RESPONSE: *Wastes being incinerated on-site have been characterized in Appendix C-1, Table C-4, in Section C of the permit application, as well as in the supplemental information. Also, this is found in Section C.*

12. The waste characterization contains insufficient information on the toxic metals (i.e., those in 40CFR261 Appendix VIII and Section 112 CAA HAP's) that may be present in the non-PEP portions of feed items. In addition to identification of the metals present in the PEP and non-PEP components (including casing, wires, solder, hardware, etc.), provide the mass of each toxic metal component in the waste feed item.

KDHE Determination: This information must be available on-site in the operating record.

KSAAP RESPONSE: *Estimated toxic metal concentrations in PEP and non-PEP feed items are maintained in the facility operating log.*

13. Heat value physical form, identification of Appendix VIII organic constituents, chlorine, ash, POHC and metals information for wastes to be incinerated are located in trial burn plan.

This information must be provided in summary form for all munition items proposed to be incinerated. Please provide this information in Section C of the application. In addition, for all wastes proposed to be incinerated, please identify all applicable waste codes.

KDHE Determination: This information must be available on-site in the operating record.

KSAAP RESPONSE: *The requested information is recorded and maintained in the facility operating log.*

14. No information is provided in the waste characteristics section to determine VOC emissions from the SRS. Appendix F-2 provides information on a few compounds. Emission factors or other information with which to estimate emissions must be provided for materials to be processed in this system.

KDHE Determination: The SRS was removed from the application.

KSAAP RESPONSE: *No additional response needed.*

GENERAL NOTE: The following comments on the waste analysis plan refer to specific items provided in the application. If you decide to revise the waste analysis plan along the lines of EPA's draft guidance, you must still address the information and issues identified below.

15. The information does not include the analysis for POHCs, metals (including HAP metals) or organic TCLP parameters. This table should also include the LDR parameters and constituents for which analysis is necessary to demonstrate compliance with the treatment standards.

KDHE Determination: LDR requirements apply to the residues generated from the treatment of hazardous waste, regardless of where the residues are ultimately land disposed; therefore, the requirements are applicable to KSAAP. Proper identification of incoming waste in critical in the characterization of the waste residues. The waste analysis plan must be revised to address EPA's original comment.

KSAAP RESPONSE: *Analysis of waste residues is addressed in Section C-2a(3) of the permit application. This section discusses the analyses that are performed on the residues, and the procedures for disposing of these residues based on the results of the analyses. Table C-2A presents the waste analysis methods, test parameters and rationale for the waste residues. Additionally, Table C-4 in Appendix C-1 presents the RCRA waste codes and treatment methods for APCS, OB and EWI residues. This table indicates that the treatment/disposal method is determined based on the that analytical results.*

16. The plan must include a discussion of how the analysis of these parameters will provide all the physical and chemical information necessary to properly handle, i.e., personnel protection requirements, characterize the waste for acceptance (both pre-acceptance and load inspection), store and/or identify treatment limitations and determine compliance with operating limits.

KDHE Determination: This comment has been adequately addressed. It should be noted that the last paragraph of page C-8, Attachment XI, refers to waste solvents being treated/reclaimed on-site in the SRS, which has been removed from the application. Page C-5 of the Part B application does not contain this verbiage; therefore, it is questionable if the highlight/strikeout pages attached to the July 1999 submittal are accurate. Uncertainty about where and if revisions were made makes the review process very difficult.

KSAAP RESPONSE: *No additional response needed*

17. Please include the edition of SW-846 being referenced in the WAP.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed*

18. The application states that sampling of PEP items and reject munitions is not routinely undertaken for safety reasons. We agree that unused bulk PEP and munitions being de-milled that are fully characterized by their mil-specs do not require "routine" analysis to determine proper storage requirements, particularly when they result from on-site manufacturing operations. We also agree that other munition items that will be received from off-site and that meet their mil-specs do not require "routine" analysis to determine proper storage requirements. However, for items that no longer meet their mil-specs or items without mil-specs, the WAP must justify why routine analysis is not necessary to properly store the item and/or demonstrate compliance with operating limits. The WAP must discuss how to properly identify or characterize any additional hazards for storage and/or treatment of "off-spec" or out of service munitions, e.g., such as when there are inadequate stabilizers in a propellant. Note that materials must also be characterized for other hazards to address the health and safety of waste management and emergency personnel. In addition, the ASTM methods referenced in Table C-3 should be provided in the supplemental information submittal.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

19. The WAP must address how non-military PEP, PEP-containing items and other hazardous wastes will be characterized in order to pre-approve their acceptance, develop load inspection requirements, handling requirements, storage requirements and, if they will be treated, sufficient information to demonstrate compliance with operating limits. In addition, please develop an example waste profile and management SOP. The waste profile is the summary of the pertinent information from the waste data sheet, analysis of samples by KSAAP and other information developed from knowledge of the waste. A waste profile and management SOP will be prepared for each waste stream (from each generator) to be managed. It will provide instructions for the inspection of incoming loads, any special handling or personnel protection necessary, storage and/or treatment requirements.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

20. The WAP does not describe how incoming loads will be inspected. If inspections will not be exhaustive, i.e., each item inspected, the plan must describe how a representative (statistically valid) sample of each waste stream in the load will be selected. This discussion must also describe how representative samples for analysis will be collected.

KDHE Determination: Since the SRS has been removed from the application, only off-site waste that can be incinerated may be accepted. Table C-2B must clearly identify the waste codes that may be incinerated versus those that are simply generated at the site. The WAP must clearly list the items that may be accepted from off-site for treatment. Just because waste codes are included in the Part A for storage does not mean that the facility will have the ability to provide treatment. Please update the WAP to reflect which waste codes will be treated on-site.

KSAAP RESPONSE: *The appropriate hazardous waste codes have been included in Appendix C-1, Table C-4 of the revised Waste Analysis Plan, Section C of the revised permit application. Table C-2A also presents the management options for each waste generated on-site or accepted from off-site."*

21. Please expand the discussion of the waste inspection procedures for treatment at the EWI and SRS. Please include a discussion of inspections that are conducted prior to moving wastes within or between units.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

22. The WAP must include a discussion of any additional waste analysis and other information that is necessary to determine appropriate handling, storage and treatment of ignitable, reactive or incompatible wastes. Include descriptions of compatibility tests to be conducted on potentially incompatible wastes if they are to be stored together or combined. In addition, please describe how information will be developed to comply with explosive limits for storage units, feed rates for treatment units, initiating materials and items from bulk PEP materials and adherence to DDESB requirements.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

23. The analysis requirements for LDRs should be incorporated throughout the WAP. Section C-3 should be a discussion of how the plan addresses the LDR analysis requirements.

KDHE Determination: Figure C-2, Analysis Flow Logic Diagram for the EWI, must be modified to reflect that only waste with D003 and/or D008 waste codes may be incinerated. The current flow diagram shows K044, K045, K047, U036, U122, U123 waste streams being sent to the incinerator, which is incorrect.

KSAAP RESPONSE: *Figure C-2 has been modified to show only those waste streams being treated at the incinerator.*

24. Access to the facility is no longer controlled on a 24-hour basis. The security procedures and equipment must be revised to describe the minimum amount of security and access control that will be maintained including manned security activities. Please provide the SOP regarding security procedures, maintenance of barriers, and other items related to security referenced as Appendix B.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

25. The facility is described to include security fencing around the perimeter and each hazardous waste management unit (or groups of units in the case of storage facilities). Perimeter fencing has been observed to be livestock fencing rather than barriers to prevent unauthorized entry by persons. Please delete references to perimeter security fencing. Please include more information on the security fencing around hazardous waste management units, such as height, gauge, barbed wire, etc.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

26. Please provide details on how lessees are allowed access to the storage areas. In addition, please provide describe how individual units are secured with high security locks, doors, etc., to prevent unauthorized access.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

27. We recommend that an example inspection form for items to be checked daily during loading/unloading be included in the application.

KDHE Determination: No response necessary.

KSAAP RESPONSE: *No additional response needed.*

28. The application should include a discussion of the time frames in which deficiencies identified during inspections will occur. Contingencies of halting operations and removing wastes from the unit should be included if deficiencies cannot be remedied in a timely manner. Please discuss any standby equipment that will be maintained that can be used to immediately replace deteriorated equipment.

KDHE Determination: Please specify exactly where the requested information is located.

KSAAP RESPONSE: *Section F of the permit application discusses inspections and frequency of inspections related to management of the hazardous waste facilities. Additionally, the Spill Control and Contingency Plan (SPCCP) provided in the supplemental information discusses the inspection and frequency of inspections related to spill events. Appendix XIV of the SPCCP contains an example hazardous waste spill inspection form.*

29. The description of internal communication must include information on how facility personnel are alerted in case of an emergency or the requirement to evacuate.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

30. The application must include a discussion of any dedicated fire control equipment such as deluge and fire suppression systems, fixed monitors, etc. in addition to the portable equipment. The locations of hydrants in relation to hazardous waste management units should be shown on a map/drawing. In addition, we recommend KSAAP to develop a spill trailer that contains adequate quantities of response equipment so that response actions can be initiated as soon as possible.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

31. The application states that hydrant pressure is 65 psi and that adequate volumes of water are available to fight fires. Please include the documentation that supports these statements including information on volume and pressure requirements for fire brigade equipment.

KDHE Determination: Fire pumper trucks provide acceptable redundancy to hydrants.

KSAAP RESPONSE: *No additional response needed.*

32. No information is provided on the testing and maintenance schedule for the fire brigade equipment. Please include this information in the application.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

33. The application must be updated to reflect the lack of on-site 24-hour emergency response personnel and the increased role of local emergency personnel. Please review the assistance that can be provided by local emergency personnel and update the agreements to reflect the higher level of response that will be requested.

KDHE Determination: This comment has been adequately addressed; however, there are several pages that appear to be missing, (i.e.. Pages G-5 through G-22). Please specify in your written response exactly what revisions, if any, were made.

KSAAP RESPONSE: *Section F-3 of the permit application discusses the supplemental assistance available for emergency response by the Labette County Number 9 Fire Department. Additionally, the Spill Control and Contingency Plan (SPCCP) provides a further description on the emergency coordination agreements (ECAs) that exist between KSAAP and the surrounding communities (See Page 41 of the SPCCP). Copies of the ECAs with various emergency care*

facilities, police departments, and fire departments are provided in Appendix XXII of the SPCCP. Pages G-5 though G-22 were deleted prior to the last submittal. The pages in Section G have been renumbered.

GENERAL NOTE: The discussion of the preventive procedures, structures and equipment included in the application provides limited information. However, revisions are not requested since we anticipate including performance based permit conditions for these requirements, i.e, it would be a violation if waste operations contaminated the water supply.

KDHE Determination: The specifications which need to be addressed more thoroughly will be defined in the permit conditions and requirements.

KSAAP RESPONSE: *No additional response needed.*

34. Section F-4a: Please include the referenced SOPs in the supplemental information.

KDHE Determination: The SOP'S referenced in this section are not included in the Table of Contents for the supplemental information. Please specify exactly where the requested information is located.

KSAAP RESPONSE: *The referenced SOPs have been added to the supplemental information. All references within the permit application have also been changed to reflect this move.*

35. We would like to note that a power failure at the EWI would shut down APCD in addition to the rotary kiln and would most likely result in an uncontrolled release to the atmosphere.

KDHE Determination: No response necessary.

KSAAP RESPONSE: *No additional response needed.*

36. We would like to note that startup after a power failure or other emergency shut down of the EWI would most likely result in an uncontrolled release to the atmosphere due to the delay in the startup of APCD programmed into the system. In addition, inspection of the igloos noted several instances where interior lighting is available with power provided externally. Please revise the discussion to address personnel actions in those instances should a power failure occur.

KDHE Determination: No response required.

KSAAP RESPONSE: *No additional response needed.*

37. Please include references to procedures or SOPs in the description of the precautions to prevent ignition or reaction of ignitable or reactive wastes. Please include copies of all referenced procedures or SOPs in the supplemental information. Please include a complete copy of Chapter 19; DARCOM-AMCR 385-100 in the supplemental information and remove it from the application. Please remove Appendices F-5 and F-6 from the application and include it in the supplemental information. Please provide MSP 260-0100 referenced as Appendix F-7 as it was not included in the application.

KDHE Determination: See KDHE Determinations 34 and 28.

KSAAP RESPONSE: *All referenced SOPs have been added to the supplemental information. Additionally, Chapter 19 (DARCOM-AMCR 385-100) has been moved to the supplemental information section. References to Appendices F-5 and F-6 have been removed from the permit application. Therefore, these documents are no longer included in the permit application, or the supplemental information. Appendix F-7 (MSP 260-0100), which was inadvertently left out of the last submittal, has been included in the supplemental information section of the application. All references within the permit application have also been changed to reflect these changes.*

38. The application must include a discussion on how the compatibility of materials being stored and/or treated will be documented. Note that the process description for the EWI must include a description of the procedures that are used to prevent over pressure of the kiln system resulting in fugitive emissions and to prevent damage to its structural integrity. The process description for storage units must include a discussion of explosive ratings and how wastes will be managed to meet DDESB standards.

KDHE Determination: Include the documentation procedures that will be followed to ensure compliance with 40 CFR 264.17(c) and (b). Additional information must be included to address EPA's original comment.

KSAAP RESPONSE: *Precautions related to ignitable, reactive, and incompatible wastes are addressed in Section F-5 of the permit application. The retort pressure is maintained at negative pressure (-0.15 to –0.25 in water) as recorded in the trial burn plan, Appendix D-2 of the revised permit application. Maintaining negative pressure at the kiln prevents both overpressure of the device and the release of fugitive emissions. This parameter is monitored continuously and recorded in the facility operating log. Waste feed cutoff is initiated if draft fan failure occurs.*

GENERAL NOTE: Please revise the discussion and the contingency plan to reflect the facilities contract status of D&Z and the reduced level of on-site activities. Please provide copies of MSP 300-0100 and MSP 305-0100 in the supplemental information.

KDHE Determination: See KDHE comments 28, 34, and 37.

KSAAP RESPONSE: *Section G-1 of the permit application discusses Day & Zimmerman's role as the operator of the KSAAP. Additionally, the Spill Control and Contingency Plan (SPCCP) briefly addresses the owner and operator roles of the U.S. Army and Day & Zimmerman in the discussion on mission provided on page 12 of the SPCCP. Copies of MSP 300-0100 and MSP 305-0100 have been included in the supplemental information.*

39. The contingency plan should describe and include the arrangements made with police and other local groups to provide assistance in the event of emergency, such as restricting traffic in the vicinity of the facility, providing external notification and facilities for persons who may require evacuation, etc.

KDHE Determination: No changes were made to the Part B permit application, please respond to EPA's comments accordingly.

KSAAP RESPONSE: *Section F-3 of the permit application discusses the supplemental assistance available for emergency response by the Labette County No. 9 Fire Department. Additionally, the Spill Control and Contingency Plan (SPCCP) provides a further description on the emergency coordination agreements (ECAs) that exist between KSAAP and the surrounding communities (See Page 41 of the SPCCP). Copies of the ECAs with various emergency care facilities, police departments, and fire departments are provided in Appendix XXII of the SPCCP.*

40. EPA's emergency spill notification number has recently been changed to 913-281-0991. Other notifications and verbal reports for non-emergencies can be made to the Chief, RCRA Permits and Compliance Branch at 913-551-7323 (JoAnn Heiman).

KDHE Determination: The name and numbers of the spill event contacts listed are incorrect. KDHE's emergency spill notification number has been changed to: 785-368-7300 (days) and 785-296-0614 (24 hour and nights). The Labette County emergency information should be sent to the Labette County Emergency Operations Center at 316-421-5255. The Kansas State Emergency Response Commission should be replaced with the Kansas Division of Emergency Management (KDEM), 2800 SW Topeka Blvd., Topeka, KS, 785-296-3176. In addition, many of the additional contacts are outdated. Therefore, make the necessary changes requested by EPA and KDHE.

KSAAP RESPONSE: *Appendix VI of the Spill Control and Contingency Plan (SPCCP), List of Spill Event Contacts, has been modified to reflect the new contact numbers provided by KDHE and the EPA. Additionally, Appendix G-1, the Bureau of Environmental Remediation Spill Packet, which was apparently outdated, has been replaced with a current list of spill event*

contacts, developed from the information provided by KDHE and EPA. A copy of the spill reporting regulations, Article 48 of the Kansas Administrative Regulations, has also been included in Appendix G-1.

41. The contingency plan must include a description of the records that will be kept for incidents (including those in which implementation of the contingency plan is not required). We recommend a form be developed and included in the plan that summarizes incident information such as date, time, type of incident, whether the contingency plan was implemented, etc.

KDHE Determination: Please specify exactly where the requested information is located.

KSAAP RESPONSE: *KSAAP has provided copies of completed incident reports and telephone notification forms for reference in Appendices XIII and XVI of the Spill Control and Contingency Plan (SPCCP). These appendices provide the spill information history form, maintained by the facility, as well as copies of the memos and telephone records of spill notification. Each incident report provides the data, time and type of incident, as well as the actions taken and parties notified/involved in spill cleanup.*

GENERAL NOTE: The plan anticipates providing specific details of the closure performance standard, procedures for removal or decontamination and other required information at some point in the future when the closure date is determined. We agree that some of these specifics can be deferred until closure to the date for closure. Note that this information must be made available for public comment prior to its approval. However one purpose of the closure plan was to adequately scope out the closure activities so that adequate financial assurance could be provided. While a Federal facility is not required to provide financial assurance for closure a reasonable cost estimate must be available several years in advance in order to secure adequate funding to complete closure activities. We recommend that the plan be revised to include such details of the closure performance standard and decontamination procedures so that closure costs may be estimated.

KDHE Determination: A response to this comment is not included in your July 1999 letter. Please describe what revisions, if any, were made to account for this comment.

KSAAP RESPONSE: *In an effort to provide more detail on decontamination procedures, the Department of Army Technical Bulletin (TB) 700-4, "Decontamination of Facilities and Equipment," has been included in the supplemental information. This document will be used in conjunction with the applicable standard operating procedures (SOPs) to complete decontamination in the event that any of the hazardous waste areas included in this permit are closed.*

Should Day & Zimmerman or the Army decide to proceed with closure of any of the hazardous waste areas included in this permit application, more detailed information on the closure performance standard, including a sampling and analysis plan, will be submitted to KDHE for review and approval.

42. The plan should be revised to provide for partial closure of individual units to allow for lay-away due to the inactive status of the facility.

KDHE Determination: No response needed, however, should partial closure of the individual units be requested a permit modification will be required.

KSAAP RESPONSE: *No additional response needed.*

43. The closure plan must inventory all equipment (including hand equipment, furniture, etc.) for which decontamination and/or disposal may be necessary. The closure plan may refer to documentation to be kept at the facility if the procedures for maintaining that documentation are described in Section D - Process Description, of the application.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

44. The final plans and specifications submitted for approval must contain all details necessary to complete closure of the unit including closure performance standard, details of closure, disposal (including locations and approval of disposal facilities) and decontamination procedures. They must detail any sampling, testing and analysis that is necessary to certify closure. Criteria must be included to determine when closure (and decontamination) is complete for all hazardous constituents managed in the unit.

KDHE Determination: No response needed.

KSAAP RESPONSE: *No additional response needed.*

45. The plan must allow for modification to include additional activities if unexpected events during closure require activities not included in the closure plan or detailed plans and specifications.

KDHE Determination: No response required.

KSAAP RESPONSE: *No additional response needed.*

46. The application must include all the information required in 40CFR270.24 for all applicable process vents. The information provided must demonstrate compliance with the requirements of 40CFR264, Subpart AA. Please include the information and attached Table AA.

KDHE Determination: No response needed.

KSAAP RESPONSE: *No additional response needed.*

47. The application must include all the information required in 40CFR270.27 for containers. The information provided must demonstrate compliance with the requirements of 40CFR264, Subpart CC. Please include the information and attached Table CC.

KDHE Determination: No response required.

KSAAP RESPONSE: *No additional response needed.*

Part B Information - EPA's April 1997 Checklist Table III

1. Section D-1a(2), Page D-1: This section should specify storage locations for ignitable and reactive wastes and whether the storage areas are at least 15 meters from the property line.

KDHE Determination: The section clarifies that all storage areas are at least 15 meters from the property line; however, additional information must be provided on the storage location of ignitable, reactive and incompatible wastes and how incompatible wastes are segregated.

KSAAP RESPONSE: *The procedures described in Chapter 19 of DARCOM-AMCR 385-0100 are followed to ensure that incompatible wastes are never stored in the same container or location. This appendix has been moved to the Supplemental Information, as requested. KSAAP has designated numerous container storage areas at the facility. These areas are listed, along with the maximum number of containers, capacity in gallons, and the spill capacity provided for each designated area in Table D-2 of the revised permit application. Non-compatibles are not stored within the same designated storage facility.*

2. Section D-la(2), Page D-l: This section should refer to Section F for the procedures for and frequency of inspection for containers and containment system.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

3. Section D-la(3)(a), Page D-2

   a. Inspection in June 1996 showed cracking of the base in many of the proposed container storage areas. Provide certifications of the repair of all cracks for each container storage area.

   b. Concrete is not considered an impermeable base for the containment of hazardous wastes. Provide specifications for a coating resistant to the wastes to be stored. Upon approval of the specifications, this coating must be applied and certifications of completion provided. Please provide a retrofit schedule in the application that starts upon the approval of the specifications.

   c. Provide design information for the igloos including specifications for materials of construction and other appropriate design information, e.g., reinforcement, etc. Note that Section D-1a(3) describes a concrete sill in the doorway of igloos where Drawing D-1 shows angle iron being used. Please ensure the correct specifications are included in the application.

   d. Provide an engineering evaluation of the structural integrity of the base and a discussion of base compatibility with the stored wastes. An engineering evaluation of the base should be made to determine whether the base can withstand the load resulting from the estimated maximum storage capacity. Also, the section should discuss base and coating compatibility with stored wastes.

KDHE Determination: Attachment XXIV does not include the requested certification of repairs or engineering evaluation of the integrity of the igloo's base. In addition, no specifications for a coating resistant to the waste being stored was provided. Section D-1a(3)(a) or other applicable sections must be revised to address EPA's original comment.

KSAAP RESPONSE: *KSAAP has addressed the deficiencies included in this comment by designating usage of some of the affected igloos as liquid container storage only. Those igloos with deficiencies, which were designated as liquids storage, were equipped with additional polyethylene containment pans. Therefore, the repairs and certifications requested in this agency comment were not performed, nor are available. The specifications for these pans are provided in Appendix D-7. Figures D-2a, D-2b, and D-5a provide the igloo specifications requested in part c of this comment. Please reference the letter dated November 12, 1999 from KSAAP to KDHE, which addressed the noted deficiency. A copy of the specification sheets for the skids is included as Appendix D-7 of the permit application.*

4. Sections D-1a(3)(c) and D-la(3)(d), Page D-2: This section lacks data regarding the regional geographic storm intensity or frequency. This section should state whether storage areas are located in a 100-year or any other flood plain areas. Also, the section should provide specific information whether the elevations at each storage area is higher than the 100-year flood plain elevation and refer to the information provided to satisfy 270.14(b)(11).

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

5. Section D-1a(3)(e) Page D-2: Please provide design drawings of the drainage systems, e.g., sloping and troughs. This section also refers to the Hazardous Waste Contingency Plan (HWCP) in Appendix G of Section G for information on the management of accumulated liquids. The contingency plan does not provide an adequate description. Please provide a description of the analysis and management of accumulated liquids within the secondary containment system. Include how liquids would be analyzed, description of removal equipment and methods and management of accumulated liquid including prevention of overflow.

KDHE Determination: The drawings provided in Attachment XXIV do not show the drainage systems and/or are not legibly. Please include the procedures to ensure that incompatible wastes are correctly segregated.

KSAAP Response: *Structural drawings for storage areas are included in the revised permit application as Figures D-2a, D-2b and D-5a. These drawings also include drainage systems for these storage areas. Section F-5 of the revised permit application addresses the procedures taken to ensure proper handling of incompatible wastes.*

6. Sections D-2a(1) and D-2c, Pages D-4 and D-5: These sections indicate that a minimum 3-foot aisle space would be maintained between container rows; however, please provide the minimum main aisle width in the center of the igloos. Note that changes in configuration to allow adequate aisle space may result in reduction of the maximum storage capacity.

KDHE Determination: No response required.

KSAAP RESPONSE: *No additional response needed.*

7. Section D-2a(2), Pages D-4 and D-5: This section provides a description of storage igloo 1721 and refers to Figure D-6 for container storage configuration; however, Figure D-6 provides only the building plan and construction details. Please provide a drawing showing container storage configuration in Storage Igloo 1721.

KDHE Determination: Figure D-6 is the floor plan for storage igloo 1721. Please provide the actual configuration/location of containers when in storage, and/or clarify that Figure D-6 refers to the floor plan for storage igloo 1721.

KSAAP RESPONSE: *Containers are only stored in the area labeled Red Mastic Floor on Figure D-6.*

8. Sections D-2a(1), D-2c, and D-2d, Pages D-4 through D-6: These sections indicate that containers other than 55-gallon drums would be stored in the free liquid storage igloos (1700, 1900 and 2700); however, they discuss stacking practices for 55-gallon drums only. Stacking practices should also be discussed for all the containers that will be used.

KDHE Determination: Include a list of all containers storage units at the facility, their storage capacity, and stacking practices, (i.e., palletized and stacked, stacked, etc.)

KSAAP RESPONSE: *Only 55-gallon drums are stacked without pallets. Table D-1 provides a list of all container types used for hazardous waste storage, along with each unit capacity and the specifications for the containers. Additionally, each storage facility is listed in Table D-2 with the maximum number of containers allowed and the allowable volume of material for that storage facility.*

9. Section D-la(2), Page D-l: Please provide a more detailed description of the tracking system. Provide a copy of the container tracking SOP with the supplemental information. SOPs provided in Section F for the management and safety procedures are incomplete. Please provide a description of the handling procedures to avoid rupture or leakage from containers. Provide revised SOPs with the supplemental information.

KDHE Determination: Please specify exactly where the requested information is located.

KSAAP Response: All of the procedures referenced above are covered by SOPs included in the supplemental information. Procedure KN-0000-L-011 includes information and procedures for tracking containers. SOP KN-199 addresses management and safety procedures for containers, as well as container handling procedures.

10. Table D-1, Page D-23: This table does not include the boxes (listed on Table D-2) used for free liquid storage. The table should include the capacity and description of the boxes, including the dimensions and the material used in their construction. In addition to the descriptions of each type of container, provide copies of the specifications as part of the supplemental information.

KDHE Determination: Please specify exactly where the requested information is located.

KSAAP Response: Descriptions and capacity information for the boxes used for free liquid storage have been added to Table D-1 as cardboard containers. Additionally, the supplemental

information contains detailed specifications on these boxes. This information is presented in the Federal Specification for fiberboard shipping boxes (PPP-B-00636L).

11. Figure D-2: Provide topographic contour maps for each container storage area showing drainage away from the unit. Provide building profiles to show protection against run-on.

KDHE Determination: This comment has been adequately addressed.

KSAAP RESPONSE: *No additional response needed.*

12. Sections D-1a(1) and D-la(2), Page D-1: Markings for containers should also include those for compatibility and free liquids. Please provide a discussion on how these markings will be used. Provide SOPs with the supplemental information.

KDHE Determination: Please specify exactly where the requested information is located.

KSAAP RESPONSE: *Procedures for marking containers are provided in procedures KN-199, KN-000-L-011, and PPP-B-00636L. Additional information on marking containers for compatibility and free liquids has been included.*

13. Incompatible Wastes: Please provide a discussion of the management of incompatible wastes. Refer to the waste analysis plan for their identification, describe their markings, how they will be protected when stored together in the same area, e.g., detonators stored with bulk PEP, etc. Provide SOPs with the supplemental information.

KDHE Determination: Please specify exactly where the requested information is located.

KSAAP RESPONSE: *The procedures described in Chapter 19 of DARCOM-AMCR 385-0100 are followed to ensure that incompatible wastes are never stored in the same container or location. This appendix has been moved to the Supplemental Information, as requested. KSAAP has designated numerous container storage areas at the facility. These areas are listed; along with the maximum number of containers, capacity in gallons, and the spill capacity provided for each designated area in Table D-2 of the revised permit application. Non-compatibles are not stored within the same designated storage facility.*

INCINERATOR

The following are specific comments related to the process information provided in Section D for the incineration unit. These comments were developed based on a review of the information summarized in Section D. We note that the trial burn has been completed. However, a re-test must

be conducted at the mid-term of the permit. If different operating conditions or test protocol will be requested as the result of that testing, the trial burn plan and permit application must describe those changes.

14. Section D-6b, Page D-8: Update this section to provide the dates of the trial burn and reference the trial burn reports.

KDHE Determination: Since this comment was written, additional requirements for hazardous waste combustion units have been promulgated. The Hazardous Waste Combustor MACT rule, effective September 30, 1999, implements significant new requirements which affect the scheduling of trial burns and performance tests. Please address EPA's original comment in light of the new requirements for combustors. Provide a comparison of the results for the earlier trial burns with the HWC MACT requirements and outline a schedule for demonstrating compliance with the new regulations.

KSAAP RESPONSE: *This revised permit application is submitted for compliance with RCRA Hazardous Waste Combustor regulations. KSAAP is aware of the newly promulgated Hazardous Waste Combustor MACT rule. If KSAAP proceeds with permitting of the facility as described in this permit application, a timeline for submission of test plans, execution of testing, and reporting of test results will be in compliance with the proposed MACT schedule. Based on the referenced schedule, KSAAP will submit a Comprehensive Performance Test Plan by March 30, 2002 perform the Comprehensive Performance Test by March 30, 2003, and report the results of this testing in a detailed report by August 28, 2003. KSAAP anticipates that some preliminary testing will be performed to verify incinerator performance. If needed, operational and monitoring equipment will be upgraded to meet the stringent MACT emissions and performance standards. Additionally, KSAAP will comply with the required schedule for on-going performance of Confirmatory and Comprehensive Tests, each to be conducted at 5-year intervals after the initial Performance Test. KSAAP will also prepare and/or submit, as applicable operating plans as required by the HWC MACT Rule by September 30, 2002. If it is determined that KSAAP will perform an indirect risk assessment, a risk assessment protocol will be submitted under separate cover.*

15. Section D-6b(1) Page D-8: Provide a description of incinerator prove out prior to trial burn testing. The prove out must show that the incinerator can reliably operate at the proposed trial burn conditions.

KSAAP RESPONSE: *Information on incinerator prove out prior to trial burn testing is provided in KSAAP Engineering Program, EP-042. This document has been included in the supplemental information.*

16. Describe how compliance with the 720 hour limit for startup and shakedown (prior to a trial burn) will be documented.

KSAAP RESPONSE: *KSAAP will maintain a complete operating log, which will document operation of the unit and the conditions of operation. KDHE will be notified of the time and nature of any preliminary testing to be performed at the facility.*

17. Provide information that demonstrates that proposed operating conditions should achieve required performance criteria for DRE, HCl/Chlorine, particulate and metals emissions.

KSAAP RESPONSE: *KSAAP has performed testing at the incinerator in May and November 1995. Based on the results from this testing during which comparable POHCs and POHC federates yielded DREs of greater than or equal to 99.99%. Particulate emissions demonstrated during the November 1995 retest were also within acceptable limits. The proposed trial burn feed rates for metals are either within allowable Tier 1 feed rate limits or the anticipated emissions rates are within acceptable levels, based on previous testing with comparable metals feed rates. Finally, HCl emissions were not previously demonstrated, nor are proposed because the only waste proposed for the trial burn, which contains chlorine is ammonium perchlorate. At the proposed feed rate, should all the chlorine being fed produce HCl, the 4 pounds per hour emission limit would not be exceeded.*

18. Provide a summary description of the operating conditions for the startup, shakedown and trial burn.

KSAAP RESPONSE: *The allowable waste feed rates for startup and shakedown periods are presented in the KSAAP engineering program 042 (EP-042). Operating conditions are provided in the Hazardous Waste Incinerator Operations Manual (Appendix D-4). Feed rate and operating conditions for the trial burn are included in the Trial Burn Plan (Appendix D-2).*

19. Provide information that demonstrates control of fugitive emissions from the kiln system including feed systems, incineration (rotary kiln) and ash discharge systems.

KSAAP RESPONSE: *The retort pressure is maintained at negative pressure (-0.15 to –0.25 in water) as recorded in the Trial Burn Plan, (Appendix D-2) of the revised permit application. Maintaining negative pressure at the kiln prevents both overpressure of the devise and the release of fugitive emissions. This parameter is monitored continuously and recorded in the facility operating log. Waste feed cutoff is initiated if draft fan failure occurs. The entire furnace system, including the feed chute and end plates, is completely enclosed in a carbon steel shroud. This shroud confines the fugitive emissions from the furnace. The fugitive emissions are then removed*

through the fugitive emission return ducts (FERD). The FERDs are held under negative pressure by the burner blower, which routes emissions back to the furnace. Fugitive emissions control is discussed on page 6 of Appendix D-8.

20. Provide a summary description and table of alarms and automatic waste feed cut-offs for startup, shakedown and trial burn. Show permit limits in addition to alarms and AWFCOs.

KSAAP RESPONSE: *Table 13 of the Trial Burn Plan (Appendix D-2) provides the list of AWFCOs. Table 12 of the same appendix shows the monitored parameters and alarms. The operating conditions are provided in Section D-6b(2)(f).*

21. Provide a revised trial burn plan for the mid-term test. This plan may be a repeat of the trial burn conducted in 1995 or propose revised operating conditions. This test plan must also include all necessary testing to collect emissions information in order to complete an indirect risk assessment.

KSAAP RESPONSE: *This revised permit application is submitted for compliance with RCRA Hazardous Waste Combustor regulations. KSAAP is aware of the newly promulgated Hazardous Waste Combustor MACT rule. If KSAAP proceeds with permitting of the facility as described in this permit application, a timeline for submission of test plans, execution of testing, and reporting of test results will be in compliance with the proposed MACT schedule. Based on the referenced schedule, KSAAP will submit a Comprehensive Performance Test Plan by March 30, 2002 perform the Comprehensive Performance Test by March 30, 2003, and report the results of this testing in a detailed report by August 28, 2003. KSAAP anticipates that some preliminary testing will be performed to verify incinerator performance. If needed, operational and monitoring equipment will be upgraded to meet the stringent MACT emissions and performance standards. Additionally, KSAAP will comply with the required schedule for on-going performance of Confirmatory and Comprehensive Tests, each to be conducted at 5-year intervals after the initial Performance Test. KSAAP will also prepare and/or submit, as applicable operating plans as required by the HWC MACT Rule by September 30, 2002. If it is determined that KSAAP will perform an indirect risk assessment, a risk assessment protocol will be submitted under separate cover.*

22. Provide a summary of the operating conditions based on trial burn results that are necessary to ensure compliance with the performance standards for DRE, HCl/Cl, particulate and metals emissions. Include a summary of the actual system performance versus the required performance.

KSAAP RESPONSE: *Operating conditions during the 1995 trial burns are provided in detail in the trial burn reports submitted to KDEH after testing. Feed rate information and operational data are compiled and summarized in* ***Table 2 – Summary of Trial Burn Average Waste Feed and***

Operating Parameters *in each report. Requested operational limits are based on these conditions, which were previously demonstrated to yield acceptable emissions results.*

23. Provide as-built drawings and equipment specifications of the incinerator including any modifications and/or replacements since it was retro-fitted. Remove detailed engineering information as part of the trial burn plan and instead include it in the application.

KSAAP RESPONSE: *Detailed system descriptions have been moved to Appendix D-8.*

24. Section D-6b(2)(a), Page D-9: Provide a description of afterburner including linear dimensions and cross sectional area.

KSAAP RESPONSE: *This information is included in Appendix D-8. Additionally, the linear dimensions of the afterburner are provided in the Hazardous Waste Incinerator Operations Manual (Appendix D-4).*

25. Section D-6b(2)(f), Page D-12: Provide the updated automatic waste feed cut-off limits, alarm limits and permit limits.

KSAAP RESPONSE: *The requested information is provided in a table in Section D-6b(2)(f).*

KDHE Determination for Comments 15-25: Your response states that the requested information is included in the supplemental information but does not elaborate. If the information was provided please specify exactly where it is located. It should be noted that new performance requirements included in the HWC MACT rule must be met within time lines specified in the rule. Please include a discussion of KSAAP's ability to comply with these new requirements.

26. Section D-6b(2)(a), Paragraph 5, Page D-9: This paragraph states that the exhaust gas velocity will be measured using pitot tubes, and the resulting data would be corrected for temperature variations; however, it does not describe how the velocity would be corrected for molecular weight and moisture content variations. Because exhaust gas velocity is dependent on molecular weight and moisture content as well, KSAAP should discuss how the measured data would be corrected for these variables.

KDHE Determination: Your response does not mention if/where Attachment XXIX of your response will be incorporated in the Part B. Furthermore, the paragraph in question was not modified in response to EPA's comment. Please provide additional language in the referenced paragraph indicating where the information in Attachment XXIX is located in the Part B.

KSAAP RESPONSE: *The referenced paragraph has been modified to provide more description on the calculations that will be performed to determine stack gas velocity. Additionally, a reference has been included to the example calculation, which is included in the Trial Burn Plan (Appendix D-2) (Annex 12) of the revised permit application.*

27. Section D-6b(2)(a), Paragraph 6, Pages D-9 and D-10: This paragraph states that based on mass and energy calculations, potentially hazardous inorganic lead and barium components in the munitions would be emitted as solid or suspended particulates. KSAAP conducted the mass and energy calculations assuming complete combustion for two types of 20 millimeter (mm) cartridges. It is not clear whether the two cartridge types used for mass and energy calculations demonstrate the worst-case scenario. Update this information to conform to the items burned during the trial burn.

KSAAP RESPONSE: *The 20 mm cartridges discussed in this section represent the worst-case waste with respect to metals and particulate. These 20 mm cartridges have designated tracers every fifth cartridge. The inclusion of tracer compounds in these cartridges results in the release of more fine particulate during detonation. This characteristic yields greater particulate emissions than any of the other wastes burned at the facility. Therefore, using this material in the mass and energy calculations results in a conservative allowable feed rate.*

28. Section D-6b(2)(a), Paragraph 7, Page D-10: This paragraph indicates that solid residue from complete combustion may not exhibit toxicity characteristics for lead and barium because it contains very small percentages of these constituents; the basis for this conclusion is incorrect. The potential for waste residue to exhibit toxicity characteristics is not solely dependent on or determined, based on constituent concentration but rather on the quantity of the constituent the waste residue releases in the leachate extracted during an EPA extraction procedure. Therefore, instead of surmising whether or not the solid residue would exhibit toxicity characteristics, KSAAP should discuss the analysis of the residue for toxicity characteristics and comply with applicable disposal requirements.

KSAAP RESPONSE: *Analysis of waste residues is addressed in Section C-2a(3) of the permit application. This section discusses the analyses that are performed on the residues, and the procedures for disposing of these residues based on the results of the analyses. Table C-2A presents the waste analysis methods, test parameters and rationale for the waste residues. Additionally, Table C-4 in Appendix C-1 presents the RCRA waste codes and treatment methods for APCS, OB and EWI residues. This table indicates that the treatment/disposal method is determined based on the analytical results.*

29. Section D-6b(2)(a), Paragraph 8, Page D-10: This paragraph presents information concerning sulfur dioxide and hydrogen chloride concentrations anticipated during certain operating conditions, and whether the presence of hydrogen chloride or potassium chloride in emissions constitutes a complete combustion. This information is specific to the two 20 mm cartridge types. It is not clear whether this data would be applicable to other munitions incinerated. Provide estimates of sulfur dioxide and carbon monoxide emission rates for the items proposed to be incinerated, and the operating condition under which these emission rates would be fairly consistent, in order to determine if sulfur dioxide, hydrogen chloride and chlorine controls are necessary.

KSAAP RESPONSE: *Sulfur dioxide controls are not applicable for a RCRA permit application. HCl emissions were not previously demonstrated, nor are proposed because the only waste proposed for the trial burn, which contains chlorine is ammonium perchlorate. At the proposed feed rate, should all the chlorine being fed produce HCl, the 4 pounds per hour emission limit would not be exceeded. Carbon monoxide levels are expected to be within the allowable 100ppmv @7%O_2, as required, and as demonstrated during the 1995 trial burn.*

30. Section D-6b(2)(a), Paragraph 11, Page D-10: This paragraph discusses about the energy release or heat of combustion from incineration of 20mm cartridges and the amounts contributed by munitions and fuels. This section provides information specific to combustion of 20mm cartridges. It is unclear why KSAAP is using 20mm cartridges and not other munitions for mass and energy calculations. Instead of presenting data specific to the incineration of 20mm cartridges, KSAAP should briefly provide general operating conditions, including expected BTU, munition specific feed rates, fuel oil flow rate, and operating temperatures. Also, the section should briefly discuss the correlation between the waste feed and fuel oil flow rates.

KDHE Determination for Comments 27-30: Your response states that these comments were addressed in the supplemental information but does not specify where. It appears that some of the sections referenced in each of these comments were modified; however, without a highlight/strikeout version it is very difficult to determine what has been changed. Please specify exactly where the requested information is located.

KSAAP RESPONSE: *The 20 mm cartridges discussed in this section represent the worst-case waste with respect to metals and particulate. These 20 mm cartridges have designated tracers every fifth cartridge. The inclusion of tracer compounds in these cartridges results in the release of more fine particulate during detonation. This characteristic yields greater particulate emissions than any of the other wastes burned at the facility. Therefore, using this material in the mass and energy calculations results in a conservative allowable feed rate.*

31. Section D-6b(2)(c), Page D-11: This section indicates that the trial burn report would be submitted within 85 days from initiation of the trial burn, while Paragraph 12 of Section D-6b(2)(c) indicates that the report will be submitted within 90 days of the completion of the trial burn. KSAAP should correct the inconsistency in the time frame proposed for report submittal.

KDHE Determination: This comment was addressed in Section D-6b, not the supplemental information as indicated in your response. The revised paragraph does not mention the May/June 1994 trial burn. Please include this burn in the discussion and provide a brief discussion of the results of each burn.

KSAAP RESPONSE: *There was no testing performed in May/June 1994. Per the original request, the document has been modified to consistently state that a Trial Burn report will be submitted 90 days following completion of the Trial Burns.*

32. Section D-6b(2)(e), Page D-11: This section does not discuss procedures for, and frequency of, sampling the hopper below the baghouse unit, baghouse, gas coolers, and cyclone separators. This section should briefly discuss sampling procedures and frequency at each of these units. If the sampling procedures and frequency are provided in the trial burn plan, KSAAP should refer to the appropriate sections.

KSAAP RESPONSE: *Analysis of waste residues, including APCS residue, is addressed in Section C-2a(3) of the permit application. This section discusses the analyses that are performed on the residues, and the procedures for disposing of these residues based on the results of the analyses. Table C-2A presents the waste analysis methods, test parameters and rationale for the waste residues. Additionally, Table C-4 in Appendix C-1 presents the RCRA waste codes and treatment methods for the APCS residues. This table indicates that the treatment/disposal method is determined based on the analytical results.*

33. Section D-6b(2)(e), Page D-11: This section does not include operating parameters or dimensions of air pollution control devices (APCD). There is no information concerning APCD dimensions, anticipated particulate matter size distribution and temperature ranges of each APCD, anticipated pressure drop at the baghouse, and frequency at which gas coolers are cleaned.

KSAAP RESPONSE: *This information is provided in Appendix D-8. Additional APCD information is provided in the Hazardous Waste Incinerator Operations Manual (Appendix D-4).*

34. Provide a copy of the most recent CEM certification test as part of the supplemental information. Document in the application that the location of the CEMs meets the criteria in 40 CFR 266, Appendix IX.

KSAAP RESPONSE: *This revised permit application is submitted for compliance with RCRA Hazardous Waste Combustor regulations. KSAAP is aware of the newly promulgated Hazardous Waste Combustor MACT rule, which included CEMs certification testing.. When KSAAP proceeds with permitting of the facility as described in this permit application, certifications will be performed as called for by this regulation. If needed, operational and monitoring equipment will be upgraded to meet the stringent MACT emissions and performance standards.*

35. Section D-6b(2)(f), Paragraph 1, Page D-11: This paragraph states that the incinerator will be shut down by stopping waste feed to the kiln, allowing the waste that has been last fed to travel completely through the kiln and aborting fuel flow to the burner. The time required for waste to travel completely through the kiln is not provided. KSAAP does not discuss the changes, if any, in operating conditions for the entire system after aborting fuel flow to the burner. KSAAP does not discuss whether fuel flow to the afterburner would also be aborted. In addition, KSAAP should demonstrate that the control system would be capable of increasing fuel oil flow to compensate for lack of waste feed and maintaining normal operating conditions.

    KSAAP should discuss the ramifications of aborting waste and fuel oil feed to the kiln; state whether fuel oil flow to the afterburner would also be terminated, and if so, the potential impact on the APCD and emissions; and demonstrate the control system's ability to regulate fuel oil flow depending on waste feed rates.

KSAAP RESPONSE: *Procedures for shutting down the incinerator during both normal and "emergency" situations are provided in SOP KN-103, which is included in the supplemental information.*

As described in this procedure, an emergency shutdown includes failure of the APCS, automatic shutdown, or a fire in the baghouse. In the event of an emergency shutdown the kiln (retort) and burner continue to operate for a minimum of 15 minutes following the event that initiated the shutdown, or until the discharge conveyor runs empty, whichever is a longer period. The retort is then stopped and cooled with the burner and APCS (including the afterburner) operating until the retort cools to 400 °F.

During a normal shutdown scenario, the furnace continues to operate for five minutes after the last items are fed to the unit. Once this five minute period concludes, shutdown of the system proceeds in the following order: draft fan, gas cooler, oil pump, compressor, discharge conveyor, feed conveyor, return conveyor, retort and purge fan.

36. Section D-6b(2)(f), Paragraph 2, Page D-12: This section lists the specific device failures that will activate the automatic waste feed cutoff (AWFCO), including failure of temperature monitors (excluding those located downstream of the baghouse). In the following table, KSAAP indicates that stack gas velocities outside a stipulated range would also activate AWFCO. In Section D-6b(2)(a), KSAAP states that stack gas velocity will be measured with pitot tubes and corrected for temperature variations. Because temperatures directly affect stack gas velocity and stack gas velocity (outside a stipulated range) prompts the AWFCO, any failure in temperature monitor controls downstream of the baghouse unit would result in inaccurate stack gas velocity measurements and potential false activation of AWFCO. Therefore, KSAAP should design the system such that failure in any temperature monitor controls, downstream or upstream of the baghouse, will result in activation of the AWFCO.

KSAAP RESPONSE: *KSAAP has proposed those AWFCOs required by RCRA hazardous waste regulations. Required AWFCO temperature cutoffs are listed in Table 13 of the Trial Burn Plan.*

37. Section D-6b(2)(f), Paragraph 2, Page D-12: This section also lists baghouse bypass activation as a device failure that would prompt an AWFCO. KSAAP should elaborate on the baghouse bypass and how and when the bypass would be activated.

KSAAP RESPONSE: *The baghouse bypass is no longer in use. This duct has been covered to preclude further use of the bypass.*

38. Section D-6b(2)(f), Paragraph 3 and Tabulated Data Page D-12: This paragraph states that any deviations in the operating parameters or conditions listed in the table would trigger AWFCO. It is unclear whether the operating parameters presented in the table were established for the trial burn test only or for the post-trial burn operations as well. Operation parameters for the post-trial burn operations should be set based on trial burn test results. Therefore, KSAAP should state that post-trial burn operating parameters, if the parameters are established only for trial burn testing, will be set based on the trial burn results.

KSAAP RESPONSE: *This statement has been added to Section D-6b(2)(g).*

39. Section D-6b(2)(f), Tabulated Data, Page D-12: The first row indicates that the AWFCO would be triggered when carbon monoxide levels exceed 100 parts per million (corrected). KSAAP does not state how it would be corrected. KSAAP should clearly explain the variables involved in correcting carbon monoxide levels.

KSAAP RESPONSE: *Carbon monoxide levels are corrected to 7% O2. The sample calculation for this correction is provided in Annex 12 to the Trial Burn Plan.*

40. Section D-6b(2)(f), Tabulated Data, Page 12: The second row in the table provides the lower (1,200 degrees Fahrenheit [°F]) and upper limits (1800°F) for the afterburner temperature. However, the first paragraph of Section D-6b(2)(e) states that the afterburner elevates the temperature of the exhaust gases to a maximum of 2200°F to ensure complete waste degradation and complete burner fuel combustion. KSAAP should clarify this inconsistency.

    The tabulated data does not include the upper or lower limits for baghouse inlet temperatures. Activation of AWFCO based on baghouse inlet temperatures is critical, because the potential for dioxin formation exists at temperatures above 450°F and acid condensation may occur at temperatures below 250°F. KSAAP should set limits for baghouse inlet temperatures or discuss why this parameter is not critical in determining waste feed cutoff.

KSAAP RESPONSE: *These temperature limits are set for equipment protection only. Dioxin/furan emissions are not parameters addressed by RCRA regulations, so a temperature limit for minimization of dioxin/furan is not applicable at this time.*

41. Section D-6b(2)(g) Page D-12: This section does not state whether the incinerator would be operated after the trial burn, or if operations would be halted until permit approval. KSAAP does not address when operations would resume after permit approval.

KSAAP RESPONSE: *This statement has been added to Section D-6b(2)(g).*

42. Figure D-12: This figure does not show the secondary conveyor identified in Section D-6b(2)(a). This figure shows high and low temperature gas coolers, but these were not discussed in the text. This figure should be modified to show the secondary conveyor, and the text should be modified to include a discussion of the gas coolers.

KSAAP RESPONSE: *A discussion on the gas cooler is provided in Section D-6b(2)(c) and D-6b(2)(e) of the Trial Burn Plan and Appendix D-8. Figure D-13 shows both the primary and secondary feed conveyors.*

43. Figure D-13: This figure shows a kiln shroud, but the associated text in Section D of the application does not mention the existence of the kiln shroud, or its importance to the process. The text should be modified to include a discussion on the kiln shroud and its importance to the process.

KSAAP RESPONSE: *The kiln shroud is discussed in Appendix D-8.*

44. Figure D-14: This figure does not show pressure drop monitors around the kiln, fuel oil and combustion air flow meters, and pressure drop monitors around the cyclone separator to demonstrate control of fugitive emissions; these items should be added to the figure and should also be discussed in the text.

KSAAP RESPONSE: *The monitors are shown in the Furnace Control Diagram (Figure 8) in Appendix D-8.*

45. Figure D-15: This figure shows a propane tank level; however, the text in Section D does not discuss the use of propane. KSAAP should address this inconsistency.

KDHE Determination for Comments 32-45: Your response states that these comments were addressed in the supplemental information but does not specify where. It appears that some of the sections referenced in each of these comments were modified; however, without a highlight/strikeout version it is very difficult to determine what has been changed. Please specify exactly where the requested information is located.

KSAAP RESPONSE: *Propane is used for kiln burner and afterburner, which are combination liquid propane and No. 2 fuel oil burners, discussed in Appendix D-8.*

Additional KDHE Comments on September 1997 Part B Application (not the July 1999 attachments).

1. Page B-l: States that the facility has not hazardous waste disposal units. Please revise the application to reflect the 700 Area as a land disposal unit.

KSAAP RESPONSE: *The 700 area is not being permitted as a land disposal unit. In regard to how this area is being handled, please refer to the letter sent to Mr. Dennis Degner at KDHE from Mr. Donald Dailey on December 15, 1999.*

2. Page B-2: Explain further what is meant by saying that the EWI is used to treat explosive-contaminated hazardous waste and describe how the trail burn demonstrated limits on such feed items.

KSAAP RESPONSE: *Treatment, as described on page 1 of the Trial Burn Plan, includes any method, technique or process designed to change the physical, chemical, or biological character, or composition of hazardous waste. Therefore, incineration of hazardous waste is considered treatment.*

Section 5 of the Trial Burn Plan describes those items that are incinerated and how the trial burn feed items are representative of worst case feed. This section also addresses how the proposed feed limits were determined.

3. Page B-5: Please explain why it is not possible to estimate the groundwater recharge rate from the 700 Area investigation conducted to date.

KSAAP RESPONSE: *The 700 area is not being permitted as a land disposal unit. In regard to how this area is being handled, please refer to the letter sent to Mr. Dennis Degner at KDHE from Mr. Donald Dailey on December 15, 1999.*

4. Page B-16, B-5f: Remove the word "typically" from the last sentence in this section.

KSAAP RESPONSE: *The referenced text has been modified, as requested.*

5. Page C-3, C-1e: The reference to 40 CFR 264.136 is incorrect and should be 264.13. Also, if KSAAP accepts waste from off-site sources, KSAAP becomes responsible for proper characterization of the waste streams (see the comment at 264.13(a)(2)). Unless acceptance is limited to off-specification military items, it may be necessary to perform analysis on the waste stream.

KSAAP RESPONSE: *This reference has been corrected, as requested.*

6. Table C-2: The "Rationale" portion of this table conflicts with the Part A. Items such as explosive contaminated solvents were not demonstrated as feed items during the trial burn and therefore can not be fed to the incinerator. The table also refers to "EP Toxicity" which has been replaced by TCLP.

KSAAP RESPONSE: *Trial Burn feed materials were selected to be representative of the worst case that could result from feeding any of the feed streams. Therefore, if emission limitations were met for the Trial Burn feed materials, emissions criteria for all feed items will also be met. A discussion of waste feed section, and worst case feed criteria is contained in the Trial Burn Plan, Section 6. All references to EP Toxicity have been replaced with TCLP Toxicity.*

7. Table C-2: The rationale for listed hazardous waste does not include a discussion of the LDR requirements. For example, EWI and OB/OD residues must be treated in accordance with LDR criteria before land disposal. Furthermore, disposal of treatment residues from characteristic hazardous waste may only be sent to Subtitle D landfill after demonstrating

that the treatment residue meeting the criteria of Phase IV Land Disposal Restrictions. Conversely, listed hazardous waste treatment residues must be disposed in a permitted Subtitle C landfill after meeting the LDR standards. Disposal of these residues in the on-site industrial landfill is prohibited.

KSAAP RESPONSE: *This rationale has been modified to discuss LDR requirements.*

8. Table C-2A: See above comment.

KSAAP RESPONSE: *This rationale has been modified to discuss LDR requirements.*

9. Appendix C-l, Table C-2, Page 1: P065 (mercury fulminate) is not included on the Part A for the renewal application (or the approved Part A for that matter).

KSAAP RESPONSE: *Waste code P065 has been added to the Part A application and to Appendix C-1, Table C-2.*

10. Appendix I-l, Page 3, Section VI: Refers to "See Appendix" but does not specify which appendix.

KSAAP RESPONSE: *This reference has been corrected to reference TB 700-4, which is now contained in the supplemental information.*

11. Please explain why the Part A lists T04 (OB/OD) for D004 (arsenic).

KSAAP RESPONSE: *Treatment code, T04, applies for instances when DRMO and the hazardous waste treatment contractor determine that an alternate method of treatment is recommended for the material. KSAAP utilizes the T04 code for these cases and does not necessarily indicate OB/OD treatment.*

12. (Attachment XI to July 1999 response) Page C-8: The last paragraph states that waste solvents will be reclaimed on-site in the SRS which has been removed.

KSAAP RESPONSE: *The reference to the SRS has been removed.*

13. (Attachment XIV to July 1999 response) Figure C-2: The figure does not correspond to the Part A with respect to handling of K044, K045, K046, U122 and U132. On-site thermal treatment will not be used for these waste codes. Furthermore, LDR considerations are not accounted for with the residues (see comment 7).

KSAAP RESPONSE: *Figure C-2 has been revised to reflect actual handling of wastes at the EWI facility.*

14. (Attachment XXIV to July 1999 response) Page D-3, Section D-1a(3)(b) is not the same as this section in the 6/30/97 version in the Part B renewal application.

KSAAP RESPONSE: *The permit application has been modified to show the correct wording.*

15. HWC MACT and Indirect Risk Assessment: In order to satisfy RCRA combustion standards, the facility will be required to complete an indirect site-specific risk assessment for the incinerator. Information necessary to complete an indirect risk assessment was not collected during previous trial burns. Indirect risk from the OB/OD operation must also be considered in the assessment.

    Section III.D.3 of the facility permit states the following: *"Upon request by the Secretary, or at least once during the life of the Permit, the Permittee shall perform the test required by 40 CFR 264.347(a)(3). The Permittee shall notify the Secretary at least 90 days prior to performance of the test and submit the test plan for approval. All testing must be completed 180 days prior to expiration of the permit. The results of the test must be submitted in accordance with 40 CFR 270.62(b)(7), (8) and (9) and must be submitted with any new permit application under Section I.E.2."*

    Clearly, the original permit envisioned trial burns on a 5-year interval. The last trial burn conducted for this incinerator was in November 1995, which is more than 4 ½ years ago. In light of the fact that the HWC MACT requires additional testing in order to demonstrate compliance in the relatively near future, we believe that it is prudent to conduct a combined risk burn/comprehensive performance test prior to re-issuance of this permit. This would allow the facility to demonstrate compliance with MACT early and at the same time, collect the PIC emission data necessary to conduct a site-specific risk assessment for the facility. Emissions from the OB/OD operations should also be considered for indirect risk. Please include in your response a detailed description of the facility intends to demonstrate compliance with MACT as well as the site-specific risk assessment standards.

KSAAP RESPONSE: *This revised permit application is submitted for compliance with RCRA Hazardous Waste Combustor regulations. KSAAP is aware of the newly promulgated Hazardous Waste Combustor MACT rule. If KSAAP proceeds with permitting of the facility as described in this permit application, a timeline for submission of test plans, execution of testing, and reporting of test results will be in compliance with the proposed MACT schedule. Based on the referenced schedule, KSAAP will submit a Comprehensive Performance Test Plan by March 30, 2002 perform*

the Comprehensive Performance Test by March 30, 2003, and report the results of this testing in a detailed report by August 28, 2003. KSAAP anticipates that some preliminary testing will be performed to verify incinerator performance. If needed, operational and monitoring equipment will be upgraded to meet the stringent MACT emissions and performance standards. Additionally, KSAAP will comply with the required schedule for on-going performance of Confirmatory and Comprehensive Tests, each to be conducted at 5-year intervals after the initial Performance Test. KSAAP will also prepare and/or submit, as applicable operating plans as required by the HWC MACT Rule by September 30, 2002. If it is determined that KSAAP will perform an indirect risk assessment, a risk assessment protocol will be submitted under separate cover.

16. OB/OD and 700 Area Compliance Schedule: In order to re-issue this permit, it will be necessary to demonstrate to the public that all of the hazardous waste activities requiring a permit at the site are addressed, including the OB/OD unit and the 700 Area (if the consent agreement is abandoned). While we do not intend to hold re-issuance until review and approval of the OB/OD and/or 700 Area Post-Closure application is complete, we do intend to include a compliance schedule in the permit that would require review and approval or denial of the application within a specified time-frame. Please provide a response to the December 7, 1999 letter from the department related to achieving compliance with the MCL requirements for the 700 Area.

KSAAP RESPONSE: *A letter, dated December 15, 1999, was sent to Mr. Dennis A. Degner, KDHE Chief Permits Section, from Mr. Donald Daily, Commander's Representative, in response to the December 7, 1999 letter.*

Respectfully,

STEVE KOSMAN
Director of Engineering

SWK/CJS

cf: Glen Parish – ACO
Dean Cramer – DZI
Ken Herstowski - EPA
Environmental File
Reading File

SECTION A. PART A PERMIT APPLICATION *[40 CFR 270.13]*

The owner or operator of a treatment, storage, or disposal facility is required to submit a completed Part A application form (*Notification of Hazardous Waste Activity*), as part of the Part B RCRA permit application. See the Part A Form in this section.

TABLE A-1

MAXIMUM HAZARDOUS WASTE STORAGE CAPACITITES FOR HW STORAGE STRUCTURES

Storage Facility	Estimated Number of Containers to be Stored in Facility	Capacity of Containers to be Stored (gallons)	Facility Included in Existing (E) Permit or Proposed (P) for use
1705	320	17,600	E
1709	320	17,600	E
1711	320	17,600	E
1712	320	17,600	E
1717	320	17,600	E
1721	80	480	E
1813	2,160	118,800	E
1910	320	17,600	P
1911	320	17,600	P
1914	320	17,600	E
1915	320	17,600	E
1916	320	17,600	E
1917	320	17,600	E
1946	320	17,600	P
1947	320	17,600	P
1948	320	17,600	P
1953	320	17,600	P
1956	320	17,600	P
1958	320	17,600	E
1961	320	17,600	E
1962	320	17,600	P
1963	320	17,600	P
1965	320	17,600	P
1966	320	17,600	P
1969	320	17,600	P
1973	320	17,600	P
1974	320	17,600	E
1976	320	17,600	E
1977	320	17,600	P
1978	320	17,600	P
1979	320	17,600	P
1980	320	17,600	P
2707	8	440	E
2708	8	440	E
2709	8	440	E
A019	8	440	E
TOTAL (36 bldgs.)	11,872	649,040	

NOTE: All containers are 55 gallon drums, except for Building 1721, which holds 6 gallon boxes.

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved, OMB No. 2050-0034 Expires 10/31/02
GSA No. 0248-EPA-OT

For EPA Regional Use Only		
Date Received: Month / Day / Year		

United States Environmental Protection Agency
Washington, DC 20460

Hazardous Waste Permit Application Part A

(Read the Instructions before starting)

I. Facility's EPA ID Number *(Mark 'X' in the appropriate box)*

☐ A. First Part A Submission	☒ B. Revised Part A Submission (Amendment # 001)

C. Facility's EPA ID Number	D. Secondary ID Number *(If applicable)*
KS0213820467	

II. Name of Facility

KANSAS ARMY AMMUNITION PLANT

III. Facility Location *(Physical address not P.O. Box or Route Number)*

A. Street: 23018 ROOKS RD

Street *(Continued)*:

City or Town	State	Zip Code
PARSONS	KS	67357-8403

County Code *(If known)*	County Name
	LABETTE

B. Land Type (Enter code)	C. Geographic Location: LATITUDE (Degrees, minutes, & seconds)	LONGITUDE (Degrees, minutes, & seconds)	D. Facility Existence Date: Month / Day / Year
F	37 16	095 11	10 / 14 / 1942

IV. Facility Mailing Address

Street or P.O. Box: 23018 ROOKS RD

City or Town	State	Zip Code
PARSONS	KS	67357-8403

V. Facility Contact *(Person to be contacted regarding waste activities at facility)*

Name *(Last)*	*(First)*
PARISH	GLEN

Job Title	Phone Number *(Area Code and Number)*
ENV. COORD.	620-421-7596

VI. Facility Contact Address *(See Instructions)*

A. Contact Address: Location	Mailing	Other	B. Street or P.O. Box
☐	☒	☐	23018 ROOKS RD

City or Town	State	Zip Code
PARSONS	KS	67357-8403

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved, OMB No. 2050-0034 Expires 10/31/02
GSA No. 0248-EPA-OT

EPA ID Number *(Enter from page 1)*: KS0213820467

Secondary ID Number *(Enter from page 1)*:

VII. Operator Information *(See instructions)*

A. Name of Operator: DAY & ZIMMERMANN, INC.

Street or P.O. Box: 23018 ROOKS RD

City or Town: PARSONS

State: KS

ZIP Code: 67357-

Phone Number *(Area Code and Number)*: 620-421-7400

B. Operator Type: P

C. Change of Operator Indicator: Yes [ ] No [X]

Date Changed Month / Day / Year:

VIII. Facility Owner *(See instructions)*

A. Name of Facility's Legal Owner: DEPARTMENT OF THE ARMY

Street or P.O. Box: 23018 ROOKS RD

City or Town: PARSONS

State: KS

ZIP Code: 67357-

Phone Number *(Area Code and Number)*: 316-421-7448

B. Owner Type: F

C. Change of Owner Indicator: Yes [ ] No [X]

Date Changed Month / Day / Year:

IX. NAICS Codes *(in order of significance; start in left box)*

First	332995	**Third**	
(Description)		*(Description)*	
Second		**Fourth**	
(Description)		*(Description)*	

X. Other Environmental Permits *(See instructions)*

A. Permit Type *(Enter code)*	B. Permit Number	C. Description
N	F-NE55-P004	NPDES
P	09900107	PSD (Air Emissions)
E	401	
E		Solid Waste/Industrial Landfill

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved, OMB No. 2050-0034 Expires 10/31/02
GSA No. 0248-EPA-OT

EPA ID Number *(Enter from page 1)*

K	S	0	2	1	3	8	2	0	4	6	7

Secondary ID Number *(Enter from page 1)*

XI. Nature of Business *(Provide a brief description)*

Kansas Army Ammunition Plant, a Government-Owned Contractor-Operated military industrial installation, loads/assembles/packs ammunition items; operates and maintains the active facilities; procures, receiveds, stores, and issues the necessary supplies, equipment, components, and materials for ammunition manufacturing; and receives, performs surveillance, maintains, renovates, demilitarizes, salvages, stores, inventories, and issues the Field Service Stocks, as directed.

XII. Process Codes and Design Capacities

A. **PROCESS CODE** - *Enter the code from the list of process codes below that best describes each process to be used at the facility. Thirteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in item XIII.*

B. **PROCESS DESIGN CAPACITY** - *For each code entered in column A, enter the capacity of the process.*
1. **AMOUNT** - *Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.*
2. **UNIT OF MEASURE** - *For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.*

C. **PROCESS TOTAL NUMBER OF UNITS** - *Enter the total number of units used with the corresponding process code.*

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	Disposal:	
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day
D80	Landfill	Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards
D81	Land Treatment	Acres or Hectares
D82	Ocean Disposal	Gallons Per Day or Liters Per Day
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards
D99	Other Disposal	Any Unit of Measure Listed Below
	Storage:	
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards
S03	Waste Pile	Cubic Yards or Cubic Meters
S04	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards
S06	Containment Building Storage	Cubic Yards or Cubic Meters
S99	Other Storage	Any Unit of Measure Listed Below
	Treatment:	
T01	Tank Treatment	Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour
T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour
T03	Incinerator (Explosive waste incinerator)	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day; Liters Per Hour; or Million Btu Per Hour
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour
T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Liters Per Hour; Kilograms Per Hour; or Million Btu Per Hour
T82	Lime Kiln	
T83	Aggregate Kiln	
T84	Phosphate Kiln	
T85	Coke Oven	
T86	Blast Furnace	
T87	Smelting, Melting, Or Refining Furnace	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Hour; Liters Per Hour; or Million Btu Per Hour
T88	Titanium Dioxide Chloride Oxidation Reactor	
T89	Methane Reforming Furnace	
T90	Pulping Liquor Recovery Furnace	
T91	Combustion Device Used In The Recovery Of Sulfur Values From Spent Sulfuric Acid	
T92	Halogen Acid Furnaces	
T93	Other Industrial Furnaces Listed in 40 CFR §260.10	
T94	Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
	Miscellaneous (Subpart X):	
X01	Open Burning/Open Detonation	Any Unit of Measure Listed Below
X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons	G
Gallons Per Hour	E
Gallons Per Day	U
Liters	L
Liters Per Hour	H
Liters Per Day	V
Short Tons Per Hour	D
Metric Tons Per Hour	W
Short Tons Per Day	N
Metric Tons Per Day	S
Pounds Per Hour	J
Kilograms Per Hour	R
Million Btu Per Hour	X
Cubic Yards	Y
Cubic Meters	C
Acres	B
Acre-feet	A
Hectares	Q
Hectare-meter	F
Btu Per Hour	I

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GSA No. 0248-EPA-OT

EPA ID Number *(Enter from page 1)*: K S 0 2 1 3 8 2 0 4 6 7

Secondary ID Number *(Enter from page 1)*:

XII. Process Codes and Design Capabilities *(Continued)*

EXAMPLE FOR COMPLETING ITEM XII (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.

Line Number	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY 1. Amount (Specify)	B. PROCESS DESIGN CAPACITY 2. Unit Of Measure (Enter code)	C. Process Total Number Of Units	For Official Use Only
X 1	S 0 2	5 3 3.7 8 8	G	0 0 1	
1	S 0 1	649,040.	G	036	
2	T 0 3	0.12	D	001	
3	X 0 1	3,208.	U	001	
4	X 0 1	1,134.	U	001	
5		.			
6		.			
7		.			
8		.			
9		.			
10		.			
11		.			
12		.			
13		.			

NOTE: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in item XIII.

XIII. Other Processes *(Follow instructions from item XII for D99, S99, T04 and X99 process codes)*

Line Number (Enter #s in seq w/XII)	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY 1. Amount (Specify)	B. PROCESS DESIGN CAPACITY 2. Unit Of Measure (Enter code)	C. Process Total Number Of Units	D. Description Of Process
X 1	T 0 4	.			In-situ Vitrification
1		.			
2		.			
3		.			
4		.			

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Form Approved, OMB No. 2050-0034 Expires 10/31/02
GSA No. 0248-EPA-OT

EPA ID Number *(Enter from page 1)*	Secondary ID Number *(Enter from page 1)*
K S 0 2 1 3 8 2 0 4 6 7	

XIV. Description of Hazardous Wastes

A. **EPA HAZARDOUS WASTE NUMBER** - *Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.*

B. **ESTIMATED ANNUAL QUANTITY** - *For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.*

C **UNIT OF MEASURE** - *For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:*

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. **PROCESSES**

1. **PROCESS CODES:**

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in item XII A. on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in item XII A. on page 3 to indicate all the processes that will be used to store, treat, and/ or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. *Enter the first two as described above.*
2. *Enter "000" in the extreme right box of item XIV-D(1).*
3. *Use additional sheet, enter line number from previous sheet, and enter additional code(s) in item XIV-E.*

2. **PROCESS DESCRIPTION:** *If a code is not listed for a process that will be used, describe the process in the space provided on the form (D.(2)).*

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. *Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.*
2. *In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.*
3. *Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.*

EXAMPLE FOR COMPLETING ITEM XIV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA HAZARD WASTE NO. (Enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (Enter code)	D. PROCESS (1) PROCESS CODES (Enter)	D. PROCESS (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X 1	K 0 5 4	900	P	T 0 3 D 8 0	
X 2	D 0 0 2	400	P	T 0 3 D 8 0	
X 3	D 0 0 1	100	P	T 0 3 D 8 0	
X 4	D 0 0 2				Included With Above

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EPA ID Number *(Enter from page 1)*: K S 0 2 1 3 8 2 0 4 6 7

Secondary ID Number *(Enter from page 1)*:

XIV. Description of Hazardous Wastes *(Continued; use additional sheets as necessary)*

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES (1) PROCESS CODES (Enter code)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	D001	29,000	P	S01 X01	
2	D002	10	P	S01	
3	D003	48,350	P	S01 X01 T03	
4	D004	100	P	S01 X01	
5	D005	100	P	S01	
6	D006	34,000	P	S01	
7	D007	1,000	P	S01	
8	D008	1,000	P	S01 X01 T03	
9	D009	200	P	S01	
10	D010	200	P	S01	
11	D011	200	P	S01	
12	D018	100	P	S01	
13	D022	100	P	S01	
14	D029	100	P	S01	
15	D030	100	P	S01	
16	D035	100	P	S01	
17	F001	8,950	P	S01	
18	F002	50	P	S01	
19	F003	5,000	P	S01	
20	F005	120	P	S01	
21	K044	75,000	P	S01 X01	
22	K045	100,000	P	S01	
23	K046	5,000	P	S01 X01	
24	K047	5,000	P	S01	
25	U036	200	P	S01	
26	U122	42	P	S01	
27	U132	10	P	S01	
28	P065	1	P	S01	
29					
30					
31					
32					
33					

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Form Approved, OMB No. 2050-0034 Expires 10/31/02
GSA No. 0248-EPA-OT

EPA ID Number *(Enter from page 1)*	Secondary ID Number *(Enter from page 1)*
K S 0 2 1 3 8 2 0 4 6 7	

XV. Map

Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

XVI. Facility Drawing

All existing facilities must include a scale drawing of the facility (See instructions for more detail).

XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

XVIII. Certification(s)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner Signature: Don Dailey	Date Signed: 4-16-01
Name and Official Title (Type or print): Donald D. Dailey, Commander's Representative	
Owner Signature	Date Signed
Name and Official Title (Type or print)	
Operator Signature: W. Shinn II	Date Signed: 4-12-01
Name and Official Title (Type or print): Willard L. Shinn II, General Manager	
Operator Signature	Date Signed
Name and Official Title (Type or print)	

XIX. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office. (Refer to instructions for more information)

Green

KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

December 8, 2000

Mr. Steve W. Kosman
Day and Zimmerman, Inc.
Kansas Army Ammunition Plant
East Highway 160
Parsons, KS 67357-9106

Re: Request for Extension of Submittal of Revised Part B Permit Renewal Application
Kansas Army Ammunition Plant (KSAAP), Parsons
EPA ID No. KS0213820467

Dear Mr. Kosman:

The Kansas Department of Health and Environment (KDHE) is in receipt of your letter dated November 30, 2000, requesting an extension for submitting the Part B renewal application. The initial submission date for the permit renewal application was previously extended to January 8, 2001. KDHE is granting an additional 90-day extension to the January 8, 2001 deadline. Therefore, the Part B renewal application must be received by April 9, 2001. All applicable HWC MACT compliance dates remain in effect, and should be considered when organizing the RCRA Part B application and/or Trial Burn Plan.

Should you have any questions regarding this authorization revision, please contact me at (785) 296-0679.

Sincerely,

Shawn Corbin

Shawn Corbin
Environmental Engineer
Permits Section

cc: David Stutt - DEA/SEDO/Waste Program
Gayle Hubert - EPA Region VII/RCAP Branch

Green File

DAY & ZIMMERMANN, INC.

KANSAS DIVISION

November 30, 2000
EE:RW000082.CDC

RECEIVED
DEC 04 2000
BUREAU OF WASTE MANAGEMENT

Kansas Department of Health and Environment
Bureau of Waste Management
Permits Section
Forbes Field, Building 740
Topeka, Kansas 66620-0001
Attn: Mr. Shawn Corbin

Dear Mr. Corbin:

Subject: Request for Extension of Timeframe for Submittal of Revised Part B Permit Renewal Application

Reference: Kansas Department of Health and Environment (Mr. Lesslie) letter dated April 17, 2000; Subject: March 14, 2000 Request for Extension on Part B Application Submittal, Kansas Army Ammunition Plant, Parsons, Kansas EPA I.D. Number KS0213820467

Day & Zimmermann, Inc. (DZI), Kansas Division, hereby requests a 90-day extension to the January 8, 2001 due date for submission of the revised Kansas Army Ammunition Plant (KSAAP) Part B Permit Renewal application, as indicated in the referenced letter. Delays in establishing a subcontractor to prepare the revision, and difficulties in locating and supplying the appropriate information to the subcontractor for inclusion in the application, have severely limited the time available for completing the rough draft application, appropriate reviews and changes, and final submittal.

The additional 90-day extension will allow sufficient time for the proper completion of all aspects of the application submittal. Your approval of this extension will be greatly appreciated. If you have any questions concerning this request, our point of contact is Dean Cramer, telephone 316/421-7532.

Respectfully,

Steve Kosman

STEVE KOSMAN
Director of Engineering

SWK/CJS/raw

cf: Glen Parish – ACO
C. Dean Cramer – DZI
Environmental File
Reading File

23018 ROOKS ROAD, SUITE A ◆ PARSONS, KANSAS 67357-8403 ◆ 316-421-7400 ◆ FAX 316-421-7518

Mark D. Hyde

October 23, 2000

Environmental Office
(200-1a)

SUBJECT: Corrective Action for Solid Waste Management Units Quarterly Report

RCRA Branch Chief
U.S. Environmental Protection Agency
Region VII
901 N. 5th Street
Kansas City, KS 66101

Dear Sir/Madam

Three copies of subject report for the period 1 July 2000 through 30 September 2000, are enclosed for your use as required by Kansas Army Ammunition Plants RCRA Part B permit.

The point of contact is Glen Parish, 316-421-7596.

Sincerely,

ORIGINAL SIGNED BY

Donald D Dailey
Contractor's Representative

Enclosure

Copies Furnished:

KDHE: Dr. Degner (w/encl.)
DZI Env Eng:C.Smalley (w/encl.)
CEMRK- F. Zigmund (w/encl.)
SOSMA-IBE-R/T. Sparr (w/encl.)
KDHE:D. Gravatt (w/encl.)

Hazardous and Solid Waste Amendments (HWSA)
Permit Corrective Action for Solid Waste
Management Units Quarterly Report for
Period July 1, through September 30, 2000

The following information is offered in response to the requirement of Section VI, paragraph 4, Reporting requirements, of Kansas Army Ammunition Plant's (KSAAP'S) Resource Conservation and Recovery Act (RCRA) Part B Permit.

1. **Description of work completed**: Work plans for the Data Gap Study project were submitted to EPA and KDHE for review and comment. Comment Review meeting was held at KSAAP on 10-11 October 2000. The COE continued their efforts to complete the final Corrective Measures Study report. Radian (URS) has submitted the draft 700 Area Groundwater Engineering Report to the COE and KSAAP for review and comment. Groundwater Monitoring for the 700 Area and the OD/landfill monitoring project took place in September

2. **Summaries of all findings, including summaries of laboratory data**: NONE

3. **Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems:** None

4. **Projected work for the next period:** Complete Corrective Measures Study. Complete work plans and begin field work at KSAAP on the Data Gap study sites. Receive Remedial Design funds to complete 65% design package for the metals and explosives remediation sites. U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) will perform relative risk evaluation on five sites not currently in the restoration program. Submit 700 Area Groundwater Engineering report to KDHE for review and comment. Groundwater Monitoring for 700 Area will take place in December.

KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

August 15, 2000

Mr. Steve Kosman
Day and Zimmerman, Inc
Kansas Army Ammunition Plant
23018 Rooks Road
Parsons, KS 67357-8403

Re: Hazardous Waste Violations; EPA I.D. KSO213820467; Parsons, Labette County

Dear Mr. Kosman:

I am writing to acknowledge receipt of your August 1, 2000 letter describing corrective actions taken in regard to the referenced violations. Per subsequent telephone conversations, I have also received facsimile transmissions from Mr. Dean Cramer August 7 and 10, 2000 providing documentation and describing corrective actions. Based on the information provided, the violations are satisfactorily corrected.

Your cooperation with the waste management program is appreciated. If you have any questions or comments, please contact me at 316/431-2390.

Sincerely,

Douglas M. Cole, CHMM
Environmental Technician
Bureau of Environmental Field Services

cc: John Mitchell, BWM, Topeka
Ron Smith, BWM, Topeka
SEDO

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
BUREAU OF WASTE MANAGEMENT
FORBES FIELD, TOPEKA, KANSAS 66620

HAZARDOUS WASTE GENERATOR/TRANSPORTER COMPLIANCE INSPECTION CHECKLIST

General [x] Routine [] Complaint

EPA ID KSD 213 820 467 Time 9:30 a.m. Date June 26, 27, 28 and July 10, 2000

Facility Name Kansas Army Ammunition Plant District Southeast

Street 23018 Rooks Road City Parsons, Kansas ZIP 67357

Mailing Address (if different than above) Same

County Labette Phone (316) 421-7574

Contact(s) Dean Cramer

Inspector(s) Doug Cole and Charles Bowers SIC: 3489

Type of Business Load, assemble, pack, de-militarize munitions for U.S. Army Number of Employees 150

Facility size classification: [] Closed [] Small Qty. Generator [x] EPA Generator
[] Not a Generator [] Kansas Generator [] Transporter

Other Regulated Activities: [] T/S/D Facility [x] Used Oil Activities
(complete applicable checklist) [] HW Burner/Marketer [] Universal Waste Activities

Has the company declared any information/processes as trade secrets (KSA 65-3447)? Yes
If yes, explain: This facility handles government (Army)classified items and information. These are unrelated to hazardous waste with the exception that we were not allowed to enter one area to inspect a painting operation and satellite accumulation container.

Industrial Wastes Generated

(List hazardous wastes first)

See Attachment 1 for hazardous waste information

Transporter Requirements (TRR)

	YES	NO	NA
39. Does this facility transport hazardous waste?	[ ]	[ ]	
If yes,			
a. Are they registered as a hazardous waste transporter in the state of Kansas? [KAR 28-31-6 (b)]	[ ]	[ ]	
b. Does transporter comply with the manifest requirements of 40 CFR Part 263.20 except 263.20(h)? [KAR 28-31-6(a)]	[ ]	[ ]	
c. Does transporter retain a copy of the manifest for three years? [KAR 28-31-6(a)/(40 CFR 263.22(a)]	[ ]	[ ]	
d. Does this facility transport hazardous waste subject to the manifest exemption of KAR 28-31-4(d)(7)?	[ ]	[ ]	
If yes, does the transporter record, on a log or shipping paper:			
A. The name, address, and EPA ID Number of the generator; [KAR 28-31-6(e)(2)(A)]	[ ]	[ ]	
B. Quantity of waste shipped? [KAR 28-31-6(e)(2)(B)]	[ ]	[ ]	
C. DOT shipping information? [KAR 28-31-6(e)(2)(C)]	[ ]	[ ]	
D. Date the waste was accepted? [KAR 28-31-6(e)(2)(D)]	[ ]	[ ]	
E. Does the transporter carry this record when transporting the waste to the reclamation facility? [KAR 28-31-6(e)(3)]	[ ]	[ ]	
F. Does the transporter retain this record for a period of three years after termination or expiration of the agreement? [KAR 28-31-6(e)(4)]	[ ]	[ ]	

Transporter Requirements: **[ ] Compliance [ ] Non-Compliance [x] NA**

GENLIST: Generator Checklist Revised 9/98

Additional Information and Conclusions:

Kansas Army Ammunition Plant (KAAP), EPA I.D. KSD 213 820 467, located at 23018 Rooks Road, Parsons, Labette County, was inspected June 27, 28, 29 and July 11, 2000. This facility is a permitted T/S/D facility and was inspected as an EPA generator. KAAP has been in operation at this site since 1941 and is currently operated under contract by Day and Zimmerman , Inc.. The facility currently employees approximately 150 people. The facility is currently generating hazardous waste in the 1100 area (buildings 1136, 1127, 1139), the 200 area (buildings 202, 203), and building 58(chemistry lab). One drum of lead containing paint chips was generated in the 700 area from maintenance activities. The majority of KAAP's hazardous waste is generated from de-militarizing munitions, assembling sensor fuzed weapons, and painting items for shipment. Hazardous waste is currently stored for >90 days in building 1813 (solid hazardous waste) and buildings 1915, 1916, and 1958 (liquid and explosive waste). In the 2700 area KAAP incinerates explosives contaminated non-hazardous waste in a KDHE Bureau of Air and Radiation (BAR) permitted Contaminated Waste Processor (CWP), incinerates explosive waste in a RCRA permitted Explosive Waste Incinerator (EWI), burns propellant in the BAR permitted Open Burning Area, and detonates explosives in the permitted Open Detonation Area.

This facility was last inspected June 23-25, 1998 by Kris Goshen (USEPA), Paul Beatty (USEPA), Paula Higbee (USEPA), and Charles Bowers (KDHE). The USEPA issued a Notice of Violation for the following:

1. Failure to do adequate waste determination in accordance with 40 CFR 262.1
2. Storage container dating requirements in accordance with 40 CFR 262.34(a)(2)
3. Failure to provide impervious secondary containment in accordance with 40 CFR 264.174
4. Failure to have adequate spill prevention and control equipment in igloo 1917 and on transport truck in accordance with 40 CFR 264.32
5. No records available for silver recovery from x-ray in accordance with 40 CFR 266.70(c)(1-3)
6. Hazardous waste storage >90 days; 40CFR 262.34(a)
7. Used oil tank not labeled in accordance with 40 CFR 279.22(c)
8. Inadequate contingency plan and personnel training; 40 CFR 264.34, 40 CFR 265 Subpart D, 40 CFR 265.16

Upon arrival Mr. Charles Bowers and I met with Mr. Dean Cramer, facility contact person, and held an entrance interview in which general and waste stream information was obtained. Following the entrance interview a physical inspection of the facility was conducted as follows:

1100 Area

Building 1136 This building is currently used to prepare and pack projectiles. Hazardous waste generated at this building consists of a waste paint/thinner mixture from spray guns used to stencil (paint) the projectiles and the crates they are shipped in. The waste paint/thinner mixture, regulated as D001 and F003 waste (see attachment 2), is placed in a gray 5 gallon bucket with a funnel inserted in one of the bung holes (see photo 1). On inspection day this bucket was open and not marked with the words 'hazardous waste'. Therefore, the facility was cited for violation of K.A.R. 28-31-4(j)(1)(A) and K.A.R. 28-31-4(j)(1)(B).

Building 1114 This building has not been active since November, 1999. It was previously used to de-militarize grenades. On inspection day a partially full container (spray can) of So-Sure lacquer was observed in a trash can not marked 'hazardous waste' (see photo 2). Per the label on this container, the contents of the can had a flashpoint of 23 degrees Fahrenheit. Therefore, the facility was cited for violation of K.A.R. 28-31-4(j)(1)(B). This violation was corrected during the inspection when an employee removed the spray can and placed it in a properly managed satellite accumulation container on June 29, 2000.

Building 1139 This building is where the Sensor Fuzed Weapons are assembled. The room where the assembly takes place also has a painting operation for stenciling the weapons and the crates they are shipped in. Facility personnel denied us access to this area stating that the room was a classified area and U.S. Government Department of Defense security clearance is required for entry. Although inactive on inspection day, this building is a site of current activity and hazardous waste generation.

Other buildings inspected in this area in which no violations were noted are 1102, 1109, 1127, and 1140.

300 Area

Building 315 This building was last active in October, 1999 and last generated hazardous

waste in November, 1996. The hazardous waste satellite accumulation container storage shed (see photo 3 for example) located outside the building contained 2 hazardous waste satellite accumulation containers and 1 non-hazardous waste container. Of the 2 hazardous waste satellite accumulation containers, one contained a waste paint/thinner mixture and had an open funnel inserted in one of the bung holes (see photo 4) and the other contained waste paint/thinner contaminated rags with the retaining ring not attached to the drum (see photo 5). Therefore, the facility was cited for violations of K.A.R. 28-31-4(j)(1)(A). These violations were corrected immediately when an employee closed the funnel lid and secured the retaining ring on the satellite accumulation containers (see photo 6).

Building 306 was also inspected in this area. It is currently inactive.

200 Area

Building 203 This is a facility maintenance building which contains the pipe shop, millwright shop, and machine shop. This building has 4 parts washers which use Simple Green to clean parts. Per Pat McReynolds, shop foreman, the parts washers have not been emptied for approx. 3 years, when they started using Simple Green. Prior to that, the waste solvent generated from the parts washers was disposed as hazardous waste. Metal shavings and scrap generated from the shops is recycled. Waste coolant and cutting fluid has been analyzed and determined to be non-hazardous and is solidified and disposed into the general trash. While in the pipe shop I observed a partially full can of Ace Hardware PVC pipe cleaner placed in a trash can not labeled 'hazardous waste' (see photo 7). The label stated that the main constituents of the pipe cleaner were methyl ethyl ketone and acetone. Therefore, the facility was cited for violation of K.A.R. 28-31-4(j)(1)(B). This violation was corrected during the inspection when the container was removed and placed on a shelf to be used as product.

Building 202 This building contains the auto garage, forklift shop, and heavy equipment shop. All shops contained used oil drums labeled 'used motor oil' instead of 'used oil' as required by K.A.R. 28-31-16 which adopts 40 CFR 279. After discussion with Mr. Ron Smith, KDHE, it was determined not to cite the facility because the intention of the regulation was being met. I advised the facility of the specific labeling requirement during the inspection. A satellite accumulation container of waste antifreeze was located in both the forklift shop and the heavy equipment shop.

Building 207 This is a building maintenance shop. While inspecting the 200 area I noticed a 55 gallon drum outside the building labeled hazardous waste. Further inspection of the drum revealed it was satellite accumulation container of lead paint chips. It was later discovered, per Mr. Cramer, that facility personnel had transported the satellite accumulation container from the 700 area where they had been scraping the paint chips from a wall and placing them in this container. Per Mr. Cramer, the personnel were not finished with the scraping and intended to transport the satellite accumulation container back to the 700 area when work resumed. Based on this information I cited the facility for violation of K.A.R. 28-31-4(j)(1).

Other buildings inspected in this area are 231 and 247, both of which are inactive and have been unused for approx. 3 years.

1800 Area

Building 1813 This is a permitted hazardous waste storage area for >90 days and is used to store solid hazardous waste. No violations were observed in this building.

1700 Area

This is a permitted hazardous waste storage area for >90 days and contains 6 storage "igloo's" used to store liquid and solid hazardous waste. On inspection day this area was inactive and no waste was stored in the igloo's.

1900 Area

This is a permitted hazardous waste storage area for >90 days and contains 89 igloo's used to store hazardous waste. On inspection day there was waste present in 3 of the igloo's - 1915, 1916, and 1958. These three igloo's were inspected and no violations were observed. I also inspected igloo 1961 and found it to be locked and empty.

Building 58

This building contains the chemistry laboratories. Included in this building are the general chemistry lab, QA/QC lab, and south explosives lab. While inspecting the south explosives lab I observed 6 satellite accumulation containers (step cans) labeled hazardous waste. One of the satellite accumulation containers, which contained RDX propellant (see photo 8), did not have the lid completely closed and making continuous contact with the rim of the cannister. Therefore the facility was cited for violation of K.A.R. 28-31-4(j)(1)(A).

While inspecting the general chemistry lab I observed a beaker labeled hazardous waste which was covered with a watchglass (see photo 9). The beaker contained liquid from the high performance liquid chromatography machine. Review of facility analysis revealed that this waste is regulated under RCRA waste codes D001, D028, D035, and D040. Therefore, the facility was cited for violation of K.A.R. 28-31-4(j)(1)(A). It was also discovered in the general chemistry lab that hazardous waste from the Magnaflux machine, used to determine chemical oxygen demand, was placed in a satellite accumulation container beside the machine. Per Mr. Lee Geisler, chemistry lab foreman, the contents of the can were then emptied into a satellite accumulation container in the satellite accumulation container storage shed located outside the building (see photo 10). Therefore, the facility was cited for violation of K.A.R. 28-31-4 (j)(1).

1000 Area

Building 1019 This building is currently inactive. It was previously used to x-ray munitions for quality control and to develop the x-ray's. No satellite accumulation containers were present on inspection day.

Explosives Waste Incinerator (EWI)

This is a permitted hazardous waste incinerator used to incinerate explosive waste. The EWI is currently inactive. There are 4 waste containers associated with this process: high temp. gas cooler, low temp. gas cooler, cyclone separator, and baghouse container. On inspection day these containers were attached to the EWI and considered to be in process, therefore not satellite accumulation containers.

Contaminated Waste Processor (CWP)

This is a BAR permitted car bottom furnace used to incinerate wastes contaminated with

is used

explosive material. There is one hazardous waste satellite accumulation container located inside the building which is used to collect items not appropriate for incineration and possibly hazardous. There were no violations observed at this satellite accumulation container. Three other waste containers are associated with this process: gas cooler, cyclone separator, and baghouse container. On inspection day these containers were attached to the CWP and considered to be in process, therefore not satellite accumulation containers.

Following the physical inspection of the facility I inspected the facility documents pertaining to hazardous waste management and the permitted T/S/D facility. During inspection of the training records I discovered that Mr. Lee Geisler, chemistry lab foreman, had not received any hazardous waste training as required by 40 CFR 265.16. Mr. Geisler was presented as the hazardous waste management person for building 58. Mr. Geisler had the responsibility of labeling the indoor satellite accumulation containers, calling the transportation department when satellite accumulation containers need removed, and managing the outdoor satellite accumulation container shed. Therefore, the facility was cited for violation of K.A.R. 28-31-4(g)(4).

Inspection of hazardous waste manifests revealed that hazardous waste bearing RCRA waste code D039 was shipped October 14, 1999 and November 22, 1999 under manifests P9008 and P9012, respectively (see attachment 3). Hazardous waste bearing RCRA waste codes D028, D035, and D040 were shipped March 16, 1999 under manifest P9006. The facility's last hazardous waste notification did not include these waste codes. Therefore, the facility was cited for violation of K.A.R. 28-31-4(c)(1).

Inspection of the facility contingency plan revealed that it did not contain the correct information for the listed emergency coordinators as required by 40 CFR 265.52(d). The address and telephone number for Carolyn Smalley and the address for Larry Wetherell were incorrect. Therefore, I cited the facility for violation of K.A.R. 28-31-4(g)(4). The information for these individuals was also not current for the T/S/D facility as required by 40 CFR 264.52(d). Therefore, the T/S/D portion of the facility was cited for violation of 28-31-8(a).

At the conclusion of the inspection an exit interview was held with facility personnel in which an NONC was issued advising the facility of the violations and discussing corrective action to be taken in order to return to compliance.

KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

April 17, 2000

Steve Kosman
Director of Engineering
Day & Zimmermann, Inc.
23018 Rooks Road
Parsons, Kansas 67357-8403

RE: March 14, 2000 Request for Extension on Part B Application Submittal
Kansas Army Ammunition Plant
Parsons, Kansas
EPA I.D. Number KS0213820467

Dear Mr. Kosman:

We have reviewed the referenced request to extend the deadline for submittal of requested revisions to the Part B renewal application from June 6, 2000 to January 6, 2001. You have also requested that we delay conducting a trial burn for the explosive waste incinerator (EWI) until results from testing at the Tooele AAP can be evaluated in order to determine what changes will be necessary in order to make the EWI comply with the MACT standards.

It is our understanding that the Tooele testing will not occur until the Summer of 2000, which means that the formal documentation of the test result will probably not be available until the Fall of 2000. Our only concern related to delaying the trial burn schedule in order to perform a combined Risk Burn and Comprehensive Performance Test is that the facility does not yet have a clear understanding of what equipment changes may be necessary in order to demonstrate compliance with HWC MACT standards. According to 40 CFR 63.1210(b), the Notice of Intent to Comply (NIC) must include the following key activities and dates:

A) The dates for beginning and completion for engineering studies to evaluate emission control systems or process changes for emissions;

B) The date by which you will award contracts for emission control systems or process changes for emission control, or the date by which you will issue orders for the purchase of component parts to accomplish emission control or process changes;

C) The date by which you will submit construction applications;

D) The date by which you will initiate on-site construction, installation of emission control equipment, or process change;

E) The date by which you will complete on-site construction, installation of emission control equipment, or process change; and

F) The date by which you will achieve final compliance.

While the dates included in the NIC are not enforceable, they are necessary to present your intent to comply to the public and the department, which includes a public meeting before July 31, 2000 for the draft NIC. If KSAAP does not currently know what, if any, equipment modifications may be necessary to comply with MACT, how will the requirements of the NIC be met? Furthermore, by allowing the facility to delay the trial burn, KDHE may be implicitly accepting the idea that the facility is simply going through the motions of the MACT notification process in order gain another year of life without truly having the intent to comply with MACT.

At this time we are extending the deadline for submittal of a revised Part B renewal application to Monday, **January 8, 2001** as requested; however, we will not make a final decision regarding the delay of a trial burn until we have reviewed the facility's draft NIC. Assuming we are comfortable that the facility legitimately intends to comply with MACT, we will consider how the trial burn might be extended to coincide with the Comprehensive Performance Test.

If you have any questions about this letter, please call me at (785) 296-6562.

Sincerely,

Curtis D. Lesslie, P.E.
Chief, Hazardous Waste Combustion Facilities Unit
Permits Section

C: Don Dailey - Kansas Army Ammunition Plant
Bill Pedicino - EPA
Steve Lemons - USACE
David Stutt - SEDO
Gary Miller → Harish Agrawal - BAR
Dennis Degner → Curtis Lesslie → File

KSAAP

RECEIVED
MAR 16 2000
BUREAU OF WASTE MANAGEM

DAY & ZIMMERMANN, INC.

GOVERNMENT SYSTEMS GROUP
KANSAS DIVISION

March 14, 2000
EE:RW000016.CDC

Kansas Department of Health and Environment
Bureau of Waste Management
Forbes Field - Building 740
Topeka, Kansas 66620-0001
Attn: Mr. Curtis Lesslie

Dear Mr. Lesslie:

Subject: Part B Permit Renewal Application Revision

Reference: Kansas Department of Health and Environment (KDHE) letter (Mr. Lesslie) dated February 8, 2000; subject: Comprehensive Review of Part B Permit Renewal Application

Upon review of comments generated from your comprehensive review of Kansas Army Ammunition Plant's (KSAAP's) Part B Permit renewal application, it has become apparent that a significant revision to the application must be prepared for resubmittal. The volume and scope of this revision is such that support from an independent subcontractor will be required to accomplish the task.

Day & Zimmermann, Inc. (DZI), contractor-operator of KSAAP, hereby requests a six-month extension of the June 8 response deadline, so that a sufficient timeframe is available to solicit a subcontractor, and allow them enough time to research the requirements and prepare a complete revised package.

One area of concern that may greatly affect completion of this revision would be planned compliance with the new MACT standards. At the present time there is not a sufficient amount of information available pertaining to upgrading KSAAP's APE 1236 incinerator to meet the new MACT standards, or what additional equipment is available to make the system compliant. This information is currently being developed at Tooele AAP by other Federal agencies, and the final results of these efforts will be incorporated into the permit application. To support this requested extension, DZI will provide your office with a written progress report during the month of October to keep you informed of the progress to date.

In conjunction with this six-month extension request for permit renewal application submittal, it is also requested that the timeframe for performing a trail burn of KSAAP's explosive waste incinerator (EWI) be delayed until the outcome of the Tooele trial burn has been formally documented. The results of the Tooele effort will significantly impact the trial burn event. Awaiting Tooele's results before attempting the next trial burn at this facility would eliminate the need for two separate trial burns at an estimated cost of $250,000 each, to a single effort that would include all aspects of the MACT standards.

23018 ROOKS ROAD ♦ PARSONS, KANSAS 67357-8403 ♦ (316) 421-7400 ♦ FAX (316) 421-7477

Subject: Part B Permit Renewal Application Revision

DZI appreciates your cooperation and understanding of the situation, and we will continue to strive to fulfill all environmental requirements for this facility. If you have any questions concerning this subject, our point of contact is Dean Cramer, telephone 316/421-7532.

Respectfully,

STEVE KOSMAN
Director of Engineering

SWK/CJ/raw

cf: Glen Parish - ACO
C. Dean Cramer – DZI
Environmental File
Reading File

Green File

KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

February 8, 2000

Steve Kosman
Director of Engineering
Day & Zimmermann, Inc.
23018 Rooks Road
Parsons, Kansas 67357-8403

RE: Comprehensive Review of Part B Permit Renewal Application
Kansas Army Ammunition Plant
Parsons, Kansas
EPA I.D. Number KS0213820467

Dear Mr. Kosman:

We have completed a review of the information supplied in your letter of July 29, 1999. In addition, we have conducted a review of the complete Part B Renewal Application, dated September 11, 1997. The last round of comments were generated by EPA in April 1997. Since it was unclear during our review if each of the comments from 1997 were addressed, we requested that KSAAP clarify where each modification had been made; this was supplied by KSAAP in the July 1999 submittal.

In order to clearly document where we are in the application review process, each of the comments from EPA's 1997 letter are listed below along with our determination as to whether or not the comment was adequately addressed.

It should be noted that KSAAP's latest response is very difficult to evaluate since it does not provide a written description of the actions taken to address the comments, but merely refers to attachments. Revisions are not readily apparent using this response method; furthermore, the rationale to the revision is never documented. Future response to comments must provide a written response to each comment detailing the revisions that have been made and clearly indicate the location of the revision by page number and section. Highlight/strike-out pages must also be provided in order to clearly indicate exact wording changes.

PART A INFORMATION - EPA's April 1997 Checklist Table I

1. The most recent edition of the part a permit application should be provided (a copy of which is enclosed). The application should identify what processes/units are used to conduct T04 activities. Table A-1 should indicate which [existing] facilities were included in the 1989 permit and which are proposed (facilities not previously used or not constructed) for hazardous waste management.

KDHE Determination: See response to comment 2 below.

2. The Part A should indicate what the T03 & T04 units are, i.e., explosive waste incinerator, OB/OD, to show the capacity of these units. Note that the names used here should be consistent with the Part B permit.

KDHE Determination: The information provided in Attachments I and II is inadequate. KSAAP completed only pages 3, 4 and 6 of a 1999 version of EPA Form 8700–23. This form is newer than the 1990 version included in KDHE's version of the September 1997 Part B application. The correct process code for Open Burning/Open Detonation is X01, not T04 as indicated in Attachment II. Please complete and submit the entire form (including new signatures and dates) using the appropriate process codes and the most recent Form 8700-23.

3. Please clarify if lines 4 & 5 are the same permit.

KDHE Determination: This will be addressed in the revised Part A submitted with your response.

4. Please submit a copy of the CD with topographic information being used for the RFI. Topographic maps of a smaller scale showing the features within the storage yards (1700, 1800, 1900, 2700) must be provided. Sufficient detail must be provided to show the pathways for spills, runoff from fire fighting activities or other surface releases from hazardous waste units.

KDHE Determination: KDHE does not have a copy of the CD used for the RFI.

Part B Information - EPA's April 1997 Checklist Table II

GENERAL NOTE: The "List of Figures" describes figures B-5, B-9, B-11, B-12, B-13, B-14, B-15, B-16, B-18 & B-19 which are not included in the application. Note that figures B-13, B-14, B-15, B-19, B-20 & B-21 are not described in the "List of Figures." Please provide missing figures and update tables appropriately.

KDHE Determination: This comment has been adequately addressed.

1. Please include the date of the FEMA map upon which the figure is based. Note that because development can change the boundaries of the flood plain, the determination of whether the units may be affected by a 100-year flood must evaluate whether additional development since the date of the FEMA map has changed the flood plain area. Potential development plans must also be factored into the flood determinations.

KDHE Determination: This comment has been adequately addressed.

2. Please provide the referenced drainage maps for the hazardous waste management areas.

KDHE Determination: This comment has been adequately addressed.

3. Figure B-10 shows land use depicted on a 1973 USGS quadrangle map. Please update the land uses showing current municipal boundaries and any zoning or other local land use restrictions.

KDHE Determination: This comment has been adequately addressed.

4. Please revise area detail maps to show gates and other entrances for hazardous waste management areas.

KDHE Determination: Figure B-10 now includes gates and other entrances.

5. Please revise the figure to show septic systems at the facility (both current and historical). Note that the text states that no wells are utilized onsite for water supply. Show all existing wells regardless of their use or status including groundwater monitoring wells. Note that additional maps can be used to show these features.

KDHE Determination: This comment has been adequately addressed

6. Please show recreational areas, e.g., fishing ponds and other public access features, storm (including under road flumes), sanitary and process sewerage systems (including sumps), off-site waste acceptance and classification area(s), and fire control features. Note that additional maps can be used to show these features.

KDHE Determination: This comment has been adequately addressed

7. Please show the 2700 Area igloos, A019 igloo and the SRS location. In addition, please show the 700 area as a land disposal facility.

KDHE Determination: Please clarify exactly where this comment was addressed.

8. Appendix B contains standard operating procedures and is included as part of the general facility description (Section B). We recommend that all SOPs be removed from the Part B and reference instead. Any SOPs referenced must be submitted as separate supplemental information. We are evaluating whether we can provide for the modification of SOPs that will not require a permit modification. Note, however, that this will most likely require the permit to specify a procedure to revise SOPs. Therefore, please include a change procedure for SOPs in the revised application.

KDHE Determination: It does not appear that a response to this comment was included in your July 25, 1999 letter. While it is understood that the SOPs were moved to Volume 3 as supplemental information, please specify exactly where the change procedure for SOPs is located.

9. Several hazardous waste units are near the boundary of the 100-year rain event floodplain. The detail of the map provided is insufficient to show compliance. Please supplement the map by providing information that shows all hazardous waste management units are at an elevation above the 100-year flood elevation level. Note the comment above that requires you to consider development that has occurred since the date of the FEMA map and future development that has been planned in evaluating the 100-year rain event flood pool level.

KDHE Determination: Review of the FEMA maps provided in the updated application show compliance with the 100-year floodplain provisions.

GENERAL NOTE: Please provide all the waste characterization information in one location. This information is currently spread throughout the application in various sections and appendices. We recommend that military specifications for components or other materials that are being managed as hazardous wastes be removed from the application and provided as supplemental information. We also anticipate requiring their

being maintained in an on-site mil-spec reference file available for review, i.e., during inspections. This file would also include complete breakdown drawings of munition items and sub-components of sufficient detail to determine compliance with feedrate limits or other permit requirements.

Throughout Section C of the application, the terms munition(s) or munition item(s) are used. EPA will be promulgating a definition of military munition in 40 CFR 260.10. Please revise your use of these terms in a manner that is consistent with the new definition. We intend to consider an item a "military munition" as long as the mil-spec is included in the mil-spec reference file to be kept in accordance with the permit.

KDHE Determination: A response to this comment is not included in your July 1999 letter. Please describe what revisions were made to account for this comment.

10. The waste characterization must include information on the treatment residues from incineration including those discharged from the kiln, baghouse, gas coolers and cyclone.

KDHE Determination: Attachment IX does not include the requested waste characterization information.

11. The waste characterization must include the applicable waste codes for each specific waste generated on-site (e.g., those listed in Table C-1). The information must include whether it contains free liquids as-generated or if liquids are added as a management practice.

KDHE Determination: Attachment X does not include the requested waste characterization information.

12. The waste characterization contains insufficient information on the toxic metals (i.e., those in 40CFR261, Appendix VIII and Section 112 CAA HAP's) that may be present in the non-PEP portions of feed items. In addition to identification of the metals present in the PEP and non-PEP components (including casing, wires, solder, hardware, etc.), provide the mass of each toxic metal component in the waste feed item.

KDHE Determination: This information must be available on-site in the operating record.

13. Heat value, physical form, identification of Appendix VIII organic constituents, chlorine, ash, POHC and metals information for wastes to be incinerated are located in trial burn plan. This information must be provided in summary form for all munition items proposed to be incinerated. Please provide this information in Section C of the application. In addition, for all wastes proposed to be incinerated, please identify all applicable waste codes.

KDHE Determination: This information must be available on-site in the operating record.

14. No information is provided in the waste characteristics section to determine VOC emissions from the SRS. Appendix F-2 provides information on a few compounds. Emission factors or other information with which to estimate emissions must be provided for materials to be processed in this system.

KDHE Determination: The SRS was removed from the application.

GENERAL NOTE: The following comments on the waste analysis plan refer to specific items provided in the application. If you decide to revise the waste analysis plan along the lines of EPA's draft guidance, you must still address the information and issues identified below.

15. The information does not include the analysis for POHCs, metals (including HAP metals) or organic TCLP parameters. This table should also include the LDR parameters and constituents for which analysis is necessary to demonstrate compliance with the treatment standards.

KSAAP Response: LDR parameters are not applicable at KSAAP because no treated waste is land disposed at this facility.

KDHE Determination: LDR requirements apply to the residues generated from the treatment of hazardous waste, regardless of where the residues are ultimately land disposed; therefore, the requirements are applicable to KSAAP. Proper identification of incoming waste in critical in the characterization of the waste residues. The waste analysis plan must be revised to address EPA's original comment.

16. The plan must include a discussion of how the analysis of these parameters will provide all the physical and chemical information necessary to properly handle, i.e., personnel protection requirements, characterize the waste for acceptance (both pre-acceptance and load inspection), store and/or identify treatment limitations and determine compliance with operating limits.

KDHE Determination: This comment has been adequately addressed. It should be noted that the last paragraph of page C-8, Attachment XI, refers to waste solvents being treated/reclaimed on-site in the SRS, which has been removed from the application. Page C-5 of the Part B application does not contain this verbiage; therefore, it is questionable if the highlight/strikeout pages attached to the July 1999 submittal are accurate. Uncertainty about where and if revisions were made makes the review process very difficult.

17. Please include the edition of SW-846 being referenced in the WAP.

KDHE Determination: This comment has been adequately addressed.

18. The application states that sampling of PEP items and reject munitions is not routinely undertaken for safety reasons. We agree that unused bulk PEP and munitions being de-milled that are fully characterized by their mil-specs do not require "routine" analysis to determine proper storage requirements, particularly when they result from on-site manufacturing operations. We also agree that other munition items that will be received from off-site and that meet their mil-specs do not require "routine" analysis to determine proper storage requirements. However, for items that no longer meet their mil-specs or items without mil-specs, the WAP must justify why routine analysis is not necessary to properly store the item and/or demonstrate compliance with operating limits. The WAP must discuss how to properly identify or characterize any additional hazards for storage and/or treatment of "off-spec" or out of service munitions, e.g., such as when there are inadequate stabilizers in a propellant. Note that materials must also be characterized for other hazards to address the health and safety of waste management and emergency personnel. In addition, the ASTM methods referenced in Table C-3 should be provided in the supplemental information submittal.

KDHE Determination: This comment has been adequately addressed.

19. The WAP must address how non-military PEP, PEP-containing items and other hazardous wastes will be characterized in order to pre-approve their acceptance, develop load inspection requirements, handling requirements, storage requirements and, if they will be treated, sufficient information to demonstrate compliance with operating limits. In addition, please develop an example waste profile and management SOP. The waste profile is the summary of the pertinent information from the waste data sheet, analysis of samples by KSAAP and other information developed from knowledge of the waste. A waste profile and management

SOP will be prepared for each waste stream (from each generator) to be managed. It will provide instructions for the inspection of incoming loads, any special handling or personnel protection necessary, storage and/or treatment requirements.

KDHE Determination: This comment has been adequately addressed.

20. The WAP does not describe how incoming loads will be inspected. If inspections will not be exhaustive, i.e., each item inspected, the plan must describe how a representative (statistically valid) sample of each waste stream in the load will be selected. This discussion must also describe how representative samples for analysis will be collected.

KDHE Determination: Since the SRS has been removed from the application, only off-site waste that can be incinerated may be accepted. Table C-2B must clearly identify the waste codes that may be incinerated versus those that are simply generated at the site. The WAP must clearly list the items that may be accepted from off-site for treatment. Just because waste codes are included in the Part A for storage does not mean that the facility will have the ability to provide treatment. Please update the WAP to reflect which waste codes will be treated on-site.

21. Please expand the discussion of the waste inspection procedures for treatment at the EWI and SRS. Please include a discussion of inspections that are conducted prior to moving wastes within or between units.

KDHE Determination: This comment has been adequately addressed.

22. The WAP must include a discussion of any additional waste analysis and other information that is necessary to determine appropriate handling, storage and treatment of ignitable, reactive or incompatible wastes. Include descriptions of compatibility tests to be conducted on potentially incompatible wastes if they are to be stored together or combined. In addition, please describe how information will be developed to comply with explosive limits for storage units, feed rates for treatment units, initiating materials and items from bulk PEP materials and adherence to DDESB requirements.

KDHE Determination: This comment has been adequately addressed.

23. The analysis requirements for LDRs should be incorporated throughout the WAP. Section C-3 should be a discussion of how the plan addresses the LDR analysis requirements.

KDHE Determination: Figure C-2, Analysis Flow Logic Diagram for the EWI, must be modified to reflect that only waste with D003 and/or D008 waste codes may be incinerated. The current flow diagram shows K044, K045, K047, U036, U122, U123 waste streams being sent to the incinerator, which is incorrect.

24. Access to the facility is no longer controlled on a 24-hour basis. The security procedures and equipment must be revised to describe the minimum amount of security and access control that will be maintained including manned security activities. Please provide the SOP regarding security procedures, maintenance of barriers, and other items related to security referenced as Appendix B.

KDHE Determination: This comment has been adequately addressed.

25. The facility is described to include security fencing around the perimeter and each hazardous waste management unit (or groups of units in the case of storage facilities). Perimeter fencing has been observed

to be livestock fencing rather than barriers to prevent unauthorized entry by persons. Please delete references to perimeter security fencing. Please include more information on the security fencing around hazardous waste management units, such as height, gauge, barbed wire, etc.

KDHE Determination: This comment has been adequately addressed.

26. Please provide details on how lessees are allowed access to the storage areas. In addition, please provide describe how individual units are secured with high security locks, doors, etc., to prevent unauthorized access.

KDHE Determination: This comment has been adequately addressed.

27. We recommend that an example inspection form for items to be checked daily during loading/unloading be included in the application.

KDHE Determination: No response necessary.

28. The application should include a discussion of the time frames in which deficiencies identified during inspections will occur. Contingencies of halting operations and removing wastes from the unit should be included if deficiencies cannot be remedied in a timely manner. Please discuss any standby equipment that will be maintained that can be used to immediately replace deteriorated equipment.

KDHE Determination: Please specify exactly where the requested information is located.

29. The description of internal communication must include information on how facility personnel are alerted in case of an emergency or the requirement to evacuate.

KDHE Determination: This comment has been adequately addressed.

30. The application must include a discussion of any dedicated fire control equipment such as deluge and fire suppression systems, fixed monitors, etc. in addition to the portable equipment. The locations of hydrants in relation to hazardous waste management units should be shown on a map/drawing. In addition, we recommend KSAAP to develop a spill trailer that contains adequate quantities of response equipment so that response actions can be initiated as soon as possible.

KDHE Determination: This comment has been adequately addressed.

31. The application states that hydrant pressure is 65 psi and that adequate volumes of water are available to fight fires. Please include the documentation that supports these statements including information on volume and pressure requirements for fire brigade equipment.

KDHE Determination: Fire pumper trucks provide acceptable redundancy to hydrants.

32. No information is provided on the testing and maintenance schedule for the fire brigade equipment. Please include this information in the application.

KDHE Determination: This comment has been adequately addressed.

33. The application must be updated to reflect the lack of on-site 24-hour emergency response personnel and the increased role of local emergency personnel. Please review the assistance that can be provided by local emergency personnel and update the agreements to reflect the higher level of response that will be requested.

KDHE Determination: This comment has been adequately addressed; however, there are several pages that appear to be missing. (i.e., Pages G-5 through G-22). Please specify in your written response exactly what revisions, if any, were made.

GENERAL NOTE: The discussion of the preventive procedures, structures and equipment included in the application provides limited information. However, revisions are not requested since we anticipate including performance based permit conditions for these requirements, i.e, it would be a violation if waste operations contaminated the water supply.

KDHE Determination: The specifications which need to be addressed more thoroughly will be defined in the permit conditions and requirements.

34. Section F-4a: Please include the referenced SOPs in the supplemental information.

KDHE Determination: The SOP's referenced in this section are not included in the Table of Contents for the supplemental information. Please specify exactly where the requested information is located.

35. We would like to note that a power failure at the EWI would shut down APCD in addition to the rotary kiln and would most likely result in an uncontrolled release to the atmosphere.

KDHE Determination: No response necessary.

36. We would like to note that startup after a power failure or other emergency shut down of the EWI would most likely result in an uncontrolled release to the atmosphere due to the delay in the startup of APCD programed into the system. In addition, inspection of the igloos noted several instances where interior lighting is available with power provided externally. Please revise the discussion to address personnel actions in those instances should a power failure occur.

KDHE Determination: No response required.

37. Please include references to procedures or SOPs in the description of the precautions to prevent ignition or reaction of ignitable or reactive wastes. Please include copies of all referenced procedures or SOPs in the supplemental information. Please include a complete copy of Chapter 19; DARCOM-AMCR 385-100 in the supplemental information and remove it from the application. Please remove Appendices F-5 and F-6 from the application and include it in the supplemental information. Please provide MSP 260-0100 referenced as Appendix F-7 as it was not included in the application.

KDHE Determination: See KDHE Determinations 34 and 28.

38. The application must include a discussion on how the compatibility of materials being stored and/or treated will be documented. Note that the process description for the EWI must include a description of the procedures that are used to prevent over pressure of the kiln system resulting in fugitive emissions and to

prevent damage to its structural integrity. The process description for storage units must include a discussion of explosive ratings and how wastes will be managed to meet DDESB standards.

KDHE Determination: Include the documentation procedures that will be followed to ensure compliance with 40 CFR 264.17(c) and (b). Additional information must be included to address EPA's original comment.

GENERAL NOTE: Please revise the discussion and the contingency plan to reflect the facilities contract status of D&Z and the reduced level of on-site activities. Please provide copies of MSP 300-0100 and MSP 305-0100 in the supplemental information.

KDHE Determination: See KDHE comments 28, 34, and 37.

39. The contingency plan should describe and include the arrangements made with police and other local groups to provide assistance in the event of emergency, such as restricting traffic in the vicinity of the facility, providing external notification and facilities for persons who may require evacuation, etc.

KDHE Determination: No changes were made to the Part B permit application, please respond to EPA's comments accordingly.

40. EPA's emergency spill notification number has recently been changed to 913-281-0991. Other notifications and verbal reports for non-emergencies can be made to the Chief, RCRA Permits and Compliance Branch at 913-551-7323 (JoAnn Heiman).

KDHE Determination: The name and numbers of the spill event contacts listed are incorrect. KDHE's emergency spill notification number has been changed to: 785-368-7300 (days) and 785-296-0614 (24 hour and nights). The Labette County emergency information should be sent to the Labette County Emergency Operations Center at 316-421-5255. The Kansas State Emergency Response Commission should be replaced with the Kansas Division of Emergency Management (KDEM), 2800 SW Topeka Blvd., Topeka, KS, 785-296-3176. In addition, many of the additional contacts are outdated. Therefore, make the necessary changes requested by EPA and KDHE.

41. The contingency plan must include a description of the records that will be kept for incidents (including those in which implementation of the contingency plan is not required). We recommend a form be developed and included in the plan that summarizes incident information such as date, time, type of incident, whether the contingency plan was implemented, etc.

KDHE Determination: Please specify exactly where the requested information is located.

GENERAL NOTE: The plan anticipates providing specific details of the closure performance standard, procedures for removal or decontamination and other required information at some point in the future when the closure date is determined. We agree that some of these specifics can be deferred until closure to the date for closure. Note that this information must be made available for public comment prior to its approval. However, one purpose of the closure plan was to adequately scope out the closure activities so that adequate financial assurance could be provided. While a Federal facility is not required to provide financial assurance for closure, a reasonable cost estimate must be available several years in advance in order to secure adequate funding to complete closure activities. We recommend that the plan be revised to include such details of the closure performance standard and decontamination procedures so that closure costs may be estimated.

KDHE Determination: A response to this comment is not included in your July 1999 letter. Please describe what revisions, if any, were made to account for this comment.

42. The plan should be revised to provide for partial closure of individual units to allow for lay-away due to the inactive status of the facility.

KDHE Determination: No response needed, however, should partial closure of the individual units be requested a permit modification will be required.

43. The closure plan must inventory all equipment (including hand equipment, furniture, etc.) for which decontamination and/or disposal may be necessary. The closure plan may refer to documentation to be kept at the facility if the procedures for maintaining that documentation are described in Section D - Process Description, of the application.

KDHE Determination: This comment has been adequately addressed.

44. The final plans and specifications submitted for approval must contain all details necessary to complete closure of the unit including closure performance standard, details of closure, disposal (including locations and approval of disposal facilities) and decontamination procedures. They must detail any sampling, testing and analysis that is necessary to certify closure. Criteria must be included to determine when closure (and decontamination) is complete for all hazardous constituents managed in the unit.

KDHE Determination: No response needed.

45. The plan must allow for modification to include additional activities if unexpected events during closure require activities not included in the closure plan or detailed plans and specifications.

KDHE Determination: No response required.

46. The application must include all the information required in 40CFR270.24 for all applicable process vents. The information provided must demonstrate compliance with the requirements of 40CFR264, Subpart AA. Please include the information and attached Table AA.

KDHE Determination: No response needed.

47. The application must include all the information required in 40CFR270.27 for containers. The information provided must demonstrate compliance with the requirements of 40CFR264, Subpart CC. Please include the information and attached Table CC.

KDHE Determination: No response required.

Part B Information - EPA's April 1997 Checklist Table III

1. Section D-1a(2), Page D-1: This section should specify storage locations for ignitable and reactive wastes and whether the storage areas are at least 15 meters from the property line.

KDHE Determination: The section clarifies that all storage areas are at least 15 meters from the property line; however, additional information must be provided on the storage location of ignitable, reactive and incompatible wastes and how incompatible wastes are segregated.

2. Section D-1a(2), Page D-1: This section should refer to Section F for the procedures for and frequency of inspection for containers and containment system.

KDHE Determination: This comment has been adequately addressed.

3. Section D-1a(3)(a), Page D-2
   a. Inspection in June 1996 showed cracking of the base in many of the proposed container storage areas. Provide certifications of the repair of all cracks for each container storage area.
   b. Concrete is not considered an impermeable base for the containment of hazardous wastes. Provide specifications for a coating resistant to the wastes to be stored. Upon approval of the specifications, this coating must be applied and certifications of completion provided. Please provide a retrofit schedule in the application that starts upon the approval of the specifications.
   c. Provide design information for the igloos including specifications for materials of construction and other appropriate design information, e.g., reinforcement, etc. Note that Section D-1a(3) describes a concrete sill in the doorway of igloos where Drawing D-1 shows angle iron being used. Please ensure the correct specifications are included in the application.
   d. Provide an engineering evaluation of the structural integrity of the base and a discussion of base compatibility with the stored wastes. An engineering evaluation of the base should be made to determine whether the base can withstand the load resulting from the estimated maximum storage capacity. Also, the section should discuss base and coating compatibility with stored wastes.

KDHE Determination: Attachment XXIV does not include the requested certification of repairs or engineering evaluation of the integrity of the igloo's base. In addition, no specifications for a coating resistant to the waste being stored was provided. Section D-1a(3)(a) or other applicable sections must be revised to address EPA's original comment.

4. Sections D-1a(3)(c) and D-1a(3)(d), Page D-2: This section lacks data regarding the regional geographic storm intensity or frequency. This section should state whether storage areas are located in a 100-year or any other flood plain areas. Also, the section should provide specific information whether the elevations at each storage area is higher than the 100-year flood plain elevation and refer to the information provided to satisfy 270.14(b)(11).

KDHE Determination: This comment has been adequately addressed.

5. Section D-1a(3)(e), Page D-2: Please provide design drawings of the drainage systems, e.g., sloping and troughs. This section also refers to the Hazardous Waste Contingency Plan (HWCP) in Appendix G of Section G for information on the management of accumulated liquids. The contingency plan does not provide an adequate description. Please provide a description of the analysis and management of accumulated liquids within the secondary containment system. Include how liquids would be analyzed, description of removal equipment and methods and management of accumulated liquid including prevention of overflow.

KDHE Determination: The drawings provided in Attachment XXIV do not show the drainage systems and/or are not legibly. Please include the procedures to ensure that incompatible wastes are correctly segregated.

6. Sections D-2a(1) and D-2c, Pages D-4 and D-5: These sections indicate that a minimum 3-foot aisle space would be maintained between container rows; however, please provide the minimum main aisle width in the center of the igloos. Note that changes in configuration to allow adequate aisle space may result in reduction of the maximum storage capacity.

KDHE Determination: No response required.

7. Section D-2a(2), Pages D-4 and D-5: This section provides a description of storage igloo 1721 and refers to Figure D-6 for container storage configuration; however, Figure D-6 provides only the building plan and construction details. Please provide a drawing showing container storage configuration in Storage Igloo 1721.

KDHE Determination: Figure D-6 is the floor plan for storage igloo 1721. Please provide the actual configuration/location of containers when in storage, and/or clarify that Figure D-6 refers to the floor plan for storage igloo 1721.

8. Sections D-2a(1), D-2c, and D-2d, Pages D-4 through D-6: These sections indicate that containers other than 55-gallon drums would be stored in the free liquid storage igloos (1700, 1900, and 2700); however, they discuss stacking practices for 55- gallon drums only. Stacking practices should also be discussed for all the containers that will be used.

KDHE Determination: Include a list of all containers storage units at the facility, their storage capacity, and stacking practices. (i.e., palletized and stacked, stacked, etc.)

9. Section D-1a(2), Page D-1: Please provide a more detailed description of the tracking system. Provide a copy of the container tracking SOP with the supplemental information. SOPs provided in Section F for the management and safety procedures are incomplete. Please provide a description of the handling procedures to avoid rupture or leakage from containers. Provide revised SOPs with the supplemental information.

KDHE Determination: Please specify exactly where the requested information is located.

10. Table D-1, Page D-23: This table does not include the boxes (listed on Table D-2) used for free liquid storage. The table should include the capacity and description of the boxes, including the dimensions and the material used in their construction. In addition to the descriptions of each type of container, provide copies of the specifications as part of the supplemental information.

KDHE Determination: Please specify exactly where the requested information is located.

11. Figure D-2: Provide topographic contour maps for each container storage area showing drainage away from the unit. Provide building profiles to show protection against run-on.

KDHE Determination: This comment has been adequately addressed.

12. Sections D-1a(1) and D-1a(2), Page D-1: Markings for containers should also include those for compatibility and free liquids. Please provide a discussion on how these markings will be used. Provide SOPs with the supplemental information.

KDHE Determination: Please specify exactly where the requested information is located.

13. Incompatible Wastes: Please provide a discussion of the management of incompatible wastes. Refer to the waste analysis plan for their identification, describe their markings, how they will be protected when stored together in the same area, e.g., detonators stored with bulk PEP, etc. Provide SOPs with the supplemental information.

KDHE Determination: Please specify exactly where the requested information is located.

INCINERATOR

The following are specific comments related to the process information provided in Section D for the incineration unit. These comments were developed based on a review of the information summarized in Section D. We note that the trial burn has been completed. However, a re-test must be conducted at the mid-term of the permit. If different operating conditions or test protocol will be requested as the result of that testing, the trial burn plan and permit application must describe those changes.

14. Section D-6b, Page D-8: Update this section to provide the dates of the trial burn and reference the trial burn reports.

KDHE Determination: Since this comment was written, additional requirements for hazardous waste combustion units have been promulgated. The Hazardous Waste Combustor MACT rule, effective September 30, 1999, implements significant new requirements which affect the scheduling of trial burns and performance tests. Please address EPA's original comment in light of the new requirements for combustors. Provide a comparison of the results for the earlier trial burns with the HWC MACT requirements and outline a schedule for demonstrating compliance with the new regulations.

15. Section D-6b(1), Page D-8: Provide a description of incinerator prove out prior to trial burn testing. The prove out must show that the incinerator can reliably operate at the proposed trial burn conditions.

16. Describe how compliance with the 720 hour limit for startup and shakedown (prior to a trial burn) will be documented.

17. Provide information that demonstrates that proposed operating conditions should achieve required performance criteria for DRE, HCl/Chlorine, particulate and metals emissions.

18. Provide a summary description of the operating conditions for the startup, shakedown and trial burn.

19. Provide information that demonstrates control of fugitive emissions from the kiln system including feed systems, incineration (rotary kiln) and ash discharge systems.

20. Provide a summary description and table of alarms and automatic waste feed cut-offs for startup, shakedown and trial burn. Show permit limits in addition to alarms and AWFCOs.

21. Provide a revised trial burn plan for the mid-term test. This plan may be a repeat of the trial burn conducted in 1995 or propose revised operating conditions. This test plan must also include all necessary testing to collect emissions information in order to complete an indirect risk assessment.

22. Provide a summary of the operating conditions based on trial burn results that are necessary to ensure compliance with the performance standards for DRE, HCl/Cl, particulate and metals emissions. Include a summary of the actual system performance versus the required performance.

23. Provide as-built drawings and equipment specifications of the incinerator including any modifications and/or replacements since it was retro-fitted. Remove detailed engineering information as part of the trial burn plan and instead include it in the application.

24. Section D-6b(2)(a), Page D-9: Provide a description of afterburner including linear dimensions and cross sectional area.

25. Section D-6b(2)(f), Page D-12: Provide the updated automatic waste feed cut-off limits, alarm limits and permit limits.

KDHE Determination for Comments 15-25: Your response states that the requested information is included in the supplemental information but does not elaborate. If the information was provided, please specify exactly where it is located. It should be noted that new performance requirements included in the HWC MACT rule must be met within time lines specified in the rule. Please include a discussion of KSAAP's ability to comply with these new requirements.

26. Section D-6b(2)(a), Paragraph 5, Page D-9: This paragraph states that the exhaust gas velocity will be measured using pitot tubes, and the resulting data would be corrected for temperature variations; however, it does not describe how the velocity would be corrected for molecular weight and moisture content variations. Because exhaust gas velocity is dependent on molecular weight and moisture content as well, KSAAP should discuss how the measured data would be corrected for these variables.

KDHE Determination: Your response does not mention if/where Attachment XXIX of your response will be incorporated in the Part B. Furthermore, the paragraph in question was not modified in response to EPA's comment. Please provide additional language in the referenced paragraph indicating where the information in Attachment XXIX is located in the Part B.

27. Section D-6b(2)(a), Paragraph 6, Pages D-9 and D-10: This paragraph states that based on mass and energy calculations, potentially hazardous inorganic lead and barium components in the munitions would be emitted as solid or suspended particulates. KSAAP conducted the mass and energy calculations assuming complete combustion for two types of 20 millimeter (mm) cartridges. It is not clear whether the two cartridge types used for mass and energy calculations demonstrate the worst-case scenario. Update this information to conform to the items burned during the trial burn.

28. Section D-6b(2)(a), Paragraph 7, Page D-10: This paragraph indicates that solid residue from complete combustion may not exhibit toxicity characteristics for lead and barium because it contains very small percentages of these constituents; the basis for this conclusion is incorrect. The potential for waste residue to exhibit toxicity characteristics is not solely dependent on or determined, based on constituent

concentration, but rather on the quantity of the constituent the waste residue releases in the leachate extracted during an EPA extraction procedure. Therefore, instead of surmising whether or not the solid residue would exhibit toxicity characteristics, KSAAP should discuss the analysis of the residue for toxicity characteristics and comply with applicable disposal requirements.

29. Section D-6b(2)(a), Paragraph 8, Page D-10: This paragraph presents information concerning sulfur dioxide and hydrogen chloride concentrations anticipated during certain operating conditions, and whether the presence of hydrogen chloride or potassium chloride in emissions constitutes a complete combustion. This information is specific to the two 20mm cartridge types. It is not clear whether this data would be applicable to other munitions to be incinerated. Provide estimates of sulfur dioxide and carbon monoxide emission rates for the items proposed to be incinerated, and the operating conditions under which these emission rates would be fairly consistent, in order to determine if sulfur dioxide, hydrogen chloride and chlorine controls are necessary.

30. Section D-6b(2)(a), Paragraph 11, Page D-10: This paragraph discusses about the energy release or heat of combustion from incineration of 20mm cartridges and the amounts contributed by munitions and fuels. This section provides information specific to combustion of 20mm cartridges. It is unclear why KSAAP is using 20mm cartridges and not other munitions for mass and energy calculations. Instead of presenting data specific to incineration of 20mm cartridges, KSAAP should briefly provide general operating conditions, including expected BTU, munition specific feed rates, fuel oil flow rate, and operating temperatures. Also, the section should briefly discuss the correlation between the waste feed and fuel oil flow rates.

KDHE Determination for Comments 27 - 30: Your response states that these comments were addressed in the supplemental information but does not specify where. It appears that some of the sections referenced in each of these comments were modified; however, without a highlight/strikeout version it is very difficult to determine what has been changed. Please specify exactly where the requested information is located.

31. Section D-6b(2)(c), Page D-11: This section indicates that the trial burn report would be submitted within 85 days from initiation of the trial burn, while Paragraph 12 of Section D-6b(2)(c) indicates that the report will be submitted within 90 days of the completion of the trial burn. KSAAP should correct the inconsistency in the time frame proposed for report submittal.

KDHE Determination: This comment was addressed in Section D-6b, not the supplemental information as indicated in your response. The revised paragraph does not mention the May/June 1994 trial burn. Please include this burn in the discussion and provide a brief discussion of the results of each burn.

32. Section D-6b(2)(e), Page D-11: This section does not discuss procedures for, and frequency of, sampling the hopper below the baghouse unit, baghouse, gas coolers, and cyclone separators. This section should briefly discuss sampling procedures and frequency at each of these units. If the sampling procedures and frequency are provided in the trial burn plan, KSAAP should refer to the appropriate sections.

33. Section D-6b(2)(e), Page D-11: This section does not include operating parameters or dimensions of air pollution control devices (APCD). There is no information concerning APCD dimensions, anticipated particulate matter size distribution and temperature ranges of each APCD, anticipated pressure drop at the baghouse, and frequency at which gas coolers are cleaned.

34. Provide a copy of the most recent CEM certification test as part of the supplemental information. Document in the application that the location of the CEMs meets the criteria in 40 CFR 266, Appendix IX.

35. Section D-6b(2)(f), Paragraph 1, Page D-11: This paragraph states that the incinerator will be shut down by stopping waste feed to the kiln, allowing the waste that has been last fed to travel completely through the kiln and aborting fuel flow to the burner. The time required for waste to travel completely through the kiln is not provided. KSAAP does not discuss the changes, if any, in operating conditions for the entire system after aborting fuel flow to the burner. KSAAP does not discuss whether fuel flow to the afterburner would also be aborted. In addition, KSAAP should demonstrate that the control system would be capable of increasing fuel oil flow to compensate for lack of waste feed and maintaining normal operating conditions.

KSAAP should discuss the ramifications of aborting waste and fuel oil feed to the kiln; state whether fuel oil flow to the afterburner would also be terminated, and if so, the potential impact on the APCD and emissions; and demonstrate the control system's ability to regulate fuel oil flow depending on waste feed rates.

36. Section D-6b(2)(f), Paragraph 2, Page D-12: This section lists the specific device failures that will activate the automatic waste feed cutoff (AWFCO), including failure of temperature monitors (excluding those located downstream of the baghouse). In the following table, KSAAP indicates that stack gas velocities outside a stipulated range would also activate AWFCO. In Section D-6b(2)(a), KSAAP states that stack gas velocity will be measured with pitot tubes and corrected for temperature variations. Because temperatures directly affect stack gas velocity and stack gas velocity (outside a stipulated range) prompts the AWFCO, any failure in temperature monitor controls downstream of the baghouse unit would result in inaccurate stack gas velocity measurements and potential false activation of AWFCO. Therefore, KSAAP should design the system such that failure in any temperature monitor controls, downstream or upstream of the baghouse, will result in activation of the AWFCO.

37. Section D-6b(2)(f), Paragraph 2, Page D-12: This section also lists baghouse bypass activation as a device failure that would prompt an AWFCO. KSAAP should elaborate on the baghouse bypass and how and when the bypass would be activated.

38. Section D-6b(2)(f), Paragraph 3 and Tabulated Data, Page D-12: This paragraph states that any deviations in the operating parameters or conditions listed in the table would trigger AWFCO. It is unclear whether the operating parameters presented in the table were established for the trial burn test only or for the post-trial burn operations as well. Operation parameters for the post-trial burn operations should be set based on trial burn test results. Therefore, KSAAP should state that post-trial burn operating parameters, if the parameters are established only for trial burn testing, will be set based on the trial burn test results.

39. Section D-6b(2)(f), Tabulated Data, Page D-12: The first row indicates that the AWFCO would be triggered when carbon monoxide levels exceed 100 parts per million (corrected). KSAAP does not state how it would be corrected. KSAAP should clearly explain the variables involved in correcting carbon monoxide levels.

40. Section D-6b(2)(f), Tabulated Data, Page 12: The second row in the table provides the lower (1,200 degrees Fahrenheit [°F]) and upper limits (1,800°F) for the afterburner temperature. However, the first paragraph of Section D-6b(2)(e) states that the afterburner elevates the temperature of the exhaust gases

to a maximum of 2200°F to ensure complete waste degradation and complete burner fuel combustion. KSAAP should clarify this inconsistency.

The tabulated data does not include the upper or lower limits for baghouse inlet temperatures. Activation of AWFCO based on baghouse inlet temperatures is critical, because the potential for dioxin formation exists at temperatures above 450°F and acid condensation may occur at temperatures below 250°F. KSAAP should set limits for baghouse inlet temperatures or discuss why this parameter is not critical in determining waste feed cutoff.

41. Section D-6b(2)(g), Page D-12: This section does not state whether the incinerator would be operated after the trial burn, or if operations would be halted until permit approval. KSAAP does not address when operations would resume after permit approval.

42. Figure D-12: This figure does not show the secondary conveyor identified in Section D-6b(2)(a). This figure shows high and low temperature gas coolers, but these were not discussed in the text. This figure should be modified to show the secondary conveyor, and the text should be modified to include a discussion of the gas coolers.

43. Figure D-13: This figure shows a kiln shroud, but the associated text in Section D of the application does not mention the existence of the kiln shroud, or its importance to the process. The text should be modified to include a discussion on the kiln shroud and its importance to the process.

44. Figure D-14: This figure does not show pressure drop monitors around the kiln, fuel oil and combustion air flow meters, and pressure drop monitors around the cyclone separator to demonstrate control of fugitive emissions; these items should be added to the figure and should also be discussed in the text.

45. Figure D-15: This figure shows a propane tank level; however, the text in Section D does not discuss the use of propane. KSAAP should address this inconsistency.

KDHE Determination for Comments 32-45: Your response states that these comments were addressed in the supplemental information but does not specify where. It appears that some of the sections referenced in each of these comments were modified; however, without a highlight/strikeout version it is very difficult to determine what has been changed. Please specify exactly where the requested information is located.

Additional KDHE Comments on September 1997 Part B Application (not the July 1999 attachments).

1. Page B-1: States that the facility has not hazardous waste disposal units. Please revise the application to reflect the 700 Area as a land disposal unit.

2. Page B-2: Explain further what is meant by saying that the EWI is used to treat explosive-contaminated hazardous waste and describe how the trail burn demonstrated limits on such feed items.

3. Page B-5: Please explain why it is not possible to estimate the groundwater recharge rate from the 700 Area investigation conducted to date.

4. Page B-16, B-5f: Remove the word "typically" from the last sentence in this section.

5. Page C-3, C-1e: The reference to 40 CFR 264.136 is incorrect and should be 264.13. Also, if KSAAP accepts waste from off-site sources, KSAAP becomes responsible for proper characterization of the waste streams (see the comment at 264.13(a)(2)). Unless acceptance is limited to off-specification military items, it may be necessary to perform analysis on the waste stream.

6. Table C-2: The "Rationale" portion of this table conflicts with the Part A. Items such as explosive contaminated solvents were not demonstrated as feed items during the trial burn and therefore can not be fed to the incinerator. The table also refers to "EP Toxicity" which has been replaced by TCLP.

7. Table C-2: The rationale for listed hazardous waste does not include a discussion of the LDR requirements. For example, EWI and OB/OD residues must be treated in accordance with LDR criteria before land disposal. Furthermore, disposal of treatment residues from characteristic hazardous waste may only be sent to Subtitle D landfill after demonstrating that the treatment residue meeting the criteria of Phase IV Land Disposal Restrictions. Conversely, listed hazardous waste treatment residues must be disposed in a permitted Subtitle C landfill after meeting the LDR standards. Disposal of these residues in the on-site industrial landfill is prohibited.

8. Table C-2A: See above comment.

9. Appendix C-1, Table C-2, Page 1: P065 (mercury fulminate) is not included on the Part A for the renewal application (or the approved Part A for that matter).

10. Appendix I-1, Page 3, Section VI: Refers to "See Appendix" but does not specify which appendix.

11. Please explain why the Part A lists T04 (OB/OD) for D004 (arsenic).

12. (Attachment XI to July 1999 response) Page C-8: The last paragraph states that waste solvents will be reclaimed on-site in the SRS which has been removed.

13. (Attachment XIV to July 1999 response) Figure C-2: The figure does not correspond to the Part A with respect to handling of K044, K045, K046, U122 and U132. On-site thermal treatment will not be used for these waste codes. Furthermore, LDR considerations are not accounted for with the residues (see comment 7).

14. (Attachment XXIV to July 1999 response) Page D-3, Section D-1a(3)(b) is not the same as this section in the 6/30/97 version in the Part B renewal application.

15. HWC MACT and Indirect Risk Assessment: In order to satisfy RCRA combustion standards, the facility will be required to complete an indirect site-specific risk assessment for the incinerator. Information necessary to complete an indirect risk assessment was not collected during previous trial burns. Indirect risk from the OB/OD operation must also be considered in the assessment.

Section III.D.3 of the facility permit states the following: *"Upon request by the Secretary, or at least once during the life of the Permit, the Permittee shall perform the test required by 40 CFR 264.347(a)(3). The Permittee shall notify the Secretary at least 90 days prior to performance of the test and submit the test plan for approval. All testing must be completed 180 days prior to expiration of the permit. The results of the test must be submitted in accordance with 40 CFR 270.62(b)(7), (8) and (9) and must be submitted with any new permit application under Section I.E.2."*

Clearly, the original permit envisioned trial burns on a 5-year interval. The last trial burn conducted for this incinerator was in November 1995, which is more than 4 ½ years ago. In light of the fact that the HWC MACT requires additional testing in order to demonstrate compliance in the relatively near future, we believe that it is prudent to conduct a combined risk burn/comprehensive performance test prior to re-issuance of this permit. This would allow the facility to demonstrate compliance with MACT early and at the same time collect the PIC emission data necessary to conduct a site-specific risk assessment for the facility. Emissions from the OB/OD operations should also be considered for indirect risk. Please include in your response a detailed description of how the facility intends to demonstrate compliance with MACT as well as the site-specific risk assessment standards.

16. OB/OD and 700 Area Compliance Schedule: In order to re-issue this permit, it will be necessary to demonstrate to the public that all of the hazardous waste activities requiring a permit at the site are addressed, including the OB/OD unit and the 700 Area (if the consent agreement is abandoned). While we do not intend to hold re-issuance until review and approval of the OB/OD and/or 700 Area Post-Closure application is complete, we do intend to include a compliance schedule in the permit that would require review and approval or denial of the application within a specified time-frame. Please provide a response to the December 7, 1999 letter from the department related to achieving compliance with the MCL requirements for the 700 Area.

Summary

A significant amount of work is required in order to address each of the outstanding comments noted above. As stated previously, in order to expedite continued review of the application, a detailed written response to each of the comments as well as a highlight/strikeout version of the modified pages must be provided. If a significantly incomplete response is submitted, it will be returned without substantial review. Furthermore, if a complete response is not submitted, discussions will be held to clarify how we will proceed to initiate final closure of the incinerator and terminate the expired operating permit.

Please provide a written response to each of these comments **before June 8, 2000**. It is suggested that a complete set of text pages (minus maps, drawings, etc.) be submitted in order to ensure that our version of the application is an exact duplicate of the facility's copy. If you have any questions about this letter, please call me at (785) 296-6562.

Sincerely,

Curtis D. Lesslie, P.E.
Chief, Hazardous Waste Combustion Facilities Unit
Permits Section

C: Don Dailey - Kansas Army Ammunition Plant
Bill Pedicino - EPA
Steve Lemons - USACE
David Stutt - SEDO
Dennis Degner → Curtis Lesslie →File

Curtis
AKAAP
File - Blue

KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

December 6, 1999

RECEIVED

DEC 1 1999

DIVISION OF ENVIRONMENT
DEPT. OF HEALTH & ENVIRONMENT

Steve W. Kosman, Director of Engineering
Day & Zimmerman, Inc.
Kansas Division
23018 Rooks Road
Parsons, Kansas 67357-8403

Source I.D. No: 0990010

Dear Mr. Kosman:

The Kansas Department of Health and Environment (KDHE) has reviewed your request, on behalf of Kansas Army Ammunition Plant (KAAP), for exemption from the K.A.R. 28-19-645, Open Burning Prohibited. The request listed six specific open activities that will be conducted over the next twelve months. These burning activities are as follows:

1) Comp A-5 & A-3, wet sumpage and sump sludge
2) Cyclotol, Octol, Comp B and TNT wet sumpage and sump sludge
3) Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX and TNT scrap
4) Adsorbent materials from cleanup of Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX and TNT wastewater spills
5) Propellants and Propellant charges
6) Support Collars

All burning is to be conducted in accordance with the guidelines as set forth in K.A.R. 28-19-647(e) and is only applicable for materials generated on-site. Should this facility be considered to be used as a disposal site for materials from other locations, a separate open burning request will need to be submitted and an approval granted for each material prior to conducting this activity. This exemption expires December 31, 2000 and supersedes any current exemptions. This exemption shall be revocable upon thirty days notice at the Department's discretion.

If you have any questions about this exemption, please contact me at (785)296-1581.

Sincerely,

Lynn Ranabargar
Environmental Scientist
Air and Asbestos Compliance Section
Bureau of Air and Radiation

cc: Mostafa Kamal, Bureau of Waste Management
SEDO
File

Division of Environment
Bureau of Air and Radiation
Air and Asbestos Compliance Section
(785) 296-1550

Forbes Field, Bldg, 283
Topeka, KS 66620-0001
FAX (785) 296-1545

DAY & ZIMMERMANN, INC.

GOVERNMENT SYSTEMS GROUP
KANSAS DIVISION

September 22, 1999
EE:RW990086.CDC

Mr. Dennis Degner, Ph.D, P.E.
Chief, Permits Section
Bureau of Waste Management
Kansas Department of Health and Environment
Forbes Field, Building 740
Topeka, Kansas 66620-0001

Dear Mr. Degner:

Subject: Part B Permit Renewal Application for the Kansas Army Ammunition Plant (KSAAP)

Day & Zimmermann, Inc. (DZI), Kansas Division, hereby requests information pertaining to the status of the Kansas Army Ammunition Plant's (KSAAP's) Part B Permit renewal application. Several pending contracts are contingent on KSAAP having a new Part B Permit. For KSAAP to lose this potential business because of delays in getting the permit issued will hurt the company, the employees, and the community.

Please review the application, confer with your staff, and let us know the application's current status. We believe we have shown in the past and continue to show, our willingness to work with your department to make the permit a viable, complete document. If you have any questions concerning this request, our point of contact is Dean Cramer, telephone (316) 421-7532.

Respectfully,

STEVE KOSMAN
Director of Engineering

SWK/CJS/raw

cf: C. Dean Cramer – DZI
Environmental File
Reading File

23018 ROOKS ROAD ♦ PARSONS, KANSAS 67357-8403 ♦ (316) 421-7400 ♦ FAX (316) 421-7477

DAY & ZIMMERMANN, INC.

GOVERNMENT SYSTEMS GROUP
KANSAS DIVISION

July 29, 1999
EE:RW990073.CDC

RECEIVED
JUL 30 1999
BUREAU OF WASTE MANAGEMENT

Kansas Department of Health and Environment
Hazardous Waste Section
Bureau of Waste Management
Forbes Field, Building 740
Topeka, Kansas 66620-0001
Attn: Mr. Curtis Lesslie

Dear Mr. Lesslie:

Subject: Revisions to Part B Permit Renewal Application

The following information is supplied to you in an effort to clarify the changes made to the Part B Permit renewal application for the Kansas Army Ammunition Plant (KSAAP), in response to the EPA's comments of April 28, 1997.

Checklist Table I:

Item 1:	See Attachment I (1 Page)
Item 2:	See Attachment II (3 Pages)
Item 3:	No response required.

Checklist Table II:

Item 1:	See Attachment III (19 Pages)
Item 2:	See Attachment IV (4 Pages)
Item 3:	See Attachment V (1 Page)
Item 4:	See Attachment III
Item 5:	See Attachment VI (8 Pages)
Item 6:	See Attachment III
Item 7:	See Attachment III
Item 8:	See Attachment VII (1 Page)
Item 9:	See Attachment VIII (1 Page)
Item 10:	See Attachment IX (3 Pages)
Item 11:	See Attachment X (5 Pages)
Item 12 & 13:	In conversations with Ken Herstowski (EPA), this information only needed to be available on-site.

23018 ROOKS ROAD ♦ PARSONS, KANSAS 67357-8403 ♦ (316) 421-7400 ♦ FAX (316) 421-7477

Subject: Revisions to Part B Permit Renewal Application

Item 14:	SRS unit is no longer part of KSAAP's program. Therefore, this information is not necessary.
Item 15:	LDR parameters are not applicable at KSAAP because no treated waste is land disposed at this facility.
Item 16:	See Attachment XI (6 Pages)
Item 17:	See Attachment XI
Item 18:	In conversation with Ken Herstowski, it was determined that this comment should be ignored.
Item 19:	See Attachment XII (3 Pages)
Item 20:	See Attachment XII
Item 21:	See Attachment XII
Item 22:	See Attachment XIII (3 Pages)
Item 23:	See Attachment XIV (2 Pages)
Item 24:	See Attachment XV (1 Page)
Item 25:	See Attachment XVI (2 Pages)
Item 26:	See Attachment XVI
Item 27:	No response required.
Item 28:	See SOP in supplemental information.
Item 29:	See Attachment XVII (2 Pages)
Item 30:	See Attachment III
Item 31:	See Attachment XVIII (2 Pages)
Item 32:	See Attachment XVIII
Item 33:	See Attachment XIX (1 Page)
Item 34:	See SOPs in supplemental information.
Item 35:	No response required. .
Item 36:	Personnel will follow SOPs. No response required.
Item 37:	See Supplemental information.
Item 38:	See Attachment XX (2 Pages)
Item 39:	See Spill Plan in Supplemental information.
Item 40:	See Attachment XXI (2 Pages)
Item 41:	See Spill Plan in Supplemental information.
Item 42:	No response required.
Item 43:	See Attachment XXII (2 Pages)
Item 44 – 47:	In conversation with Ken Herstowski, these items were determined to require no response.

Checklist Table III:

Item 1:	See Attachment XXIII(2 Pages)
Item 2:	See Attachment XXIII
Item 3:	See Attachment XXIV (5 Pages)
Item 4:	See Attachment XXV (1 Page)
Item 5:	See Attachment XXIV

Subject: Revisions to Part B Permit Renewal Application

Item 6:	In conversation with Ken Herstowski, this item does not require a response.
Item 7:	See Attachment XXVI (1 Page), Building size is insufficient to require aisle space controls.
Item 8:	See Attachment XXVII (2 Pages)
Item 9:	See supplemental information.
Item 10:	See supplemental information.
Item 11:	See Attachment III
Item 12:	See supplemental information.
Item 13:	See Attachment XXVIII
Item 14:	See Attachment XXVII (24 Pages) Trial Burn report will be part of supplemental information.
Item 15-25:	See supplemental information.
Item 26:	See Attachment XXIX (19 Pages)
Item 27-45:	See supplemental information.

Please note that the attachments were taken from the strike out/highlight copy of the application sent to the EPA to assist them in their review effort. Also, please note that the table of contents is included as Attachment XXX.

Day & Zimmermann, Inc. will assemble and provide to you three exact copies of this application when you have declared it to be complete. Please notify us of your progress in this area. If you have any other comments or questions, our point of contact is Dean Cramer, telephone 316/421-7532.

Respectfully,

STEVE KOSMAN
Director of Engineering

SWK/CdS/raw

cf: Glen Parish - ACO
Dean Cramer - DZI
Environmental File
Reading File

SUMMARY
OF
RESTORATION ADVISORY BOARD
COMMUNITY CONCERNS
AND
PARTICIPATION INTEREST

Day & Zimmermann, Inc., using procedures outlined in the U.S. Army Restoration Advisory Board and Technical Assistance for Public Participation Guidance document, placed a Publication Notice in the Parsons Sun, a daily newspaper printed in Parsons, Kansas. The Notice was published on June 21, 1999. A copy of the Notice is attached (Attachment 1).

The Notice provided information about the purpose of a Restoration Advisory Board (RAB) and Kansas Army Ammunition Plant's (KSAAP) intent to determine the level of public interest in forming such a board. The Notice also provided information on how a copy of the Community Concerns and Participation Survey form could be acquired. A copy of the Survey is attached (Attachment 2).

Copies of the Survey forms were placed in the Parsons Public Library and also mailed to all individuals on the KSAAP Notification List. Copies of the Restoration Advisory Board Fact Sheet were also provided at the library and in the Notification List mailings. A copy of the RAB Fact Sheet is attached (Attachment 3).

Seven completed Survey forms were returned to KSAAP. A copy of each returned Survey is attached (Attachments 4-10).

This was a re-evaluation of public interest in an RAB at KSAAP. The original survey was conducted in April 1997. That survey indicated no significant public interest, and so the procedures outlined in the Army guidance document were followed. The guidelines establish that a re-evaluation should take place every two years.

DEPARTMENT OF THE ARMY
KANSAS ARMY AMMUNITION PLANT
23018 ROOKS ROAD, SUITE AA
PARSONS, KANSAS 67357-8403

REPLY TO
ATTENTION OF

June 1, 1999

Environmental Office
(200-1a)

SUBJECT: Quarterly Groundwater Monitoring Report for the 700 Area - 1st Quarter 1999

Mr. Steve Travis
Kansas Department of Health & Environment
Bureau of Waste Management
Hazardous Waste Section
Building 740 - Forbes Field
Topeka, KS 66620-0001

Dear Mr. Travis

Enclosed is a copy of the Quarterly Groundwater Monitoring Report (encl.1) for the sampling event that took place in March 1999. Also attached is a copy of Radian memorandum dated 28 May 1999, (encl.2) providing a summary of 1st quarter monitoring results.

The Point of Contact is Glen Parish, 316-421-7596

Sincerely,

Don Bailey
Donald D. Bailey
Commander's Representative

Enclosure

Copy Furnished:
DZI Env Eng./C.Smalley

KANSAS ARMY AMMUNITION PLANT, PARSONS, KANSAS
RFI SWMUs AND 700 AREA CONSENT ORDER
CONFIRMATION NOTICE NO. 43

TO: U.S. Army Engineer District, Kansas City
ATTN: CENWK-EP-EC (Steve Lemons)
700 Federal Building
601 East 12th Street
Kansas City, Missouri 64106-2896

CONTRACTOR: Radian International

CONTRACT NO.: DACA41-96-D-8005

DELIVERY ORDER NOs.: 0005, 0007, 0009, and 0010

TITLES: Kansas Army Ammunition Plant, Installation Wide Ecological Risk Assessment (DO0005), 700 Area Groundwater VOC Investigation (DO0007), 700 Area Quarterly Groundwater Monitoring (DO0009), and Landfills/OD Site Semiannual Groundwater Monitoring (DO0010)

DATE OF THIS REPORT: 28 May 1999

SUBJECTS: RFI SWMUs – 11 May
700 Area Consent Order – 12 May

A meeting was held at KSAAP on 11-12 May to discuss the projects related to the RFI SWMUs and the 700 Area Consent Order. Attendees were:

May 11: Don Dailey and Glen Parish (KSAAP); Carolyn Smalley (DZI); Ken Herstowski (EPA); Randy Carlson and Dan Gravatt (KDHE); Steve Lemons, Dave Daniel, Charles Colbert, Julia Kisser, Francis Zigmund, Angela Sena, Bill Ferguson, and Frank McStay (USACE); Drew Corson (Radian); Angela Myers (Law)

May 12: Don Dailey and Glen Parish (KSAAP); Carolyn Smalley (DZI); Steve Travis and Dennis Degner (KDHE); Steve Lemons, Dave Daniel, Julia Kisser, and Francis Zigmund (USACE); Rick French, Drew Corson, and Molly Hartfield (Radian)

May 11, 1999; meeting began at approximately 10:10 am

Steve Lemons opened with a quick update on the KSAAP Geographic Information System (GIS), currently being developed by Radian. Steve noted that the Corps/Radian were hoping to have all

groundwater data loaded into the GIS within the next couple of months, and soil and sediment data loaded by Christmas. The scope of the GIS project has been left broad to allow for incorporation of elements KSAAP may want in the GIS (e.g., land use information).

Francis Zigmund presented an early version of the GIS on a large screen to the meeting attendees. The first true demonstration and presentation of the early-stage GIS will be Thursday May 13 in Kansas City between KSAAP, the Corps, and Radian. Francis notes that he envisions the GIS replacing the need for people to carry paper reports to the KSAAP meetings.

Plant Excessing

Don Dailey gave a quick update on Plant excessing. Don stated that the Army needs the production capability at KSAAP until 2010. After that, they intend to excess the Plant. Army, government, State, or public use is possible. The transfer of some installation property the Army does not need is currently underway (1900-2000 Acres total). Don expects this transfer of property to be finalized in the next 1- 3 years.

It is also possible that DZI will buy the Plant, provided they agree with the Army to maintain production capability until 2010.

Ecological and Human Health Risk Assessment Status

Dan Gravatt requested a copy of the Final Ecological Risk Assessment document finalized several weeks ago by Radian. Radian agreed to forward a copy to KDHE.

Ken Herstowski has sent a copy of the Final Ecological Risk Assessment to his contractor to make sure Radian was responsive to all comments on the Draft Final Document.

Randy Carlson noted that KDHE has found no substantial deficiencies with Law's Final Human Health Risk Assessment.

Landfill Groundwater Monitoring Status

Drew Corson gave an update on the Landfills and Open Detonation Site groundwater monitoring project. A total of 24 wells were sampled between March 26 and April 1. The sampling results will be sent out with a brief cover memo by May 28. The second 1999 sampling event is scheduled to take place September 1-7. The Draft Annual Report will be sent out by November 12, with the Final Annual Report to follow by January 17, 2000.

Glen Parish asked if the Landfill and Open Detonation Site wells are in good condition. Drew responded that they are, except for the 5 "BH" wells (BH-2, BH-3, BH-5, BH-6, and BH-7), that do not have lockable well caps. This is a deficiency that may need to be addressed. Steve Lemons asked if anyone had any comments. There were none.

Corrective Measures Study (CMS) and Soil Cleanup Goals Status

Steve Lemons and Frank McStay indicated that the CMS for the 900 Area, 1000 Area, 1100 Area, Water Towers, and Burn Pads had been prepared, and that the Remedial Design (RD) for these units had been started. The following industrial cleanup goals were established:

KSAAP Remedial Design Cleanup Goals (Industrial Closure Scenario)

Analyte	Cleanup Goal (mg/kg or ppm)	Basis
Arsenic	16.9	95% Background UTL
Cadmium	76	Hazard Quotient (HQ) = 1 or 10^{-6}
Lead	1000	Kansas non residential IRG
HMX	4700	HQ = 1 or $10^{-6}/10^{-5}$
RDX	56	HQ = 1 or $10^{-6}/10^{-5}$
TNT	210	HQ = 1 or $10^{-6}/10^{-5}$

Randy Carlson noted that the KDHE risk-based cleanup guideline for HMX in non-residential soil is 1 ppm. Steve Lemons responded that this value is extremely low. Ken Herstowski and Randy Carlson agreed. Steve can't think of anyone across the country that has ever cleaned up a site to 1 ppm HMX. Dave Daniel requested that he would like the Army to have a chance to comment on this KDHE guideline. Randy Carlson had no objection to this.

Dave Daniel stated that if you have groundwater data that show no migration of HMX to groundwater, the models KDHE is using to arrive at their guideline of 1 ppm might not be valid. Dave stated that 1 ppm is more reasonable for a fresh spill, but too conservative in a system where HMX has been in the environment 20-30 years (and is presumably sorbed to soil particles and difficult to remove).

Steve Lemons stated the Corps would keep marching forward with the 4700 ppm cleanup goal for HMX, and that this goal could be amended (lowered) if necessary at some point in the future. Frank McStay commented that at the 1000 Area, there is an estimated 48 yd^3 of material containing HMX at greater than 4700 ppm. At the 1100 Area, there is only material near the wastewater sumps containing HMX at greater than 4700 ppm. Randy Carlson stated that he was open to compromising somewhere between 1 ppm and 4700 ppm, and that he couldn't imagine that there wouldn't be at least some lowering of the 4700 ppm cleanup goal.

Steve Lemons stated that the Corps' Draft CMS was due out to the regulators in the next 4-5 weeks. The Corps had received (from Radian) RACER estimates for the cost of remediation at the 5 areas (900 Area, 1000 Area, 1100 Area, water towers, and Burn Pads). The dig and haul cleanup option was the most expensive at $3-4 million, while phytoremediation was least expensive at approximately $2 million. Frank McStay noted that a big assumption of the phytoremediation cost estimate is that it can be done in place. He indicated it is doubtful this is actually possible (i.e., some digging and hauling of the material will need to be done),

Ron Smith - Waste

KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Acting Secretary

February 4, 1999

Steve W. Kosman
Director of Engineering
Day & Zimmermann, Inc.
Kansas Division
23018 Rooks Road
Parsons, Kansas 67357-8403

Source ID #0990010

Dear Mr. Kosman:

The Kansas Department of Health and Environment (KDHE) has reviewed your request, on behalf of Kansas Army Ammunition Plant (KSAAP), for an exemption from the Kansas Air Regulation 28-19-645, **Open Burning Prohibited**. The request listed seven specific open burning activities that will be conducted over the next twelve months. These burning activities are as follows:

1. Comp A-5 and A-3 wet sumpage and sump sludge
2. Cyclotol, Octol, Comp B, and TNT wet sumpage and sump sludge
3. Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, and TNT scrap
4. Absorbent materials for cleanup of Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, and TNT wastewater spills
5. Propellants and propellant charges
6. Support collars with M55 stab detonators
7. Various Dyno Nobel Materials

On July 12, 1990, April 29, 1992, and April 18, 1997, the Department provided KSAAP critiques on each of the materials in the first six categories in regard to open burning. The Department found that all materials in the first six categories were acceptable for open burning. However, items in category seven were not addressed in any of the letters references above. At this time, various Dyno Nobel materials are not approved to be burned. KSAAP has provided MSDS sheets for the proposed materials to be burned; the Department will evaluate the materials and inform KSAAP of the findings, and provide an addendum to this exemption if appropriate. Along with the MSDS sheets provided for the various Dyno Nobel materials, the following questions will need to answered regarding the various Dyno Nobel materials:

1. Identify the material, hazard class, and quantity of wastes from Dyna Noble?
2. Explain how these materials came to be in storage at KSAAP?
3. How long have these materials been in storage?

Until these questions are answered and our exemption is received, no Dyno Nobel materials should be burned.

All burning is to be conducted in accordance with the guidelines as set forth in K.A.R. 28-19-647(e). This exemption expires December 31, 1999 and supersedes any current exemptions. This exemptions shall be revocable upon thirty days notice at the Department's discretion.

If you have any questions about this exemption, please contact me at (785) 296-1574.

Sincerely,

Cheryl Evans

Cheryl Evans
Environmental Scientist
Air and Asbestos Compliance Section
Bureau of Air and Radiation

CEE:
c Gary Miller
SCDO
Ron Smith, Bureau of Waste Management

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

RECEIVED
NOV 20 1998
BUREAU OF WASTE MANAGEMENT

NOV 18 1998

Glen Parish
Environmental Office (200-1a)
Kansas Army Ammunition Plant
Parsons, KS 67357-9107

Dear Mr. Parish:

On June 23-25, 1998, representatives of the U. S. Environmental Protection Agency (EPA) inspected your facility. They conducted the inspection under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA). A copy of that inspection report is enclosed.

The inspector issued a Notice of Violation (NOV) to your company during the inspection. You responded to that NOV on July 1, 1998. The EPA then issued a Letter of Warning and Request for Information on October 28, 1998. You responded to the Request for Information on November 12, 1998. I have reviewed your responses to the EPA correspondence and have determined that the EPA requires no further submittals at this time. Please note that the EPA reserves its right to pursue appropriate enforcement actions, including penalties, for violations discovered as a result of this inspection.

Your facility is responsible for maintaining compliance with all applicable hazardous waste regulations. If you have any questions regarding this letter, please contact me by telephone at 913-551-7621 or by E-mail at buckner.edwin@epamail.epa.gov. Questions about hazardous and solid waste management can also be directed to the Kansas Department of Health and Environment (KDHE), Bureau of Waste Management, at 785-296-1600 or your local KDHE District Office at 316-337-6020.

Sincerely,

Edwin G. Buckner, PE
RCRA Enforcement and State Programs Branch

Enclosure

cc: Mary Bitney, KDHE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

OCT 28 1998

CERTIFIED MAIL
Return Receipt Requested
Article Number: P 165 398 915

Glen Parish
Environmental Office (200-1a)
Kansas Army Ammunition Plant
Parsons, KS 67357-9107

Dear Mr. Parish:

Letter of Warning & Request for Information

On June 23-25, 1998, representatives of the U. S. Environmental Protection Agency (EPA) inspected your facility. This inspection was conducted under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA).

My staff has reviewed the inspection report and your July 1, 1998, response to the Notice of Violation issued at the time of inspection and has determined that Kansas Army Ammunition Plant (KAAP) violated RCRA. I enclosed a copy of that report for your information.

Enclosed is a list of violations followed by a list of questions and/or requested information. Also enclosed are instructions to be used in providing your response. Please carefully read and follow these instructions. Your response in accordance with the instructions is required by Section 3007 of RCRA, and substantial penalties may result from not complying with this request. Please note that your correction of these violations or response to this request does not prevent EPA from pursuing appropriate enforcement actions, including penalties, for violations discovered as a result of the inspection.

Within fourteen (14) calendar days of receiving this letter, please mail your response to: Edwin G. Buckner, P.E., U. S. Environmental Protection Agency, ARTD/RESP, 726 Minnesota Avenue, Kansas City, Kansas 66101-2728. To request an extension of the time limit, follow the instructions in the enclosure. Please direct all questions to Mr. Buckner at 913 551-7621 or by E-mail at buckner.edwin@epamail.epa.gov.

Sincerely,

JoAnn M. Heiman, Chief
RCRA Enforcement and State Programs Branch

Enclosures
1. List of Violations
2. List of Questions and/or Requested Information
3. Instructions
4. Report of June 23-25, 1998, inspection

cc: Mary Bitney, KDHE

LIST OF VIOLATIONS

1. On June 23-25, 1998, an EPA inspection revealed that Kansas Army Ammunition Plant (KAAP) failed to make a hazardous waste determination for two drums of material located outside the southwest corner of Building 203. Failure to make a waste determination violates KDHE regulation, K.A.R. 28-31-4(b) which incorporates 40 C.F.R. §261.2 by reference.

2. On June 23-25, 1998, an EPA inspection revealed that KAAP failed to mark a 55-gallon container of F003 waste acetone with the accumulation start date. This container was stored at a less-than-90-day accumulation area outside the laboratory. Failure to mark a container of hazardous waste with the accumulation start date violates KDHE regulation K.A.R. 28-31-4(g)(2) and 40 C.F.R. §262.34(a)(2).

3. On June 23-25, 1998, an EPA inspection revealed that KAAP failed to provide adequate secondary containment that is impervious to the waste being stored in Igloo 1917. Failure to provide adequate secondary containment is a violation of K.A.R. 28-31-8(a) which incorporates 40 C.F.R. §264.175(b)(1) by reference.

4. On June 23-25, 1998, an EPA inspection revealed that KAAP failed to maintain adequate spill prevention and control equipment at Igloo 1917. Failure to provide adequate spill prevention and control equipment at a hazardous waste storage area is a violation of K.A.R. 28-31-8(a) which incorporates 40 C.F.R. §264.32(c) by reference.

5. On June 23-25, 1998, an EPA inspection revealed that KAAP failed to maintain records of the amounts of silver or film in storage for recycling at Building 1019. Building 1019 is the X-Ray Inspection Area where film is recycled to recover silver. The records must document the volume of material in storage at the beginning of the calendar year and the amount of materials remaining at the end of the calendar year. Failure to maintain these records violates K.A.R. 28-31-8b which incorporates 40 C.F.R. §266.70(c) by reference.

6. On June 23-25, 1998, an EPA inspection revealed that KAAP failed to label five containers with the words "Hazardous Waste." One container was the five gallon container under the parts washer in Building 1139. The other four containers were 55 gallon drums in Building 1136. Failure to label a hazardous waste container with the words "Hazardous Waste" is a violation of K.A.R. 28-31-4-(g)(3) and K.A.R. 28-31-4(b)(4) which incorporates 40 C.F.R. §262.34(a)(3) by reference.

7. On June 23-25, 1998, an EPA inspection revealed that KAAP failed to have a complete contingency plan for all areas where hazardous wastes are generated. The plan viewed during the inspection addressed only permitted treatment, storage, and disposal areas but not other areas subject to the large quantity generation regulations. Failure to have a complete contingency plan is a violation of K.A.R. 28-31-4(g)(4) which incorporates 40 C.F.R. Part 265, Subpart D by reference.

8. On June 23-25, 1998, an EPA inspection revealed that KAAP failed to provide training to all personnel that handled hazardous waste. The training was provide to only personnel working in the permitted treatment, storage, and disposal areas but not to other personnel working in areas subject to the large quantity generation regulations. Failure to provide training is a violation of K.A.R. 28-31-4(g)(4) which incorporates 40 C.F.R. §265.16 by reference.

LIST OF QUESTIONS AND/OR REQUESTED INFORMATION

For each of the following questions limit your response to the period from January 1, 1995, until the present unless otherwise indicated in the question. These questions refer to the July 1, 1998, letter submitted by Kansas Army Ammunition Plant (KAAP) in response to the June 25, 1998, Notice of Violation (NOV) issued by the U. S. Environmental Protection Agency.

1. Provide documentation of KAAP's hazardous waste determination for the two drums of unknown material located at Building 203.

2. Provide documentation that the undated drum in Igloo 1917 and the four undated drums in Building 1136 have been dated and placed in an appropriate storage area or manifested off for disposal or treatment.

3. Provide documentation that an adequate secondary containment structure has been installed in Igloo 1917.

4. Provide documentation that spill control materials were placed in Igloo 1917 and the transport truck.

5. Provide a copy of all available records relevant to identifying the quantities of waste film and recovered silver stored in Building 1019 at the beginning and end of each calendar year since January 1, 1995.

6. Provide documentation of changes made to KAAP's contingency plan and personnel training for the purpose of correcting violations cited in the June 25, 1998, NOV.

TRUCTIONS

- Identify the Person(s) responding to this request on your behalf.
- Address each numbered item separately, and precede each answer with the number of the item to which it responds.
- For each numbered item, identify all documents consulted, examined, or referred to in the preparation of the answer, or that contain information responsive to the requested item. Provide true, accurate, and legible copies of all such documents. (If information responsive to an item is available but there are no relevant source documents, you must still provide the information.)
- For each document provided, indicate on the document (or in some similar manner) the number of the item to which it responds.
- For each numbered item, identify all persons consulted in the preparation of the answer.
- For purposes of this request, the term "you" or "your" refers to the company, corporation and any officer, principal, agent employee, or any other person(s) associated in any capacity.
- If information responsive to a requested item is not in your possession, identify the person(s) from whom the information may be obtained.
- If information that is not known or available at the time you make your response, later becomes known or available to you, you must supplement your response.
- If, at any time after you submit your response, you find that any part of the information you submitted is incomplete, false, or misrepresents the truth, you must notify EPA immediately.
- You must provide the requested information even though you consider it confidential information or trade secrets. If you want to make a confidentiality claim covering part or all of the information submitted, identify the material with words such as "trade secret," "proprietary," or "company confidential."
- EPA will disclose this information only to the extent and by the means described in 40 CFR Part 2, Subpart B., provided that it qualifies as confidential business information.
- A request for an extension to the time limit for responding must be in writing and must be made within five (5) calendar days of receipt of this information request. Address it to the person identified in the cover letter to receive your response.
- Copies of the Code of Federal Regulations may be obtained from the U.S. Government Bookstores.
- This request for information is not subject to the approval requirements of the Paperwork Reduction Act of 1980.

Not responding to this information request within the stated time limit and in accordance with these instructions may subject your facility to an enforcement action which could include the imposition of penalties of up to $27,500 per violation, per day of continued noncompliance. Providing false, fictitious, or fraudulent statements or representations could lead to criminal penalties.

KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Gary R. Mitchell, Secretary

MEMORANDUM

TO: KAAP Facility Operating File (Green)

FROM: David E. Cox DEC

DATE: December 23, 1998

RE: Facility Contingency Plan

AUGUST 7, 1998 EPA INSPECT

, AUGUST, 1998

This is a copy of the above referenced facility's Spill Control and Contingency Plan (SCCP). During the EPA's inspection of this facility in 1998, the SCCP was found inadequate in that it did not appear to address contingency plan requirements for large quantity generators (LQGs). The specific LQG activities not covered included the generator activities in the 500 Area. Therefore, this violation prompted KAAP to modify its SCCP to address the deficiencies noted during the EPA's inspection. The enclosed document was attached to the EPA's inspection report as proof of the deficiency.

KAAP completed this modification as a requirement to satisfy the violation on November 11, 1998 as a Class 1 Modification request.

Division of Environment
Bureau of Waste Management
Phone (785) 296-1600

Forbes Field, Building 740
Topeka, Kansas 66620-0001
Fax (785) 296-1592

500 Area and 700 Area - Corrective Action Site

Corrective action clean-up activities are occurring in these areas. These activities primarily consist of removing contaminated soil, storing it for less than 90-days, and disposing it as hazardous waste. I observed several roll-offs which contained hazardous waste soil. All of the roll-off containers were properly labeled, dated, and none had been stored for greater then 90 days.

Concerns Identified: None with the container storage activities appeared to be covered in the facility's contingency plan (See Records Review). I did not review any personnel training records which showed that the personnel in the 500 and 700 areas, responsible for the waste management, were specifically trained for that purpose.

300 Area - LAP (Load, Assembly, & Pack)

This area is used to load, assemble and pack artillery round grenades, and for the general rework of rejected munitions.

Concerns Identified: None during the inspection.

Records Review

I reviewed all of the major recordkeeping requirements for large quantity generators (EPA generators in Kansas), for the interim status OB/OD areas, and for the permitted incineration activities. I reviewed all manifests used for off-site shipments of hazardous waste from January 1, 1998, to June 16, 1998, approximately 25. I reviewed the incinerator emergency shut down logs and daily pre-start-up inspection logs from April 20, 1998, to June 20, 1998. I asked Mr. Cramer for the contingency plan and personnel training plan currently used by the facility. He provided me with the documents contained in attachment 9. He also provided me with the documents that a contractor prepared for the site safety and clean-up activities in the 500 Area (attachment 12). I briefly reviewed these during the inspection and did a thorough review of the contingency plan upon return to the office.

Concerns Identified:

Except as noted below, no significant concerns were identified with the records reviewed.

Contingency Plan: The contingency plan provided does not appear to address the contingency plan requirements for large quantity generators specified under 40 CFR 262.34(a)(4) referencing 40 CFR 265 Subpart D. Specifically, the contingency plan provided only covered the permitted activities and did not cover the generator activities in the 500 Area The "Site, Safety, and Health Plan" and the "Contractor Work Plan" also did not appear to cover these requirements (attachment 12).

There are three laboratories on-site. One each in building 57 and 58, and one in the wastewater treatment plant. I did not inspect these labs during the inspection.

During the file review, I noted that there was discussion of a still to distill spent solvents. According to Mr. Cramer, the still was never used and there are no current plans to use it. I did not have time to inspect the still to verify this during the inspection.

Attachment 15 contains a copy of the Region VII Multimedia Screening Checklist.

Kris Goschen
Multimedia Inspection Coordinator
Date: 8/7/98

Attachments:

1. Confidentiality Notice (1 page)
2. Receipt for Documents (1 page)
3. Notice of Violation (2 pages)
4. Site Entry, In-Briefing and Exit-Briefing Worksheet (3 pages)
5. Map of Facility (2 pages)
6. Facility Background Information (13 pages)
7. Hazardous Waste Treated and Stored at KAAP (13 pages)
8. Hazardous Waste Log (7 pages)
9. Spill Control and Contingency Plan (202 pages)
10. Hazardous Waste Incinerator Logs (5 pages)
11. January 21, 1997 EWI Approval Letter from KDHE (18 pages)
12. Contractor Site, Safety, and Health Plan and Contractor Work Plan (2 books)
13. Hazwoper Training (6 pages)
14. Hazardous Waste Facility Inspection Sheets (10 pages)
15. Region VII Multimedia Screening Checklist (2 pages)
16. Photographs (4 each)

DAY & ZIMMERMANN, INC.

GOVERNMENT SYSTEMS GROUP
KANSAS DIVISION

July 21, 1998
Addendum to Part B Permit Renewal Application.DOC

RECEIVED
JUL 24 1998
BUREAU OF WASTE MANAGEMENT

U.S. Environmental Protection Agency
Region VII
722 Minnesota Avenue
Kansas City, Kansas 66101

Attention: Mr. Ken Herstowski

Dear Mr. Herstowski:

Subject: Addendum to Part B Permit Renewal Application

Reference: Telecon (Mr. Herstowski (EPA) and C. Smalley/D. Cramer (DZI)) dated April 21 and April 23, 1998; subject as above

Attached for your review and inclusion in the Part B Permit Renewal Application for the Kansas Army Ammunition Plant (KSAAP) is the supplemental information discussed in the referenced telephone conversation. The information is listed by item number from the original review comments.

Checklist Table III.3. Drawing A-GEN-74, Sheet 1 of 2, is supplied as requested to show detailed design of Hazardous Waste (HW) Storage Igloos at KSAAP (see Attachment I). Since the liquid HW storage igloo concrete floors are not considered impermeable, containment pans such as Spillskid Platforms will be purchased for use in the igloos to provide secondary containment.

Checklist Table III.5. Drawing A-GEN-74, Sheet 2 of 2, is supplied to show earth cover designs of HW storage igloos (see Attachment II). Also included are two lists showing the maximum explosive limits of each igloo in the 1700 and 1900 Areas. Explosive limits have been reduced for those igloos currently damaged by sloughing earth cover. These reduced limits do not affect HW storage due to the current space requirements for the HW.

Checklist Table III.9. SOP #KN-199 has been revised to include the movement of HW from storage to the EWI for treatment (see Attachment III). Move orders (Form DZI 1087A) will be utilized to track and record this movement.

Checklist Table III.23. Drawings and equipment specifications are included to indicate changes that have occurred at the EWI since it was retrofitted (see Attachment IV).

Checklist Table III.26. The formula for calculating gas velocity, and supplemental information, are enclosed (see Attachment V).

The CEM certification test procedures for the KSAAP explosive waste incinerator are also enclosed (see Attachment VI).

Checklist Table II. Appendices C-2 and C-3 are now located in Supplemental Information Book (Book 3 of 3).

[illegible] ROCKS ROAD ♦ PARSONS, KANSAS 67357-3403 ♦ (316) 421-7460 ♦ FAX (316) 421-7477

Subject: Addendum to Part B Permit Renewal Application

Section C-1 of Section C, Waste Characteristics and Waste Analysis Plan, has been revised to incorporate appropriate wording to include hazardous waste other than military munitions to be received from off plant for treatment (see Attachment VII).

Section C-2a(1) has been revised to include a reference to a pre-acceptance checklist form, which will be completed for each hazardous waste shipment received. A copy of the form DZI 16A is part of the revision (see Attachment VIII).

Standing Operating Procedures, KN-0000-L-007 and KN-0000-L-015, were inadvertently omitted from the previous submission and are now submitted for inclusion in Book 3 - Supplemental Information (see Attachments IX and X).

Additional Information Table J-1 has been revised to reflect the current SWMU groups in accordance with the RFI (see Attachment XI).

Section L Certification was inadvertently omitted. The certification is now submitted as that section (see Attachment XII).

Also included in this supplemental information are revised pages of the Appendix G-1 to reflect more up-to-date telephone numbers (see Attachment XIII), and Appendix XXI of the Hazardous Wastes and Hazardous Substances Spill Control and Contingency Plan (SPCCP) to reflect updated telephone numbers (see Attachment XIV).

Please incorporate this additional information in the Part B Permit Renewal Application for KSAAP. A copy of the information will be furnished to the Kansas Department of Health and Environment (KDHE) for their review, and to update their copy, also. If you have any questions concerning this information, our point of contact is Dean Cramer, telephone 316-421-7532.

Respectfully,

STEVE KOSMAN
Director of Engineering

SWK/CJS/dmh

cf: KDHE
ACO
Environmental Engineering
Reading File

Attachments a/s

TABLE J-1

SOLID WASTE MANAGEMENT UNITS
AT KANSAS ARMY AMMUNITION PLANT
PARSONS, KANSAS

SWMU GROUP NUMBER	DESCRIPTION	SWMU TYPE
Group No. 1	Building 112 Sump, Oxidation pond	Impoundment & Discharge
Group No. 2	200 Area Oil/Water Separator	Discharge
Group No. 3	200 Area Oil Land Farm	Land Treatment
Group No. 4	Building 314 Waste Oil/Toluene Tank Site	Collection & Storage
Group No. 5	300 Area Sumps, Ditches, Oxidation Pond	Impoundment, Treatment & Discharge
Group No. 6	500 Area Sumps and Ditches	Impoundment & Discharge
Group No. 7	800 Area Sumps and Ditches	Impoundment & Discharge
Group No. 8	900 Area Sumps, Ditches and Oxidation Ponds	Impoundment, Treatment & Discharge
Group No. 9	1000 Area Sumps, Ditches and Oxidation Ponds	Impoundment, Treatment & Discharge
Group No. 10	1100 Area Sumps, Ditches and Oxidation Pond	Impoundment, Treatment & Discharge
Group No. 11	Open Burning Pads No. 1 – 4	Landfill
Group No. 12	100 Area Classification Area	Landfill
Group No. 13	Closed/Inactive Landfill	Landfill
Group No. 14	200 Area Closed Landfill and Burn Pits	Landfill & Thermal Treatment Unit
Group No. 15	Active Landfill, Including Asbestos & Grenade Disposal Area	Landfill
Group No. 16	Closed/Inactive Landfill near OD Area	Landfill
Group No. 17	Active Open Detonation Field	Treatment
Group No. 18	Sludge Drying Beds	Treatment
Group No. 19	Coal Pile Run-off Catchment Device & Ditches	Discharge
Group No. 20	Explosive Waste Incinerator (EWI)	Hazardous Waste Incinerator

TABLE J-1

SOLID WASTE MANAGEMENT UNITS
(continued)

SWMU GROUP NUMBER	DESCRIPTION	SWMU TYPE
Group No. 21	Container Storage Units (Hazardous Waste)	Storage
Group No. 22	Contaminated Waste Processor	Thermal Treatment Unit
Group No. 23	Burning Cages No. 14, 17, and 22	Thermal Treatment Unit
Group No. 24	Open Burning Pads No. 5 and 6	Thermal Treatment Unit
Group No. 25	700 Area Sumps, Ditches, and Ponds	Impoundment, Treatment and Discharge
Group No. 26	Pistol Range	Collection
Group No. 27	Water Tower	Storage
Group No. 28	Water Detention Basin	Impoundment

DRAFT

PART II
EPA AUTHORIZATION UNDER THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Pursuant to Section 227 of the Hazardous and Solid Waste Amendments of 1984 (hereafter referred to as "HSWA"), the United States Environmental Protection Agency (hereafter referred to as "EPA") is granted authority to issue or deny permits or those portions of permits affected by the requirements established by HSWA. By this authority and pursuant to Sections 3001(g), 3001(h), 3002(b), 3004(d), 3004(u), 3004(v) and 3005 of the Resource Conservation and Recovery Act (RCRA) as amended by HSWA, 42 USC §§6921(g), 6921(h), 6922(b), 6924(d), 6924(u), 6924(v), and 6925, EPA hereby grants to the Department of the Army [dba Kansas Army Ammunition Plant] as Owner and Operator (hereafter referred to jointly as "the Permittee"), permission to perform activities permitted by HSWA as well as certain activities required by HSWA, at its facility located east of Parsons, Kansas (37° 16' 000" latitude 95° 11' 000" longitude), in accordance with the conditions of Part II of this permit.

Part II of this permit addresses the corrective action requirements for solid waste management units and other HSWA requirements as administered and enforced by EPA. Applicable regulations are found in 40 CFR Parts 260 through 264, 268, 270, and 124, as specified in Part II of this permit.

All regulations cited in Part II of this permit refer to regulations in effect on the date of this permit issuance. With the exception of regulations in existence at the time of permit issuance and referenced in Part II of this permit, the only other RCRA regulations applicable to this facility during the life of Part II of this permit shall be those regulations which, by their terms, specifically apply to pre-existing RCRA permits.

The Regional Administrator has delegated authority to perform all actions necessary to issue, deny, modify, or revoke and reissue permits for owners and operators of hazardous waste treatment, storage, and disposal facilities pursuant to Section 3005 of RCRA to the Director of the Air, RCRA, and Toxics Division (hereafter referred to as "Director") or the Director's designated representative, by delegation No. R7-8-6; January 1, 1995.

Part II of this permit is based on the assumption that the information in the approved permit application, submitted by the Permittee and dated September 11, 1997, (hereafter referred to as "the application") is accurate and that the facility will be operated as specified in the application.

Any inaccuracies found in the application or other submitted information may be grounds for the termination, revocation and reissuance, or modification of Part II of this permit in accordance with 40 CFR §§270.41, 270.42, and 270.43, or for enforcement action. The Permittee shall inform EPA of any deviation from or changes in the application that would affect the Permittee's ability to comply with Part II of this permit.

Part II of this permit shall become effective at 12:01 AM on and shall remain in effect until unless revoked and reissued, terminated or continued in accordance with 40 CFR §§270.41, 270.43, and 270.51. Part II of this permit shall remain in effect even if Part I is appealed, terminated, has expired, or is otherwise not in effect.

This permit is not subject to the requirements of the Paperwork Reduction Act.

Done at Kansas City, Kansas, this day of_, 19_.

William A. Spratlin
Director
Air, RCRA and Toxics Division

Date

complete agreement within this 30-day period, the matter will be submitted for resolution to the Director. If requested by the Permittee, the Director may, at his or her discretion, agree to meet with the Permittee. The Director's resolution shall become an enforceable part of Part II of this permit. The Director shall notify the Permittee in writing of the resolution of the dispute, and the reasons for this resolution.

II.L.2. The existence of a dispute as defined herein and EPA's consideration of such matters as placed in dispute shall not excuse, toll or suspend any obligation or deadline required pursuant to Part II of this permit, that is not the subject of dispute, during pendency of the dispute resolution process.

III. CORRECTIVE ACTION

III.A. Authority

Section 3004(u) of RCRA, 42 USC §6924, and 40 CFR §264.101, require that all permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit (SWMU), regardless of when waste was placed in the unit or whether the unit is closed. Those sections further require that permits issued under Section 3005 of RCRA, 42 USC §6925, contain a schedule of compliance for corrective action where corrective action cannot be completed prior to permit issuance and that such permits contain evidence of financial assurance for completing corrective action. Section 3004(v) of RCRA, 42 USC §6924(v) authorizes the Regional Administrator to require that corrective action be taken by the facility owner or operator beyond the facility boundary when necessary to protect human health and the environment, unless the owner or operator demonstrates that permission to undertake such action, despite the owner/operator's best efforts, was denied. Section 3005(c)(3) of RCRA, 42 USC §6925(c)(3), requires that each permit issued under that section shall contain terms and conditions as the Regional Administrator determines necessary to protect human health and the environment. The Regional Administrator has delegated authority to perform all actions necessary to enforce the corrective action portion (hereafter referred to as "Permit Condition III") of this permit to the Director of the Air, RCRA, and Toxics Division (hereafter referred to as "Director") or the Director's designated representative.

III.B. Identification of Solid Waste Management Units

The EPA has conducted a RCRA Facility Assessment (RFA) to identify releases or potential releases from any SWMU at the facility. The SWMUs identified in the RFA and additional SWMUs identified by the Permittee subsequent to the RFA have been identified as follows and are shown in Figure 1 (attached):

SWMU Designation	Description
SWMU Group 1	Building 112 Sump, Ditch and Oxidation Pond
SWMU Group 2	200 Area Oil/Water Separator
SWMU Group 3	200 Area Oil Land Farm
SWMU Group 4	700 Area SWMUs
SWMU Group 5	300 Area SWMUs

SWMU Group 6	500 Area SWMUs
SWMU Group 7	800 Area SWMUs
SWMU Group 8	900 Area SWMUs
SWMU Group 9	1000 Area SWMUs
SWMU Group 10	1100 Area SWMUs
SWMU Group 11	Open Burning Pads 1,2,3 and 4
SWMU Group 12	100 Area Classification Area
SWMU Group 13	Closed Landfill near Quarry
SWMU Group 14	200 Area Closed Landfill and Burn Pits
SWMU Group 15	Active Landfill
SWMU Group 16	Closed Landfill near Open Detonation Area
SWMU Group 17	Open Detonation Field
SWMU Group 18	STP Sludge Drying Beds
SWMU Group 19	Coal Pile Run-Off Catchment Device and Ditches
SWMU Group 23	Burning Cages 14, 17 and 22
SWMU Group 24	Open Burning Pads 5 and 6
Pistol Range	
Sludge Lagoons	
Water Towers	

III.C. Notification Requirements for and Assessment of Newly-Identified Solid Waste Management Units

III.C.1. The Permittee shall notify the Director in writing of any and all SWMUs identified subsequent to the issuance of Permit Condition III of this permit no later than fifteen (15) calendar days after discovery.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

MAR 25 1998

RECEIVED
MAR 26 1998
BUREAU OF WASTE MANAGEMENT

Mr. Dennis Degner
Chief, Permitting Section
Kansas Department of Health & Environment
Building 740, Forbes Field
Topeka, KS 66620-0001

Dear Mr. Degner: Dennis

RE: Draft Permit
Kansas Army Ammunition Plant
Parsons, Kansas
RCRA ID# KS0213820467

Enclosed is the draft Part 1 Hazardous Waste Management Permit for the Kansas Army Ammunition Plant for your review. Please provide comments as soon as possible so that any final comments on the Part B application can be provided to the facility. Also enclosed is a draft fact sheet and administrative record index.

Please provide your comments to me so that the necessary changes to the draft permit can be made. If you have any questions, please call me at (913) 551-7631. Thank you for your cooperation in this matter.

Sincerely,

Kenneth V. Herstowski
Project Manager
Air, RCRA, and Toxics Division

Enclosures

FACT SHEET

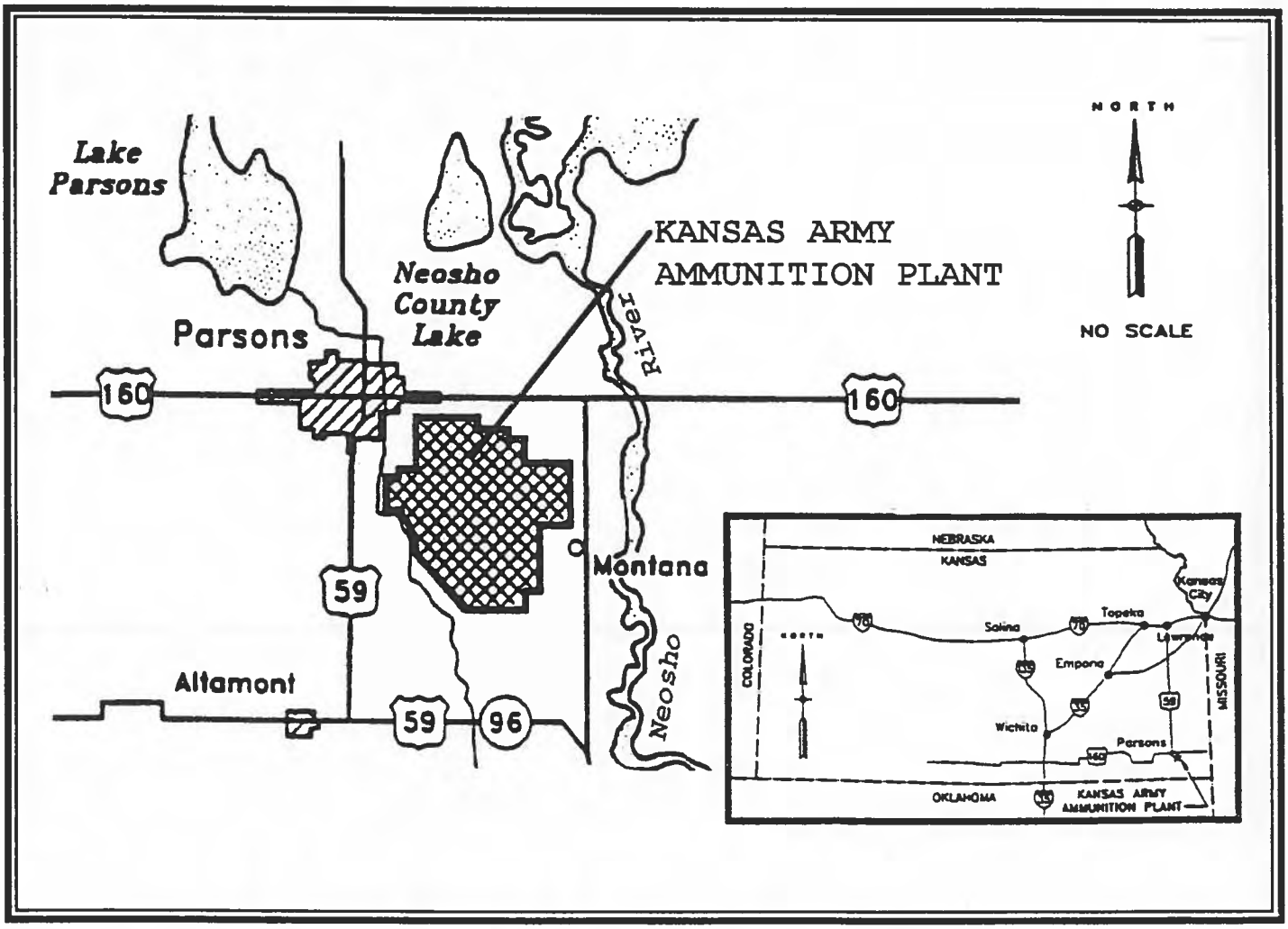
DRAFT

EPA

Hazardous Waste Permit
Kansas Army Ammunition Plant
Parsons, Kansas

Region 7
726 Minnesota Avenue
Kansas City, Kansas 66101
February 1998

BACKGROUND: The Environmental Protection Agency (EPA) and the Kansas Department of Health and Environment (KDHE) issued a hazardous waste management permit to the Kansas Army Ammunition Plant (KAAP), Parsons, Kansas, in December 1989. The location of the site is shown on this page. The permit allowed KAAP to store hazardous waste in containers in 20 hazardous waste storage units. The storage units could hold spent solvents, corrosive solutions, incinerator ash, open burning/open detonation ash, and waste explosives, including explosives-contaminated materials. The permit also allowed KAAP to operate an explosive waste incinerator (EWI) to destroy explosive wastes after successful completion of an emissions test to establish final incinerator operating conditions.



The existing hazardous waste management permit expired in December 1994; however, KAAP submitted an application for a new permit as required by Title 40 Code of Federal Regulations (CFR) Part 270 and Kansas Statutes Annotated (KSA) Chapter 65, Article 34, to continue its waste management activities. KAAP also completed emissions testing for the EWI and submitted a report on the results of the test in 1996.

DRAFT PERMIT: The draft permit allows KAAP to store hazardous waste in containers in 36 container storage units and to incinerate explosive waste in the EWI under the conditions specified in the draft permit at the locations shown on page 3. The regulated units in the 1700 Area consist of six hazardous waste container storage units that are currently operating under the existing permit. Five of the units will each be permitted to store 17,600 gallons of hazardous waste in 320 55-gallon containers for a total of 88,000 gallons and 1,600 containers. The sixth unit will be permitted to store 480 gallons of hazardous waste in 80 6-gallon boxes.

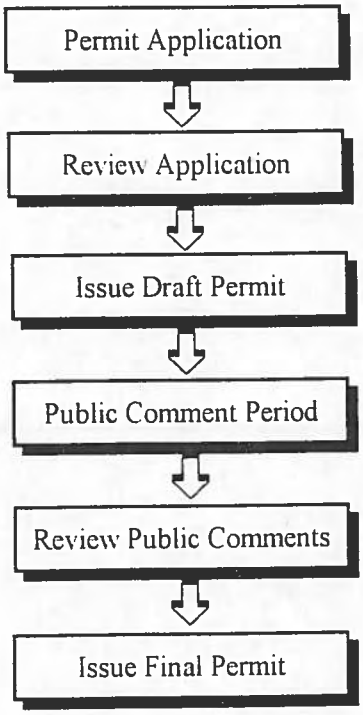
The regulated unit in the 1800 Area consists of one hazardous waste container storage unit currently operating under the existing permit that will be permitted to store 118,800 gallons of hazardous waste in 2,160 55-gallon containers. In the 1900 Area, nine hazardous waste container storage units are currently operating under the existing permit, and the draft permit adds an additional 16 container storage units. Each of the storage units will be permitted to store 17,600 gallons of hazardous waste in 320 55-gallon containers. The total permitted hazardous waste storage capacity in the 1900 Area will be 440,000 gallons and 8,000 containers.

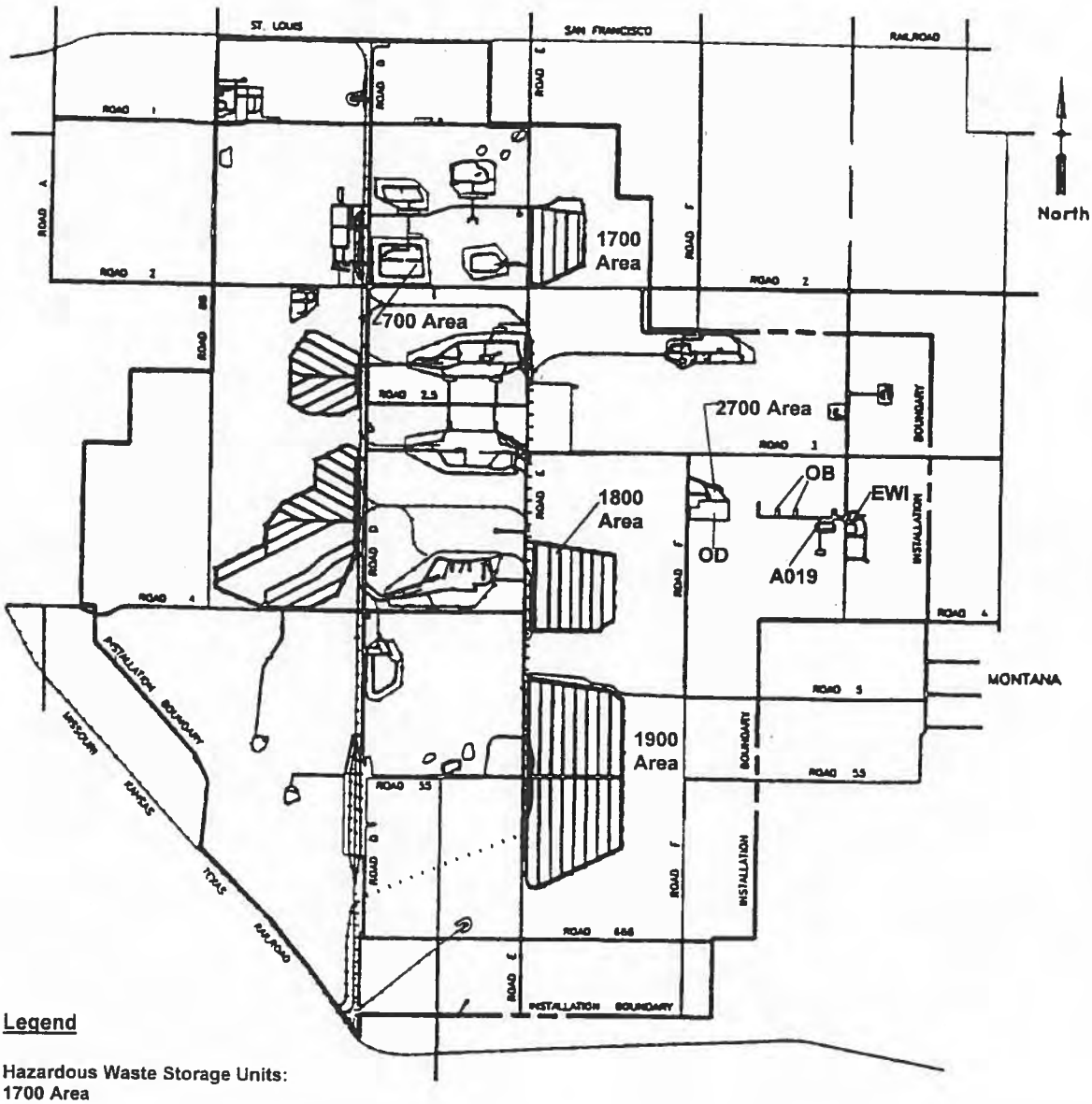
The 2700 Area contains three hazardous waste container storage units operating under the current permit. Each of the storage units will be permitted to store 440 gallons of hazardous waste in eight 55-gallon containers. The final hazardous waste container storage unit, known as Building A019, is operating under the current permit and will be permitted to store 440 gallons of hazardous waste in eight 55-gallon containers.

Based on the results of the emissions testing for the EWI, the following hazardous waste feed rates and operating limits established in the draft permit are presented in the following table:

Table	

PERMITTING PROCESS: A Resource Conservation and Recovery Act (RCRA) permit establishes a facility's operating conditions for managing hazardous waste. Before a RCRA permit is issued by EPA or KDHE, a facility must submit a complete permit application to the appropriate regulatory agency; the application must be reviewed and approved by the permitting agencies; a draft permit must be issued; and the public must be given the opportunity to review and comment on the draft permit. After the permitting agencies have addressed comments received during the public comment period, the permitting agencies make a final decision on whether to issue the final permit. The steps in the permitting process are illustrated below.





Legend

Hazardous Waste Storage Units:
1700 Area
1800 Area
1900 Area
2700 Area
A019 Area

Area Under Closure Process:
700 Area

Other Regulated Units:
EWI Explosive Waste Incinerator
OB Open Burning Area
OD Open Detonation Area

CORRECTIVE ACTION: All permits issued after the RCRA Hazardous and Solid Waste Amendments of 1984 (HWSA) were enacted must contain provisions for corrective action if there have been any releases of hazardous waste or hazardous constituents from solid waste management units (SWMU). Kansas has received final authorization to implement its own hazardous waste management program except for those federal program elements covered by HWSA. Authority for the corrective action portion of the RCRA program has not been delegated to Kansas and is currently held by EPA.

EPA has identified 25 SWMU groups at the KAAP facility that are currently under investigation to determine the nature and extent of releases of hazardous waste or hazardous constituents. The draft permit provides for further investigation of the SWMUs, and EPA will specify appropriate corrective measures, if necessary, after the investigation is evaluated. For more information on these activities see the "Corrective Action Fact Sheet" for this facility. If you did not receive this fact sheet, it is available from the sources listed at the end of this page.

OTHER HAZARDOUS WASTE UNITS: KAAP is authorized to conduct miscellaneous hazardous waste treatment operations consisting of open burning and open detonation of explosive or reactive wastes. These treatment operations are conducted under interim status until a final permit decision is made on them. The areas where open burning and open detonation operations are conducted is shown on page 3.

The area known as the 700 Area is currently undergoing closure to remediate past releases of hazardous waste. EPA and KDHE are jointly monitoring the closure process; however, this permit action does not impose any additional requirements on the closure of the 700 Area. The location of the 700 Area is shown on page 3. None of these areas are affected by this permit action.

For more information or any questions concerning the draft KAAP permit, please contact:

Dennis Degner
Bureau of Waste Management
KDHE
Forbes Field, Bldg. 740
Topeka, Kansas 66620-0001

Telephone: (785) 296-1601
Fax: (785) 296-1592

or

Ken Herstowski
ARTD/RCRA
U.S. EPA Region 7
726 Minnesota Avenue
Kansas City, Kansas 66101

Telephone: (913) 551-7631
Fax: (913) 551-7947
E-mail: herstowski.ken@epamail.epa.gov

Mr. Herstowski may also be contacted through Region 7's toll-free Environmental Action Line, 1(800)223-0425. Copies of the fact sheet and other information may also be obtained from EPA Region 7's web site at: http://www.epa.gov/region7

The administrative record for the KAAP draft permit is available for review at the KDHE and EPA offices listed above and at the following location:

Parsons Public Library
311 S. 17th St.
Parsons, Kansas 67357-4213

Telephone (316) 421-5920

KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Gary R. Mitchell, Secretary

January 12, 1998

Steve W. Kosman
Director of Engineering
Day & Zimmerman Inc.
Kansas Division
23018 Rooks Rd.
Parsons, Kansas 67357-8403

Source ID # 0990010

Dear Mr. Kosman:

The Kansas Department of Health and Environment (KDHE) has received your request, on behalf of Kansas Army Ammunition Plant (KSAAP), for an exemption from Kansas Air Regulation 28-19-645, **Open Burning Prohibited**. The request listed seven specific open burning activities that will be conducted over the next twelve months. These burning activities are as follows:

1. Comp A-5 and A-3 wet sumpage and sump sludge
2. Cyclotol, Octol, Comp B, and TNT wet sumpage and sump sludge
3. Comp A-5, Comp A-3, Comp B, Comp CH-6, PBX, Cyclotol, Octol, RDX, and TNT scrap
4. Absorbent materials from cleanup of Comp A-5, Comp A-3, Comp B, Cyclotol, Octol, RDX, and TNT wastewater spills
5. Propellants and propellant charges
6. Support collars with M55 stab detonators
7. Various Dyno Nobel Materials

On July 12, 1990, April 29, 1992, and April 18, 1997 the Department provided KSAAP critiques on each of the materials in the first six categories in regard to open burning. The Department found that all materials in the first six categories were acceptable for open burning. However, the items in category seven were not addressed in any of the letters referenced above. At this time, various Dyno Nobel materials are not approved to be open burned. KSAAP has provided MSDS sheets for the proposed materials to be burned; the Department will evaluate the materials and inform KSAAP of the findings, and provide an addendum to this exemption if appropriate. Until that exemption is received, no Dyno Nobel materials should be burned.

All burning is to be conducted in accordance with the guidelines as set forth in K.A.R. 28-19-647(e). This exemption expires December 31, 1998 and supersedes any current exemptions. This exemption shall be revocable upon thirty days notice at the Department's discretion.

Division of Environment
Bureau of Air and Radiation
Air and Asbestos Compliance Section
(785) 296-1550

Forbes Field, Bldg. 283
Topeka, KS 66620-0001
FAX (785) 296-1545

If you have any questions about this exemption, please contact me at (785) 296-1581.

Sincerely,

Steve M. Swaffar

Steve M. Swaffar
Environmental Scientist
Air and Asbestos Compliance Section
Bureau of Air and Radiation

SMS:tam
C Gary Miller
Mostafa Kamal/BWM

REVISED PERMIT RENEWAL APPLICATION

prepared for

Kansas Army Ammunition Plant
23018 Rooks Road
Parsons, Kansas 67357-8403

prepared by

Day & Zimmermann, Inc.
(Contractor - Operator)

Book 2 of 3

September 11, 1997

TH. Hamm
B. Head
File - Green

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

JUL 25 1997

Commander
Kansas Army Ammunition Plant
Attn: Don Dailey
Parsons, KS 67357

Dear Mr. Daily

RE: Request for Extension to submit Part B Application Revisions
Kansas Army Ammunition Plant
Parsons, Kansas
RCRA ID# KS0213820467

We have received a request for an extension on your behalf by the operating contractor, Day & Zimmermann, Inc., for submittal of revisions to the hazardous waste permit application. Based upon their letter, we will extend the due date for submittal until September 15, 1997.

Please call me at (913) 551-7631 if you have any questions about this letter.

Sincerely,

Kenneth V. Herstowski

Kenneth V. Herstowski
Project Manager
Air, RCRA and Toxics Division

cc: Dennis Degner, KDHE

RECYCLE
PAPER CONTAINS RECYCLED FIBERS

KAAP

~~M Komak~~
~~R Tosson~~
~~A Gustin~~
File - Green

KAAP

July 23, 1997

Environmental Office
(200-1a)

SUBJECT: Corrective Action for Solid Waste Management Units Quarterly Report

RCRA Branch Chief
U.S. Environmental Protection Agency
Region VII
726 Minnesota Avenue
Kansas City, KS 66101

Dear Sir/Madam

Three copies of subject report for the period 1 April 1997 through 30 June 1997, are enclosed for your use as required by Kansas Army Ammunition Plants RCRA Part B permit.

The point of contact is Glen Parish, 316-421-7596.

Sincerely,

ORIGINAL SIGNED BY

Donald D. Dailey
Commander's Representative

Enclosure

Copies Furnished:

KDHE: Dr. Degner (w/encl.)
DZI Env Eng:C.Smalley (wo/encl.)

HAZARDOUS AND SOLID WASTE AMENDMENTS (HWSA)
PERMIT CORRECTION ACTION FOR SOLID WASTE
MANAGEMENT UNITS QUARTERLY REPORT FOR
PERIOD APRIL 1 THROUGH JUNE 30, 1997

The following information is offered in response to the requirements of Section VI, Paragraph 4, Reporting Requirements, of Kansas Army Ammunition Plant's (KSAAP's) Resource Conservation and Recovery Act (RCRA) Part B Permit.

1. Description of work completed: A Notice of Deficiency (NOD), dated June 16, 1997 was received from the Kansas Department of Health and Environment. The NOD referenced, "Comments of Draft Closure and Post-Closure Plans for the 700 Area KSAAP, Parsons, KS EPA ID number KS0213820467.

   Completion of the Quarterly Groundwater Monitoring Report for the 700 Area – 1st Quarter 1997 – June 1997.

2. Summaries of all findings, including summaries of laboratory data: Not Applicable.

3. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems: Submittal of the Draft Phase II RFI Report (Law) to COE was behind schedule. COE indicated they will make up this time in their review process.

4. Projected work for the next period: Review and finalize the Draft Final Phase II Report (Law).

   Review the Draft Final Phase II Report (Radian).

   Continue preparation of the Human Health Risk Assessment and Ecological Reports.

   Finalize the 700 Area Closure Plans and the Decision Document.

   Perform Groundwater Assessment for PCE and TCE in the 700 Area.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

MAY 29 1997

Commander
Kansas Army Ammunition Plant
Attn: Don Dailey
Parsons, KS 67357

RE: Request for Extension to submit Part B Application Revisions
Kansas Army Ammunition Plant
Parsons, Kansas
RCRA ID# KS0213820467

We have received your request for an extension for su[illegible] of revisions to the hazardous waste permit application. Based upon your letter, we will extend the due date for submittal until June 30, 1997.

Please call me at (913) 551-7631 if you have any questions about this letter.

Sincerely,

Kenneth V. Herstowski

Kenneth V. Herstowski
Project Manager
Air, RCRA and Toxics Division

cc: Dennis Degner, KDHE

1) M. Kamal
2) B. Hess
3) File

KAAP

May 27, 1997

Environmental Office
(200-1a)

SUBJECT: Review Comments April 22,1994 Part B Permit Application Kansas Army Ammunition Plant RCRA ID# KS0213820467 ※ Request for an Extension

Mr. Ken Herstowski
U.S. Environmental Protection Agency
Region VII, Project Manager
Air, RCRA and Toxics Division
726 Minnesota Avenue
Kansas City, Ks. 66101

Dear Mr. Herstowski

Reference United States Environmental Protection Agency Region VII letter dated 24 April 1997 in regard to subject permit application.

Kansas Army Ammunition Plant requests an extension to 24 June 1997 for submission of the revised permit application requested in reference letter. Day & Zimmermann Inc. is currently incorporating your comments into the permit application. We apologize for any inconvenience in our delay in making this request.

The point of contact is Glen Parish, 316-421-7596.

Sincerely,
ORIGINAL SIGNED BY
Donald D. Dailey
Commander's Representative

ENCLOSURE

Copy Furnished:
KDHE/Dennis Degner

A97-14

DAY & ZIMMERMANN, INC.

GOVERNMENT SYSTEMS GROUP
KANSAS DIVISION

May 27, 1997
EE:RM970074.CDC

Administrative Contracting Officer
Kansas Army Ammunition Plant
Parsons, Kansas 67357-9107

Dear Sir:

Subject: Schedule for Revision of Part B Permit Renewal Application

Reference: Environmental Office (200-1a) letter dated April 28, 1997; Subject: Review Comments April 22, 1994 Part B Application Kansas Army Ammunition Plant RCRA ID#KS0213820467

Revisions to the Part B Permit renewal application are currently in progress. Completion of these revisions is anticipated to be June 24, 1997. Copies of the revisions will be submitted to the Kansas Department of Health and Environment (KDHE), Environmental Protection Agency (EPA), and the ACO staff as soon as possible.

The primary revisions pertain to the operation of the explosive waste incinerator (EWI) and the hazardous waste storage facilities on-plant. If you have any questions concerning these revisions or the schedule for completion, our point of contact is Dean Cramer, extension 532.

Respectfully,

Steve Kosman

STEVE W. KOSMAN
Director of Engineering

SWK/JEG/CJS/ram

23018 ROOKS ROAD ♦ PARSONS, KANSAS 67357-8403 ♦ (316) 421-7400 ♦ FAX (316) 421-7477

EPA DRAFT?!

Commander
Kansas Army Ammunition Plant
Attn: Don Dailey
Parsons, KS 67357

Re: Review Comments April 22, 1994 Part B Permit Application
Kansas Army Ammunition Plant
Parsons, Kansas
RCRA ID# KS0213820467

We have completed review of the permit application. Enclosed are specific comments and checklists from the review. The checklists are cross~~ed~~referenced to the comments. We would be happy to meet with you to discuss the comments and requested revisions.

Please provide the revised permit application in 30 days from the date of this letter. Please call me at (913) 551-7631 if you have any questions about this letter.

Sincerely,

Kenneth V. Herstowski
Project Manager
Air, RCRA and Toxics Division

cc: Dennis Degner, KDHE (w/encl.)

RPCB HERSTOWSKI
RPCB HEIMAN

PART A INFORMATION
(Checklist Table I)

The following are specific comments related to the general information requirements for part a permit applications. These comments are cross-referenced in the attached checklist by listing their corresponding numbers in the last column of the checklist.

1. The most recent edition of the part a permit application should be provided (a copy of which is enclosed). The application should identify what processes/units are used to conduct T04 activities. Table A-1 should indicate which [existing] facilities were included in the 1989 permit and which are proposed (facilities not previously used or not constructed) for hazardous waste management.

2. The part a should indicate what are the T03 & T04 units, i.e., explosive waste incinerator, OB/OD, to show the capacity of these units. Note that the names used here should be consistent with the Part B permit.

3. Please clarify if lines 4 & 5 are the same permit.

4. Please submit a copy of the CD with topographic information being used for the RFI. Topographic maps of a smaller scale showing the features within the storage yards (1700, 1800, 1900, 2700) must be provided. Sufficient detail must be provided to show the pathways for spills, runoff from fire fighting activities or other surface releases from hazardous waste units.

Checklist for Technical Review of RCRA Part B Permit Renewal Application

I. PART A GENERAL INFORMATION REQUIREMENTS

Item	Authority	Comments on Requirements	Location of Information in the Application	Addressed (Y/N)	Technically Adequate (Y/N)	See Attached Comment Number
SECTION I						
A. PART A APPLICATION (the form should be replaced with the new 11/30/93 edition of the form)						
Description of activities conducted which require facility to obtain a permit under RCRA and brief description of nature of the business	40CFR270.13(a) and (m)		Section A	yes	yes	
Name, mailing address, and location of facility for which the application is submitted including a topographic map	40CFR270.13(b) and (l)		Section A	yes	yes	
Up to four Standard Industrial Classification (SIC) Codes which best reflect the products or services provided by the facility	40CFR270.13(c)		Section A	yes	yes	
Operator/owner's name, address, telephone number, and ownership status	40CFR270.13(d) and (e)		Section A	yes	yes	
Facility is new, existing, or located on Indian lands	40CFR270.13(f) and (g)	Also, description must include information on whether this is a first or revised application with date of last signed permit.	Section A	yes	no	1.
Description of processes to be used for treating, storing, and disposing of hazardous waste	40CFR270.13(i)	Description must include identity of T03 & T04 units.	Section A	yes	no	2.
Specification of the hazardous wastes listed or designated under 40CFR261	40CFR270.13(j)		Section A	yes	yes	
Listing of all permits or construction approvals received or applied for	40CFR270.13(k)	Permits include the following programs: Hazardous Waste Management under RCRA; UIC under Solid Waste Disposal Act (SWDA); Prevention of Significant Deterioration (PSD), Nonattainment Program, and National Emissions Standards for Hazardous Pollutants (NESHAPS) under the Clean Air Act (CAA); ocean dumping permits under the Marine Protection Research and Sanctuaries Act; dredge and fill permits under Section 404 of the Clean Water Act (CWA); or other relevant environmental permits including state permits.	Section A	yes	yes	3.

NEWS RELEASE

Kansas Army Ammunition Plant

1 APRIL 1997

Kansas Army Ammunition Plant to establish Restoration Advisory Board (RAB)

Kansas Army Ammunition Plant is seeking community interest in the establishment of a Restoration Advisory Board (RAB) and participants for this group.

The purpose of the RAB is intended to improve public participation by involving the community in the restoration decision-making process. The RAB will include community members who reflect the diverse interest of the local community. RAB members will be asked to review and comment on plans and activities relating to the Installation Restoration program at Kansas Army Ammunition Plant.

The RAB will be made up of Army, U.S. Environmental Protection Agency (EPA) and Kansas Department Health and Environment representatives as well as members of the local community. The RAB will be co-chaired by an Army and community representative. The community co-chairperson will be selected by the community members of the RAB. Meetings will be open to the public.

RAB community interest Survey forms and fact sheet can be obtained at the Parsons Public Library, 311 South 17th, Parsons, Kansas or by contacting Glen Parish at Kansas Army Ammunition Plant, (316) 421-7596.

PUBLIC NOTICE

Kansas Army Ammunition Plant
Formation of Restoration Advisory Board
Community Interest Solicitation

The Department of Defense recognizes the importance of stakeholder participation for Installation Restoration Programs (IRP). Therefore, Kansas Army Ammunition Plant is seeking community interest in the establishment of a Restoration Advisory Board (RAB). The RAB is intended to improve public participation by involving the community in the restoration decision-making process.

The RAB will include community members who reflect the diverse interest of the local community. RAB members will be asked to review and comment on plans and activities relating to the ongoing Environmental studies, remedial investigations, and future restoration activities at Kansas Army Ammunition Plant. Members will also be expected to serve as voluntary liaison between the community and the RAB and be available to meet with community members and/or groups. RAB meetings will be open to the public

Members will be expected to attend RAB meetings quarterly and serve a term which will be determined by the RAB once it is established. Membership applications will be reviewed and approved by a selection panel. The selection panel will be made up of representatives from the Kansas Army Ammunition Plant, U.S. Environmental Protection Agency, Region VII, Kansas Department of Health and Environment, Kansas City District Corps of Engineers and the community as appropriate.

RAB Community Interest Survey forms and fact sheet can be obtained at the Parsons Public Library, 311 South 17th, Parsons, Kansas or by contacting Glen Parish at Kansas Army Ammunition Plant, (316) 421-7596 or Carolyn Smalley, Day and Zimmermann Inc., (316) 421-7434. All RAB interest survey forms must be returned by 30 April 1997, to Commanders Representative, Kansas Army Ammunition Plant , Attn: SIOKS-EO, 23018 Rooks Road, Suite AA, Parsons, Kansas 67357-8403.

March 6, 1997

SUBJECT: Agenda for 12-13 March 1997 Installation Restoration Program RFI SWMU's and 700 Area Consent Order Meeting

12 March (10:00 A.M.)

700 Area Consent Order

- Status Groundwater Monitoring Radian/Drew Corson
  --1996 Annual Groundwater Monitoring
  --Groundwater Assessment Monitoring Evaluation
  --Status of 1997 Groundwater Monitoring/Steve Lemons
- Review of draft Decision Document KDHE/KSAAP
- Status of Engineering Report (EE/CA) Radian/G.Shaw
- Treatability studies ▪ Steve Lemons/Gary Shaw
- Revise/Update schedule for final Engineering report, Decision Document, Closure Plan, Public Notice/Meeting, Remedial Design and specifications, clean-up start??
- RAB Information

13 March (8:00 A.M.)

RFI SWMU's

- Quality Control Summary Reports (QCSRs) status/schedule
- Database Update/issues (COE, RADIAN, LAW)
- Surface Water/sediments background study status (Radian/Law)
- Background Soil Data Effects on Heavy Metals (LAW)
- Investigation Derived Waste Disposal (Radian/KSAAP)
- Phase II RFI Report submittal schedule (COE,RADIAN,LAW)

Human Health Technical Memorandum/Baseline Risk Assessment

- Comment status on HHTM (EPA comments and comment resolution)
- Baseline Risk Assessment:
  - Status of SW/SD background study
  - Status of Phase I Data
  - Finalization of Phase II Data Flags
  - Use of ▪ Blanks▪ data in the Risk Assessment -- upper tolerance limits or 5x10x ▪ Rule▪
  - Schedule update
- Brief update/schedule on Ecological Risk Assessment

KS Army Ammunition Plant
Blue File.

DAY & ZIMMERMANN, INC.

GOVERNMENT SYSTEMS GROUP
KANSAS DIVISION

January 16, 1997
EE:RM970005.CDC

Kansas Department of Health and Environment
Bureau of Air and Radiation
Air and Asbestos Compliance Section
Building 283 - Forbes Field
Topeka, Kansas 66620-0001
Attn: Mr. Don Schuyler

Dear Mr. Schuyler:

Subject: Open Burning Exemption Request - Additional Information

Reference: (1) KDHE (Mr. Schuyler) letter dated January 3, 1997; Subject: Open Burning Exemption Approval

(2) DZI (Mr. Kosman) letter dated December 5, 1996; Subject: Open Burning Exemption Request

The reference (2) DZI letter contained an insufficient amount of information pertaining to Comp A-3 explosive for inclusion in the approval from your department (reference (1)). This letter is written to explain in more detail the chemical makeup of this explosive, so that your exemption approval may be amended to include this item.

Comp A-5, an explosive included in the open burning exemption approval, is composed of the explosive RDX (98.5 - 99%) and stearic acid (1 - 1.5%). Comp A-3 is composed of the same explosive RDX (91%), but with a binder of wax (9%). The only difference between Comp A-5 and Comp A-3 is merely the binder used in each mixture. Therefore, it seems appropriate that, based on this information, the open burning exemption approval could be amended to include this additional composition.

Please notify us of your decision in this matter. If you have any questions concerning this request, or require additional justification, our point of contact is Dean Cramer, telephone (316) 421-7532.

Respectfully,

Steve Kosman

STEVE W. KOSMAN
Director of Engineering

SWK/JEG/CJS/ram

cf: Glen Parish - ACO
C. Dean Cramer - DZI
Environmental File
Reading File

23018 ROOKS ROAD ♦ PARSONS, KANSAS 67357-8403 ♦ (316) 421-7400 ♦ FAX (316) 421-7477

KAAP

KAAP

April 24, 1996

Environmental Office
(200-1a)

SUBJECT: Corrective Action for Solid Waste Management Units Quarterly Report

RCRA Branch Chief
U.S. Environmental Protection Agency
Region VII
726 Minnesota Avenue
Kansas City, KS 66101

Dear Sir/Madam

Three copies of subject report for the period 1 January 1996 through 31 March 1996, are enclosed for your use as required by KAAP's RCRA Part B permit.

The point of contact is Glen Parish, 316-421-7596.

Sincerely,

ORIGINAL SIGNED BY

Thomas S. Schorr, Jr.
Captain, U.S. Army
Commanding Officer

Enclosure

Copies Furnished:

✓ KDHE Hazardous Waste Sec(w/encl.)
DZI Env Eng./R. Thomas(wo/encl.)
AMSIO-EQ/R Goetzke
CEMRK-MD-H/G. Anderson

HAZARDOUS AND SOLID WASTE AMENDMENTS (HWSA)
PERMIT CORRECTION ACTION FOR SOLID WASTE
MAMAGEMENT UNITS QUARTERLY REPORT FOR
PERIOD JANUARY 1 THROUGH MARCH 31, 1996

The following information is offered in response to the requirements of Section VI, Paragraph 4, Reporting Requirements, of Kansas Army Ammunition Plant's (KSAAP's) Resource Conservation and Recovery Act (RCRA) Part B Permit.

1. Description of work completed: The draft Final Human Health Risk Assessment has been reviewed, comments provided to Radian and responses to comments have been completed by Radian.

   Pond 36 has been posted as closed for fishing and the 30 acres around Pond 36 have been removed from the land leasing program at KSAAP.

2. Summaries of all findings, including summaries of laboratory data: Not Applicable.

3. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems: The new IRP Work Plan indicates increased funds requested for the Phase II Investigations. However, the Corps of Engineers indicates that there may be a shortage of funds to complete the draft and final reports from the Law Environmental investigations. KSAAP will seek End-of-Year funding or 1st quarter 97 funds for this effort.

   The high cost identified in the Environments Requirements A106 (formerly the 1383 Report) for the Ecological Survey/Study preliminarily scheduled for October 1996 may be a problem for obtaining 1st quarter funding. The COE has identified a $3M cost effort. It is highly unlikely that this amount will be released in October. The Eco-Committee will need to define what will be done, when it needs to be done, etc., in order to better define the funding requirement.

4. Projected work for the next period: Radian began work on the Phase II Field Investigation on April 15.

   Law Environmental will begin work on the Phase II Field Investigation during the first week of June.

   The Eco-Committee will meet at KSAAP on April 29 to conduct a walk-thru at various SWMU sites.

HAZARDOUS AND SOLID WASTE AMENDMENTS (HWSA) PERMIT CORRECTION ACTION FOR SOLID WASTE MAMAGEMENT UNITS QUARTERLY REPORT FOR PERIOD JANUARY 1 THROUGH MARCH 31, 1996

The following information is offered in response to the requirements of Section VI, Paragraph 4, Reporting Requirements, of Kansas Army Ammunition Plant's (KSAAP's) Resource Conservation and Recovery Act (RCRA) Part B Permit.

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3. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems: The new IRP Work Plan indicates increased funds requested for the Phase II Investigations. However, the Corps of Engineers indicates that there may be a shortage of funds to complete the draft and final reports from the Law Environmental investigations. KSAAP will seek End-of-Year funding or 1st quarter 97 funds for this effort.

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   The Eco-Committee will meet at KSAAP on April 29 to conduct a walk-thru at various SWMU sites.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

MAR 0 1 1995

Mr. Steve Kosman
Day & Zimmerman, Inc.
East Highway 160
Parsons, KS 67357-9106

Dear Mr. Kosman:

Re: R&D Test Firing
Kansas Army Ammunition Plant
Parsons, Kansas
EPA RCRA ID# KS0213820467

Your January 22, 1996, letter requests guidance on the applicability of current and proposed hazardous waste management regulations to certain research and development activities. Test firings are being conducted at Kansas Army Ammunition Plant (KAAP) to support the Explosive Standoff Minefield Breacher program. These activities include the clearance of unexploded or partially exploded mines at the test fire area.

Currently, firing range activities such as those described for this project are not regulated by the Environmental Protection Agency (EPA). This includes the detonation of unexploded or partially exploded items at the range as part of clearance activities. Note that you must determine if any materials removed from the range for subsequent management are solid (and hazardous) wastes.

The EPA recently published a proposed rule (see 60FR 56468) that would subject ranges to corrective action requirements at closure of the range or its transfer from military control. In addition, the Department of Defense (DOD) has proposed to issue regulations for the closure and transfer of ranges that would supersede Resource Conservation and Recovery Act (RCRA) requirements. These proposals do not appear to impact the activities you have described. However, they have the potential to impact subsequent use of the range.

Please call me at (913) 551-7631 if you have any questions regarding these issues. Thank you for your cooperation this matter.

Sincerely,

Kenneth V. Herstowski
Project Manager
Air, RCRA and Toxics Division

cc: John Mitchell, Kansas Department of Health & Environment

DEPARTMENT OF THE ARMY
KANSAS ARMY AMMUNITION PLANT
PARSONS, KANSAS 67357-9107

REPLY TO
ATTENTION OF

6 November 1995

Environmental Office
(200-1a)

SUBJECT: RCRA Facility Investigations - RFI SWMU's Phase II, and 700 Area Consent Order Project Monthly Review Meeting

Mr. Steve Travis
Kansas Department of Health & Environment
Bureau of Waste Management
Hazardous Waste Section
Building 740 - Forbes Field
Topeka, KS 66620-0001

Dear Mr. Travis:

Enclosed are four copies of notes to the 24 October 1995 subject meeting held at the Kansas Army Ammunition Plant.

The next meeting is scheduled for 13 December 1995, at the Kansas Department of Health and Environment, Airport Terminal building Conference Room, Forbes Field, Topeka, Kansas. The meeting start time will be approximately 8:00 A.M.. Attached is a copy of a KDHE facility location map and other informational material for your use. Any additions/deletions and/or changes to the proposed agenda for the next meeting should be provided to this office by 5 December 1995.

The point of contact is Glen Parish, 316-421-7596.

Sincerely,

Thomas S. Schorr, JR.
Captain, U.S. Army
Commanding Officer

ENCLOSURE

AGENDA
700 Area/RFI Program Meeting
Kansas Army Ammunition Plant
25 October 1995

Opening	EPA	0800
Review of Public Meeting	ALL	0810
ECO Committee update	LAW	0900
Status Phase II Work Plans	COE/Radian/Law	0930
Status of Cost Proposals (public meeting, ECO committee, Phase II work)	COE	1030
Data Management - Phase II	Radian/Law	1100
LUNCH		1200
700 Area Risk Assessment	Radian	1300
Background Groundwater	Radian/Law/COE	1330
Outstanding Issues	All	1530
Agenda for December meeting	All	1600
Adjourn		1630

Installation Restoration Program
Solid Waste Management Units and 700 Area Consent Order Meeting
October 25, 1995

Change in EPA Project Management

Steve Wharton announced that he would not be the project manager for this project any longer but would remain involved in the Ecological Risk Assessment and the Interim Measures Study. Ken Herstowski was introduced as the new project manager.

Update on Governmental Budgeting

No changes were anticipated from the previous estimates about funding for the EPA.

It was stated that funds for contractor support were being requested and that there was a strong possibility that some funding would be provided.

Ecological Risk Assessment Committee Update

Not much has been accomplished on this effort to date. A DOD procedural guideline will be used. Steve Wharton asked for a copy of this document. It is believed that this guidance is based on a framework document by the EPA. No contractual issues have been initiated or settled. RFP's will go out next week. Steve Wharton was requested to provide copies of past ECO Updates. The goal at this point is to complete the work plan(s) for this by next summer to allow field work to begin in the fall of 1996.

Review of Public Information Session

Mr. Lemons stated that the response for this session was typical. He suggested that for the next one that the number of hours and the number of personnel be reduced. Possible times were discussed for the next session. Captain Schorr preferred that the next session be held after the Engineering Evaluation/ Cost Analysis is complete and a remediation method has been selected.

Glen Parish placed copies of the final 700 Area report, the Background Metals Study report, and the Phase I RFI report in the repository at the Parsons Public Library.

Data Management - Phase II

A laboratory has not been selected by Law. A format has been drafted by Radian. The COE had not seen the draft yet. Any lab selected must be able to provide the data in the electronic format required. The burden for performance is on the contractor. Radian will input data from the 700 Area PRDI, Background Metals Study, and the Phase I RFI report into the data base agreed upon.

At this point the chemists broke off for a side meeting on this subject.

Status of Phase II Work Plans

Bill Lowe has reviewed the work plans and found several things he was not comfortable with but these should not impede progress. Julia Kisser has not reviewed the work plans. Steve Lemons would like to use the sampling and analysis plans as a basis for negotiations. These negotiations should take place around November 15. Comments on the final work plans are due at that time. These comments will be dealt with in negotiations.

Currently funds are obligated to both contractors to perform work. The funds are inadequate to complete either effort. Either the work will be delayed until adequate funding is received or work will begin in the hope that funds will arrive. There are funds available in Law's old contract and in Radian's new contract to pick up new work. Both work plans will be negotiated at full price.

Funding may not be available for the 700 Area groundwater monitoring. The 300, 900, and 1100 areas were the only areas that came out as Level I in the Relative Risk Ranking.

In the future wells 8-1 and 9-1 will not be sampled as part of the 700 Area groundwater monitoring effort. Wells 7-1, 6-1, and 5-4 will be sampled using a low flow method beginning with the December sampling event. This is not the sampling technique in the Phase II SAPs. Data from these sampling efforts will be used to determine if any well replacement should take place. Money exists for the replacement wells.

Law was tasked to include a UXO Avoidance Plan in their Phase II SAP. There is no intrusive sampling in the SAP. Randy Carlson mentioned that KAR 28-29 100 through 121contained monitoring guidelines that, while not required, could be used. Law will look at their SAP and compare it to KDHE guidelines.

Radian's SAP includes PCB sampling, the elevator pits, and the Building Inspection effort. Radian suggested that a pool of explosive field screenings be set up for use at trough breaks or similar areas of concern.

Inclusion of Risk Assessments in the Phase II reports was discussed and will be resolved in negotiation.

Schedule of Events

A number of milestones were discussed. These are included in the attached milestone charts.

700 Area Risk Assessment

The Final 700 Area Human Health Risk Assessment will be completed November 15, 1995. The Engineering Report can be completed after this when cleanup goals or ranges have been established. There will be a teleconference December 6, 1995 to discuss this document.

Background Groundwater

It was noted by Radian that parent materials did not affect metals levels in the Background Metals Study. It was determined that there would be six wells installed along the northern edge of the facility. Two of the wells are contingent on the information available on wells1-1 and 2-1. Law will perform this verification.

Draft Interim Measures Assessment Study

Steve Wharton had questions regarding data quality. He is not completely convinced that there is no risk. He was questioning that if some of the discarded data had been used would there still be no risk. The dioxins in Pond 36 were a concern to him. Denise Goddard discussed the data. Jeff Margolin stated that the final report would contain a discussion on the flagged data, the usability of the data, and explain the level of confidence in the data. A decision was made after the meeting by the facility to take no action regarding Pond 36 until data is available on the adjoining closed landfill. Steve Lemons asked Law to consider further sampling at Pond 36. Documents of a previous pond study performed in the early 1980's was provided to Law as requested after this meeting. Steve Wharton stated that this study is for only 15 of the 56 ponds at the facility.

Comments on this study are due November 30, 1995.

Agenda for the December Meeting

700 Area

Discussion of the Risk Assessment
Funding Update
CME Update

SWMU

Phase II Funding Update
Phase II Contracting Update
Interim Measures Assessment Study Update
Status of EPA Phase II SAP Approval
Background Groundwater Well Location Map
Ecological Risk Assessment Committee meeting