



KOCH NITROGEN COMPANY

**CERTIFIED MAIL: RETURN RECIEPT REQUESTED:**

August 23, 2006

Director  
RCRA Corrective Action & Permits Branch  
Air, RCRA and Toxics Division  
U.S. Environmental Protection Agency Region VII  
901 North Fifth Street  
Kansas City, Kansas 66101

**7005 0390 0006 6702 2388**

Andrea R. Stone  
Environmental Scientist  
RCRA Corrective Action & Permits Branch  
Air, RCRA and Toxics Division  
U.S. Environmental Protection Agency Region VII  
901 North Fifth Street  
Kansas City, Kansas 66101

**7005 0390 0006 6702 2395**



RE: Koch Nitrogen Company – Dodge City, Kansas  
EPA ID NO. KSD044625010  
Sampling and Analysis Plan – Andco Clarifier Basin Overflow, Recovery Well Pipeline Fracture and Station 3 Pipe Union Failure Groundwater Releases

Dear Ms. Stone:

Koch Nitrogen Company (KNC) appreciates your input in your letter of August 8, 2006 on the Sampling and Analysis Plan (SAP) which we submitted under a cover letter dated July 13, 2006. As you suggested in your letter, KNC is revising the SAP for this work to include the groundwater release from piping at Station 3 that occurred on July 7, 2006.

As you suggested, in order to complete the revisions and the incorporation of the Station 3 incident, KNC requests an extension of the submittal date for two weeks, to September 8, 2006.

To expedite your final review of the SAP and to indicate how each comment will be addressed in the revised SAP, KNC has included with this request our replies to the comments you transmitted in your letter. If you have any questions about the SAP, please contact AnnieLaurie Burke at (620) 227-8631, ext. 350.

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ARTD/RCAP

In accordance with Section B.22 of the Part II Permit, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to 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.

Sincerely,

KOCH NITROGEN COMPANY

A handwritten signature in blue ink that reads "Gary J. LeRock". The signature is written in a cursive style with a large initial "G".

Gary J. LeRock  
Plant Manager

Encs.: Replies to Comments of August 8, 2006 (2 copies)

Cc: Mostafa Kamal, Kansas Department of Health and Environment (with enclosure)  
Steve Ellingson, KMS Wichita (electronic copy)  
AnnieLaurie Burke, KNC Dodge City

**Koch Nitrogen Company Dodge City  
Response To Agency Comments On Draft Sampling And Analysis Plan  
Andco Clarifier Basin Overflow and Pipe Fracture Groundwater Releases**

**August 23 2006**

General Comment

Please revise this SAP within fifteen (15) days of certified receipt. Since revision is necessary on the SAP, KNC should consider adding the newly identified AOC/release from the piping at Station 3 to this SAP. If KNC chooses to do this, and needs additional time to include this information, please send a written request for an extension of time to submit the revised SAP, to my attention. If you have any questions, please call me at (913) 551-7662 or toll free at 1-800-223-0425, ext 7662.

**KNC reply: KNC will include the newly-identified Station 3 release in the revised Sampling and Analysis Plan (SAP), as suggested. In order to ensure that all information is complete, KNC is requesting an extension of one week, to September 1, 2006, to complete the revision of the SAP. Meanwhile, KNC has addressed EPA's Specific Comments below and is forwarding these replies to assist in the review process**

Specific Comments

1. Page 2, Section 1.0 Introduction: This section describes the spills. Please include additional detail to the text regarding the spills as: surface area of ground covered by spill, direction of flow from the spill, depth of the spills, etc. Was the area of the spill marked in some manner? How deep were the pipes that fractured? Was any soil excavated, etc?

**KNC reply: KNC is expanding the description of each spill to include this information.**

2. Page 2, Section 2.0 Andco Overflow, 2<sup>nd</sup> sentence: The sentence states, "KNC" believes that the treated groundwater within the Andco clarifier basin contained 0.24 milligram per liter (mg/L) or less of chromium." Please explain how KNC arrived at this concentration.

**KNC reply: KNC is including this information in the revised SAP. This concentration was based on the twice daily in-house measurements taken on the Andco unit per the Post-Closure Plan, Section F.**

3. Page 3, Pipe Fracture Leak, 3<sup>rd</sup> sentence: This sentence states that a water sample was collected during the release event. Please provide the sampling results.

**KNC reply: KNC is including the analytical reports for this area and for the Station 3 area in the revised SAP.**

4. Page 4, Table 2.1 Sample Locations: This table states that “composite samples” will be taken. EPA prefers that “grab samples” be taken. Please change the text to state that grab samples will be taken.

**KNC reply: The text is being changed to indicate that grab samples will be taken.**

5. Page 4 Section 2.2 Sample Collection, 2<sup>nd</sup> paragraph: As stated above, EPA prefers grab samples instead of composite samples. In addition, four samples are not adequate for either spill area. Please advise accordingly.

**KNC reply: The sampling method is being changed to reflect that grab samples will be taken. In addition, KNC will increase the number of samples in two of the three areas, to ensure adequate evaluation.**

**Please note, KNC is not proposing sampling at depth (greater than 2 feet below ground surface) because the water would not tend to penetrate very far into the ground due to several factors: 1) widespread presence of clayey soils at the surface; 2) high evaporation rate in the vicinity of the Plant (69 inches per year) and 3) high average wind velocity (<13 mph). Water from a subsurface leak tends to migrate upwards due to the relatively low permeability of the uncorked soil beneath the pipeline vs. that of the disturbed soils above. The soil beneath the pipe union separation (June 2006) did not appear to be as saturated as the overlying soils that were excavated to repair the pipe. In addition, directional drilling or deeper sampling beneath the lines is not feasible due to the presence of gas lines, electrical utilities and other pipelines.**

**The number of samples has been increased for the Andco overflow to include more of the linear extent of the flow, and this approach has been followed for the recent Station 3 pipe union failure area. The numbers of samples at the pipe fracture area are considered adequate based on a comparatively smaller wetted area and volume of groundwater released. In addition, samples will be taken at varying depths for all three sites.**

6. Page 4, Section 2.4 Laboratory Sample Analysis: This section states that analysis for Chromium using the Synthetic Precipitation Leaching Procedure (SPLP) may be completed pending results of the total analysis for Chromium. Please change this sentence to state that KNC will analyze samples for *total* chromium and *total* nitrate plus nitrite as N. If KNC chooses to use SPLP, it may do so. Please revise accordingly.

**KNC reply: The tested analytes are being changed to total Cr and total nitrate plus nitrite as N. KNC may also conduct a soluble Cr method in addition to the total analyses, depending on the results of the total Cr analysis.**

7. Page 5, Section 4.0 Analysis and Reporting, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence: This sentence states that, “The report will include an analysis and interpretation of the laboratory results

and recommendations for further action, if needed.” Please revise this sentence to state that the analytical results from the sampling event will be included in the report

**KNC reply: KNC’s intent was to include all analytical results. The original wording was not meant to imply that these would not be incorporated into the report. The wording is being changed.**

8. Figure No 1: Please add a scale on this figure. Also, include approximate width, length and depth (if known) of the spill area.

**KNC reply: This information is being included. A traditional scale bar is not considered applicable to the oblique photographs used to develop the figures. However, select distance measurements have been added to the figures as reference measures.**

9. Figure No.3: Please add a scale on this figure. Also, include approximate width, length and depth (if known) of the spill area. Also, show the depth of the buried pipe from ground surface.

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**Koch Nitrogen Company Dodge City  
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