

**STATE OF KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT**

In the Matter of:)

Environmental Contamination at the)
NuStar Pipeline Release North Andover Site)

Case No. 12-E-36 BER

NuStar Pipeline Operating Partnership L.P.,)
Respondent.)
)
)
)

CONSENT AGREEMENT AND FINAL ORDER (“CAFO”)

Now on this 10th day of May, 2013 (“Date of this CAFO”), the Kansas Department of Health and Environment (“KDHE”) and NuStar Pipeline Operating Partnership L.P. (“Respondent”), a limited partnership authorized to do business in the State of Kansas (collectively, the “Parties”), having agreed that settlement of this matter is in the best interests of all Parties and the public, hereby represent and state the following:

1. Respondent agrees to undertake all actions required of it by the terms and conditions of this Consent Agreement and Final Order (“CAFO”).
2. The general purpose of this CAFO is to protect human health and the environment in connection with the Release by (1) conducting Interim Measures determined by

In the Matter of:
NuStar Pipeline Release North Andover Site
NuStar Pipeline Operating Partnership, L.P.
BER File No. C2-008-72928
CAFO CASE NO. 12-E-36 BER

KDHE pursuant to Paragraph 32 to be necessary to mitigate or abate an actual or imminent threat to public health, welfare or the environment arising as a result of the Release; 2) conducting a Comprehensive Investigation ("CI") as set forth in Paragraph 33 to determine the nature and extent of the Release; 3) preparing a Corrective Action Study ("CAS") as set forth in Paragraph 33 to evaluate potential remedial actions therefore; and 4) following KDHE approval of the CI and CAS, KDHE issuance of an Agency Decision Statement of Corrective Action Decision.

3. This CAFO is a final agency order of the Secretary of the Kansas Department of Health and Environment pursuant to the Kansas Administrative Procedures Act ("KAPA"), K.S.A. 77-501 *et seq.* Respondent agrees to comply and be bound by the terms of this CAFO and further agrees it will not contest the authority of the Secretary to issue this CAFO or the basis or validity of this CAFO or its terms in any proceeding brought by KDHE to enforce this CAFO. Respondent does not admit liability for the contamination of the Site, as defined herein, and does not by entering into this CAFO intend to admit the determinations, findings of fact or conclusions of law made by KDHE, and specifically reserves the right to contest any such determinations, findings of fact and conclusions of law in any proceeding other than actions brought by KDHE to enforce this CAFO. Participation in this CAFO by Respondent is not admissible in any judicial or administrative proceeding other than a proceeding by the Parties, including KDHE to enforce the CAFO or a judgment relating to it.

4. KDHE agrees and covenants not to sue or take administrative action against Respondent, its agents, employees, affiliates, successors and assigns for cost recovery or injunctive relief arising from or in connection with any environmental response action performed or response costs paid by Respondent pursuant to this CAFO. KDHE's covenant shall be effective upon receipt by Respondent of written notice by KDHE under Paragraph 68 that Respondent has completed its obligations under this CAFO. This covenant shall extend only to Respondent, its owners, agents, employees, directors and successors, and shall not extend to any other person.

5. Except as expressly provided herein, nothing in this CAFO shall limit the power and authority of KDHE to take, direct or order all actions necessary to protect public health, welfare or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, except as expressly provided herein, nothing in this CAFO shall prevent KDHE from seeking legal or equitable relief to enforce the terms of this CAFO or from taking other legal or equitable actions it deems appropriate and necessary.

JURISDICTION

6. KDHE is a duly authorized agency of the State of Kansas, created by act of the legislature, pursuant to K.S.A. 75-5601 *et seq.*

7. Robert Moser, MD, is the duly appointed Secretary of KDHE ("Secretary") and

has authority and responsibility to protect the public health and the environment. Such responsibility and authority is granted to the Secretary pursuant to:

- a. K.S.A. 65-161 through K.S.A. 65-171y, relating to contamination and remediation of contamination of the waters and soils of the state.
- b. K.S.A. 65-3401 *et seq.*, relating to the safe and sanitary disposal of solid and hazardous wastes.
- c. K.S.A. 65-3452a *et seq.*, relating to matters involving hazardous substances and the hazardous substance cleanups.

8. K.S.A. 65-164(d) authorizes the Secretary to order any person, company or corporation that has discharged sewage or is polluting the waters of the state to treat the sewage or other polluting material to prevent the future discharges or pollution of waters of the state.

9. K.S.A. 65-3453(a)(1) authorizes the Secretary to determine that the cleanup of a site polluted by a hazardous substance is necessary to protect the public health or the environment.

10. K.S.A. 65-3453(a)(3) authorizes the Secretary to issue cleanup orders to persons responsible for the health or environmental hazard created by a hazardous substance.

11. K.S.A. 65-3453(a)(6) authorizes the Secretary to enter into contracts or agreements with any person or company to conduct the necessary clean-up operations.

12. K.S.A. 65-3453(a)(4) authorizes the Secretary to recover moneys from persons

responsible for the health or environmental hazard created by a hazardous substance.

13. K.S.A. 65-3411 and K.S.A. 65-3419 authorize the Secretary to order any person who has generated, accumulated, managed or discharged solid waste that creates a hazard or threatens to cause pollution of the land, air or waters of the state to alter the generation, accumulation or management of the solid waste or to provide and implement such solid waste management system as will prevent or remove pollution or hazards, including ceasing and desisting unlawful activity.

DEFINITIONS

14. Terms used in this CAFO, if defined in state statutes or the associated regulations, shall have the meanings assigned to them in such statutes or the regulations. To the extent not inconsistent with the meanings assigned to them in statute or regulation, the terms listed below, if used in this CAFO or in attached or incorporated documents, shall have the following meanings.

- a. "Day" shall mean a calendar day unless expressly stated to be a working day.
- b. "Interim Measure" shall mean a short-term action or activity taken to quickly prevent, mitigate or remedy unacceptable risk(s) posed to human health or the environment by an actual or potential release of a hazardous substance, pollutant or contaminants.

- c. "Release" shall mean the release of hydrocarbons from Respondent's pipeline detected in the vicinity of 2006 Colt Court, Andover, Kansas on or about June 11, 2012.
- d. "RSK Manual" shall mean the KDHE Risk-Based Standards for Kansas Manual 5th Version (October 2010) and any subsequent updates.
- e. "Site" shall mean the portion of the pipeline located in the vicinity of the detected Release approximately one-third mile southeast of the intersection of North 159th Street East and West 21st Street, in the vicinity of the detected Release at 2006 North Colt Court, Andover, Kansas, and shall include all areas and media to which hazardous substances and any other contamination or pollution arising from the Release have been released and/or have migrated or emanated.
- f. "Working day" shall mean a day other than a Saturday, Sunday or State of Kansas holiday. In computing any period of time under this CAFO where the last day would fall on a Saturday, Sunday or holiday recognized by the State of Kansas the period shall run until the end of the next working day.

FINDINGS OF FACT

15. **Site Description.** The Site is located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 7,

Township 27 South, Range 3 East, Butler County, Kansas, approximately one-third mile southeast of the intersection of North 159th Street East and West 21st Street; the Release was detected in the vicinity of 2006 North Colt Court, Andover, Kansas, as identified in Exhibit 1.

16. **Business Information.** NuStar Pipeline Operating Partnership L.P. (“NuStar”), a foreign limited partnership registered to do business in Kansas on September 21, 1989, under the name “Kaneb Pipe Line Operating Partnership, L.P.,” is a refined petroleum product pipeline owner/operator authorized to do business in the State of Kansas. NuStar changed its name on March 31, 2008. The mailing address is P.O. Box 781609, San Antonio, TX 78278.

17. **Site Ownership and Occupancy History.** NuStar is the owner and operator of the pipeline that transports refined petroleum product through the Site.

18. **Environmental Investigations.**

- a. On June 11, 2012, Respondent’s representatives met with the resident at 2006 North Colt Court and observed separate-phase hydrocarbons in the private lawn and garden well at the residence. The private irrigation well was drilled in April 2011 and is screened at 40-116 feet below ground surface (bgs); static water level is at approximately 40 feet bgs.
- b. KDHE was notified on July 12, 2012, of contamination of the private lawn and garden well at the residence of 2006 North Colt Court.
- c. On June 13, 2012, Respondent excavated soil along a 45-foot section of

the NuStar pipeline nearest to the impacted private well and inspected for signs of a release. Indications of petroleum impacts were not observed.

- d. On June 14, 2012, water samples were collected from the private lawn and garden well and submitted to Analytical Laboratory Services for analysis. The laboratory analytical report indicated the presence of benzene, toluene, ethylbenzene, xylene, naphthalene and total petroleum hydrocarbons- diesel range organics at levels above their respective Maximum Contaminant Levels (MCLs). On June 14 and 28, and July 2-3, 2012, a total of approximately 25 gallons of separate-phase hydrocarbons were removed from the private well with a bailer and transported to the NuStar El Dorado Facility for reclamation.
- e. On June 14-15 and July 3, 2012, a vacuum truck was mobilized to the Site and used to remove a total of approximately 50 gallons of separate-phase hydrocarbons and approximately 200 gallons of water from the private well. The water was disposed by permitted deep well injection and the separate-phase hydrocarbons were reclaimed by Albert Hogoboom Oil Field Trucking, Inc.
- f. Through hydrostatic testing of the pipeline, the affected pipeline interval was identified as a 250-foot section underneath West Mountain Street,

adjacent to and northwest of the property at 2006 N. Colt Court. On July 6, 2012, excavation activities were conducted and a seep was identified. Significant soil impact in a 50-foot section was observed in the vicinity of the seep. Soil samples from the excavation base and sidewalls were collected and sent for laboratory analysis. The laboratory analytical report indicated the presence of the following constituents above the applicable KDHE Tier 2 Levels as presented in the RSK Manual in the excavation floor and/or sidewall samples: benzene, toluene and total petroleum hydrocarbons (TPH) – gasoline range organics. In addition, split soil samples collected by KDHE and analyzed by Pace Analytical Laboratories indicated the presence of naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene and n-butylbenzene at levels exceeding the Tier 2 Levels for each constituent.

CONCLUSIONS OF LAW

19. Respondent is a “person”, “company”, “corporation”, “institution” or “municipality” within the authority of K.S.A. 65-164 through K.S.A 65-171y and K.S.A. 65-3452a, *et seq.*
20. The Site constitutes a site within the meaning of K.S.A. 65-3453.
21. The presence of the contaminants identified in the soil and groundwater

underlying and surrounding the Site constitute "pollution" as defined by K.S.A. 65-171d.

22. Contaminants identified in the soil and/or in the groundwater underlying and surrounding the Site are "hazardous substances" as defined by K.S.A. 65-3452a.

23. The waste identified on the land, air or water at or surrounding the Site constitutes "solid waste" as defined by K.S.A. 65-3402(a) or "hazardous waste" as defined by K.S.A. 65-3440(c).

24. The Findings of Facts set forth above constitute:

- a. The pollution of the land or waters of the state or the threat of pollution of the land or waters of the state in violation of K.S.A. 65-164(d).
- b. A health or environmental hazard created by a hazardous substance requiring cleanup pursuant to K.S.A. 65-3453.
- c. A threat to cause pollution of the land, air, or waters of the state or a hazard to property or to public health or safety pursuant to K.S.A. 65-3411 and K.S.A. 65-3419(e) or K.S.A. 65-3443(a) and K.S.A. 65-3445(a).

25. Respondent is a person responsible for the health or environmental hazard created by the hazardous substance(s) and is therefore responsible for costs incurred by KDHE pursuant to K.S.A. 65-3455.

26. The environmental contamination identified at and potentially migrating or

emanating from the Site is causing or threatens to cause pollution of the soil and/or waters of the state, or is, or threatens to become, a hazard to persons, public health or safety.

ORDER

27. The Secretary hereby orders and Respondent agrees, to conduct the activities identified in this CAFO and in all documents approved by KDHE, and to be bound by the terms set forth therein.

28. **Exhibits Incorporated.** The following documents, as required, and any KDHE documents approving the following documents, are or shall be incorporated herein by reference:

- a. Exhibit 1: Site Location Map
- b. Exhibit 2A: Interim Measures (IM) Scope of Work (SOW).
- c. Exhibit 2B: Comprehensive Investigation (CI) SOW.
- d. Exhibit 2C: Corrective Action Study (CAS) SOW.
- e. Exhibit 3A: IM Work Plan/Design (incorporated herein upon KDHE approval).
- f. Exhibit 3B: CI Work Plan (incorporated herein upon KDHE approval).
- g. Exhibit 4: Project Deliverable and Milestone Schedule.
- h. Exhibit 4A: IM Schedule (incorporated herein upon KDHE approval).
- i. Exhibit 4B: CI/CAS Schedule (incorporated herein upon KDHE approval).

- j. Exhibit 5: Field Activities Notification Form.
- k. Exhibit 6: Form of Invoice for Costs.

29. **KDHE Approval of Work and Documents.** All activity contemplated or performed pursuant to this CAFO shall be conducted subject to the approval of KDHE in accordance with the terms of this CAFO and consistent with the standards, specifications and schedules approved by KDHE as contained in the exhibits to this CAFO.

- a. All documents submitted to KDHE pursuant to this CAFO shall be considered draft documents until approved by KDHE.
- b. Any documents, reports, plans, specifications, schedules and/or attachments required by this CAFO, upon approval by KDHE, and any KDHE documents granting such approval, shall be deemed incorporated into this CAFO by reference.
- c. Upon KDHE approval, Respondent shall implement the tasks detailed in the subject work plan in accord with the corresponding implementation schedule.

30. **Task Specific Schedules.** The CAFO shall be implemented in accordance with the Project Deliverable and Milestone Schedule found at Exhibit 4. All Work Plans required pursuant to this CAFO shall establish task specific dates and timeframes for related implementation, construction and reporting activities. Each schedule shall specifically include

Respondent's proposed milestone dates for start and completion of implementation as well as construction activities and submittal of a draft report. All requests for schedule extensions must be submitted in advance by Respondent to KDHE for approval.

31. Kansas Licensure Requirement.

- a. As required by the Kansas State Board of Technical Professions, Respondent agrees that all work products that constitute the practice of geology, engineering, architecture, or surveying will be sealed, signed, and dated by a professional licensed by the Board to practice in the State of Kansas. Within thirty (30) days of the Date of this CAFO, Respondent shall notify KDHE of the name and title of its selected consultant(s) with expertise in environmental site investigation and remediation, and of any contractors or subcontractors and their personnel to be used in carrying out the terms of this CAFO. Respondent shall notify KDHE of any changes of name and title of its selected consultant(s), contractors, subcontractors and their personnel within thirty (30) days of the occurrence of such change.
- b. Respondent and its successors shall provide a copy of this CAFO to all contractors, subcontractors, laboratories, and consultants which are retained to conduct any work under this CAFO, within 14 days of either

the Date of this CAFO or the date of retaining such services. Respondent shall condition any contract for such services upon performance of the work in conformity with this CAFO. Notwithstanding the terms of any contract, Respondent is and shall remain responsible ensuring that its contractors and agents comply with this CAFO.

REQUIRED TASKS AND SUBMITTALS

32. IM Work Plan/Design and IM Schedule.

- a. **Request for IM.** If Interim Measures are required by KDHE to achieve the purpose of this CAFO, Respondent will be sent a Request for IM advising Respondent that a draft IM Work Plan/Design and IM Schedule, consistent with the IM SOW (Exhibit 2A), must be submitted. Subject to KDHE approval, Respondent may also propose Interim Measures at the Site.
- b. **Submission of Draft IM Work Plan/Design and IM Schedule.** If Interim Measures are required or proposed pursuant to Paragraph 32(a) above, Respondent shall submit a draft IM Work Plan/Design and IM Schedule which is consistent with the IM SOW (Exhibit 2A) within thirty (30) days of receipt of KDHE's Request.
- c. **Implementation.** Upon KDHE approval, Respondent shall implement

the tasks detailed in the IM Work Plan/Design and IM Schedule.

33. **CI/CAS Work Plans and CI/CAS Schedules.**

- a. **Submission of Draft CI Work Plan and CI Schedule.** Respondent has previously submitted a Groundwater Investigation Work Plan. KDHE will review the Groundwater Investigation Work Plan pursuant to the Review and Modification provisions of Paragraphs 49-51 to determine if it is consistent with the CI SOW (Exhibit 2B).
- b. **Implementation.** Upon KDHE approval, Respondent shall implement the tasks detailed in the CI Work Plan and CI Schedule.
- c. **Submission of CAS.** Within 60 days of KDHE's approval of the CI Report, or such other time as agreed to by the Parties, Respondent shall submit a CAS that is consistent with the CAS SOW (Exhibit 2C).

34. **Issuance of ADS or CAD.** Following submission and approval by KDHE of required documentation and completed tasks, as set forth in Paragraphs 32 and 33, KDHE will draft and issue for public comment an ADS or a CAD. KDHE shall determine which agency decision document shall be utilized.

GENERAL REQUIREMENTS

35. **Access.**

- a. KDHE and any of its agents or contractors shall be allowed and

authorized by Respondent to enter and freely move about all property at the Site for the purpose, among other things, of interviewing Site personnel and contractors; inspecting records, operating logs, and contracts related to the activities set out in the work plan(s); reviewing the progress of Respondent in carrying out the terms of this CAFO; conducting such sampling and tests as KDHE deems necessary; using a camera, sound recording, or other documentary type equipment; and verifying the reports and data submitted to KDHE by Respondent. Respondent shall permit such persons to inspect and copy all records, files, photographs, documents, and other writings, including all sampling and monitoring data that pertain to work undertaken pursuant to this CAFO.

- b. To the extent that work required by the Work Plan(s) must be done on property not owned or controlled by Respondent, Respondent shall use its best efforts to obtain access agreements from the present owner(s) of such property within thirty (30) days of the date the need for access is known. Best efforts include, but are not limited to, an offer of reasonable consideration in exchange for access. Any such access agreement shall be incorporated by reference into this CAFO. In the event that

agreements for site access are not obtained within thirty (30) days of the date the need for access is known, Respondent shall notify KDHE regarding both the lack of and its failure to obtain such agreements within fourteen (14) days thereafter. Upon KDHE's obtaining access for Respondent, Respondent shall undertake approved work on such property. KDHE shall not be responsible for any injury or damage to persons or property caused by the negligent or willful acts or omissions of Respondent, its officers, employees, agents, successors, assigns, contractors or any other person acting on Respondent's behalf in carrying out any activities pursuant to the terms of this CAFO.

Additional Work Requirements

36. **Wells Required by CAFO.** Any wells installed on property that is owned by Respondent for the purposes of this CAFO shall be deemed the property of Respondent. For any well installed by KDHE for investigation purposes prior to the Date of this CAFO, Respondent shall propose in the draft C/CAS Work Plan which of those wells will be retained for purposes of this CAFO. The wells retained, upon KDHE approval, shall become the property of Respondent. If any wells are installed on property not owned by Respondent, Respondent shall be responsible for such wells subject to obtaining access to the property and in accord with the provisions of this CAFO. Prior to termination of this CAFO, upon approval of

KDHE, all wells for which Respondent is responsible shall be closed in compliance with applicable KDHE regulations. Written notice shall be provided to the KDHE project coordinator as set forth in this CAFO unless otherwise approved by KDHE.

37. **Sample Collection.** At the request of KDHE, Respondent shall provide or allow KDHE or its authorized representatives to take split samples of all samples collected by Respondent pursuant to this CAFO. Similarly, at the request of Respondent, KDHE shall allow Respondent or its authorized representatives to take split or duplicate samples of all samples collected by KDHE under this CAFO. KDHE shall notify Respondent at least seven (7) days before conducting any sampling under this CAFO, provided, however, that if seven (7) days notice of sample collection activity is not possible, KDHE and Respondent shall give such advance notice to enable each party to have a representative present during said sample collection activity.

38. **Quality Assurance.**

- a. All samples analyzed pursuant to this CAFO shall be analyzed by a KDHE-approved laboratory using KDHE-approved laboratory methodologies.
- b. All sample collection and analysis shall be performed in compliance with the approved work plan(s), including scheduling of analyses, documentation of sample collection, handling and analysis.

- c. Laboratory analytical report forms shall be submitted to KDHE for all analytical work performed pursuant to this CAFO. Any deviation from the procedures and methods set forth in these documents must be approved by KDHE prior to use. Respondent shall notify KDHE within five (5) working days of notice or knowledge of a potential deviation from prescribed procedures or methods. Such notice shall provide information as to the nature of the deviation, if known, and outline a proposed investigation to determine whether the sample or results are representative or should not be considered valid. Respondent will re-sample as directed to do so by KDHE if the results cannot be validated by evaluation of the quality assurance/quality control procedures, historical data and/or laboratory protocol. Respondent shall notify KDHE at least seven (7) days before conducting re-sampling.
- d. Respondent shall use the quality assurance, quality control, and chain of custody procedures specified in the quality assurance project plans which are part of the work plan(s), for all sample collection and analysis performed pursuant to this CAFO, unless otherwise agreed to by KDHE.
- e. All contracts for field work shall provide that KDHE representatives are allowed access, for auditing and evaluation purposes, at reasonable times

upon reasonable request, to all personnel utilized by Respondent for sample collection and analysis and other field work. Upon reasonable request by KDHE, the laboratories shall perform analysis of a reasonable number of known samples provided by KDHE for the purpose of quality assurance monitoring.

Notice, Reports, and Communication between Parties

39. **Written Communications with KDHE.** All communications, notifications and requests required under this CAFO shall be made in writing. For the purposes of this CAFO, fax transmissions will be considered as being in writing; electronic transmissions shall not be considered to be in writing.

40. **Copies.** Unless otherwise directed by KDHE, Respondent shall provide to KDHE one hard copy plus one electronic copy of each deliverable required pursuant to this CAFO.

41. **Project Coordinator.** Respondent shall, upon receipt of this CAFO, designate a project coordinator who shall be responsible for overseeing the implementation of this CAFO and shall provide said coordinator's name and contact information to KDHE. The KDHE project coordinator identified below will be KDHE's designated representative. To the maximum extent possible, all communications between Respondent and KDHE and all documents, reports, approvals, and other correspondence concerning the activities performed

pursuant to the terms and conditions of this CAFO, shall be directed through the project coordinators. The parties agree to provide at least seven (7) days written notice prior to changing project coordinators. The absence of the KDHE project coordinator from the Site shall not be cause for the stoppage of work.

42. **Notification.** Unless otherwise specified, reports, notices or other submissions required under this CAFO shall be sent to the KDHE project coordinator:

Pamela Green
Bureau of Environmental Remediation/KDHE
Curtis State Office Building
1000 SW Jackson, Suite 410
Topeka, KS 66612-1367
Office: 785-296-1935

43. **Service of Process.** If service is required by law, the Parties and their attorneys may be served as set out in K.S.A. 77-531.

44. **Data/Document Availability.** Respondent shall make available to KDHE all results of sampling or tests, or other data generated by or on its behalf with respect to the implementation of this CAFO. Respondent shall report the results of such sampling or testing, or other data in accordance with the task specific work plans and schedules identified in this CAFO or as otherwise agreed to by the Parties. Upon completion of quality assurance and quality control assessment of the data, KDHE shall make available to Respondent results of sampling and tests, and other data obtained relative to this CAFO, unless it is otherwise prohibited by law.

45. **Progress Reporting.**

- a. Respondent shall provide KDHE with written progress reports, in accordance with the Project Deliverable and Milestone Schedule (Exhibit 4), commencing from the Date of this CAFO and continuing until termination of this CAFO. At a minimum, these progress reports shall:
 - i. Describe the actions, progress and status of projects which have been taken toward achieving compliance with this CAFO, as well as the actions which are scheduled for the next quarter;
 - ii. Identify any requirements under this CAFO that were not timely completed and any problem areas and anticipated problem areas in complying with this CAFO;
 - iii. Include all results of sampling, tests, data, field notes, and conclusions drawn from data generated pursuant to the work plan(s); and
 - iv. Provide updated schedule(s) as requested by, and subject to, KDHE approval.
- b. The KDHE project coordinator may direct Respondent to submit monitoring reports separate from or combined with quarterly progress reports.

46. **Field Activities Notification.** To the extent practicable, Respondent shall provide KDHE at least seven (7) days advance written notification before conducting any investigation and/or remediation, or other ancillary activities related to such measures, whether conducted pursuant to the CAFO or to a request, requirement or order from any other federal, state or local regulatory authority where the resultant data or information would be used in part or in full to satisfy requirements of the CAFO. Failure to provide advance written notification may result in KDHE rejecting the data obtained or work conducted by Respondent. Advance written notification is to be accomplished by completing the KDHE-BER Remedial Section Field Activities Notification Form on the KDHE website for each activity as distinguished by separate field mobilizations. If website access is not available, Respondent may provide required written notification by completing the Field Activities Notification Form (Exhibit 5) and submitting to the designated KDHE project coordinator.

47. **Record Preservation.** Respondent shall preserve, during the pendency of this CAFO and for a minimum of six (6) years after its termination, all non-privileged records and documents which have not previously been provided to KDHE in its possession or in the possession of Respondent's employees, agents, consultants or contractors which relate in any way to this CAFO or to hazardous substance and hazardous waste management and disposal at the Site. Only one copy of such records and documents needs to be retained. Drafts or other documents that are subsequently prepared in final form need not be retained. During this

period, Respondent shall make such non-privileged records available to KDHE upon request for inspection or KDHE's retention, or shall provide copies of any such records to KDHE.

Reimbursement of KDHE Costs

48. Reimbursement of Costs.

- a. "Costs" shall mean all direct and administrative costs and expenditures incurred by or on behalf of KDHE to develop, oversee and/or enforce this CAFO, incurred either prior to the issuance of this CAFO, or under the terms of this CAFO. The term "direct costs" shall include, but is not limited to, employee or contractor time related to oversight, sampling, investigation work, remedial work, document review and preparation, negotiation and preparation of enforcement documents and actions, internal and external discussions, travel expenses, and public involvement activities; equipment used; and other costs directly associated with, incurred at, in relation to or arising from this CAFO. The term "administrative costs" shall include, but is not limited to, overhead and general administrative expenses.
- b. Respondent shall submit to KDHE the amount \$5,366.73 which constitutes reimbursement for past costs incurred by KDHE in connection with this Site through January 14, 2013. Such payment must be received

by KDHE within thirty (30) days after the Date of this CAFO.

- c. Costs incurred by KDHE from January 15, 2013 until the end of the next calendar quarter shall be billed forty-five (45) days following the end of the calendar quarter. Thereafter, KDHE shall bill Respondent for all Costs incurred by KDHE during each calendar quarter forty-five (45) days following the end the calendar quarter. Payment of the invoice is due upon receipt, unless Respondent disputes the Costs pursuant to the Dispute Resolution provisions as set forth in Paragraph 61. Unless disputed, Respondent shall remit a check for the full amount of those Costs made payable to the Kansas Department of Health and Environment. Failure to pay the total balance due within thirty (30) days of issuance of the invoice shall be considered a violation of the CAFO. An exemplar of the invoice to be used may be found as Exhibit 6.
- d. Payment for all costs assessed to Respondent shall be made to:

Kansas Department of Health and Environment
Bureau of Environmental Remediation
Attn: Administration
1000 SW Jackson Street, Suite 410
Topeka, KS 66612-1367

A copy of the check and transmittal letter shall be sent to the KDHE project coordinator specified herein.

- e. Costs that have been invoiced to Respondent and that are past-due and owing shall be subject to interest if KDHE initiates a civil action to enforce the cost reimbursement requirements in this CAFO. KDHE shall notify Respondent in writing of its past-due requirement to pay KDHE's Costs before filing a civil action to enforce any cost reimbursement requirements. Interest shall be calculated pursuant to K.S.A. 16-201 and K.S.A. 16-204, as applicable.

Document Submittal and Work Performance Requirements

49. **Document, Review and Modification Process.** As set forth in Paragraph 30 herein, Respondent shall submit required documents to KDHE within the timeframes established in this CAFO, or such other timeframes as agreed to by the Parties. KDHE shall review the document and send a written letter to Respondent indicating approval, approval with comment, denial, or such other designation as KDHE determines appropriate. If a written response and/or document revision is requested, Respondent shall provide such in the form specified within thirty (30) days of receipt of KDHE's letter or such other timeframe as agreed to by the Parties.

50. **Inadequate Document Modification – Notice to Correct.** In the event that Respondent does not respond to KDHE's written letter request or if KDHE finds that a document submitted pursuant to this CAFO is deficient, KDHE will issue a Notice to Correct to

Respondent requesting that Respondent make such specific modifications as needed to satisfy the requirements of this CAFO. The Notice to Correct sets out the deficiencies in the document, describes the necessary modifications to address the deficiencies and provides an expected timeframe to correct the deficiencies. Failure to revise, correct or otherwise respond to the Notice to Correct shall be deemed a violation of this CAFO and may subject Respondent to penalties or other enforcement action.

51. **KDHE Document Modification.** If Respondent fails to revise, correct or otherwise respond to the Notice to Correct in a timely and responsive manner, KDHE may make or arrange for a contractor(s) to make such modifications to any document as it determines to be necessary. Such modifications shall be incorporated into this CAFO and are subject to its terms.

52. **Inadequate Work Performance – Notice to Correct.** In the event that Respondent does not respond to any KDHE written letter request or if KDHE finds that work performed pursuant to this CAFO does not meet the requirements of this CAFO, KDHE will issue a Notice to Correct to Respondent requesting that Respondent make specific modifications to any work required by this CAFO. The Notice to Correct, which shall be subject to Dispute Resolution, sets out the deficiencies in the work, describes the necessary modifications to address the deficiencies and provides an expected timeframe to correct the deficiencies. Subject to Dispute Resolution, failure to revise, correct or otherwise respond to the Notice to Correct

shall be deemed a violation of this CAFO and may subject Respondent to penalties or other enforcement action.

53. **Work Takeover – Notice.** If Respondent fails to revise, correct or otherwise respond to KDHE’s Notice to Correct for inadequate document modification or work performance in accordance with the schedule specified in the Notice to Correct, or if KDHE determines that Respondent, either: 1) has ceased implementation of any material portion of the work, 2) is seriously or repeatedly deficient or late in its performance of the work, or 3) is implementing the work in a manner which may cause an endangerment to human health or the environment, KDHE may, subject to Dispute Resolution, assume or arrange for a contractor or contractors to assume the performance of all or any portions of the work as KDHE determines necessary. If KDHE determines that such a work takeover is necessary, it will send Respondent a Notice of Work Takeover specifying a date upon which KDHE may assume or arrange for a contractor or contractors to assume the performance of all any portions of the work.

54. **Additional Tasks May Be Required.** KDHE may determine, subject to Dispute Resolution, that tasks may be required to meet the purpose of this CAFO that are in addition to those specified in the approved IM, CI/CAS work plans or associated documents/reports. In the event KDHE makes such a determination, it shall notify Respondent in writing that additional tasks are necessary to meet the purpose of this CAFO. If such tasks are required, they shall be completed as specified by KDHE and within such reasonable timeframes established by KDHE.

55. **Failure to comply.** Failure to comply with any of the terms and conditions of this CAFO or the incorporated exhibits shall be considered a violation of this CAFO and may subject Respondent to such administrative actions and penalty provisions as set forth in this CAFO or otherwise authorized by law.

Legal Claims and Authorities

56. **Other Applicable Laws.** All actions required to be taken pursuant to this CAFO shall be undertaken in accordance with all applicable local, state and federal laws and regulations.

57. **Mutual Agreement.** Each Party acknowledges that it has read all of the terms of this CAFO, has had an opportunity to consult with counsel of its own choosing or voluntarily waived such right and enters into this CAFO voluntarily and without duress.

58. **Other Claims and Parties.** Nothing in this CAFO shall constitute or be construed as a release for any claim, cause of action or demand in law or equity against any person, firm, partnership, or corporation not named herein for any liability arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the facility or the Site.

59. **Force Majeure.** In the event of the inability of Respondent to meet any deadline, work requirement or other requirement under this CAFO due to weather conditions,

unforeseen acts of third parties not related to Respondent, or other events beyond the reasonable control of Respondent, Respondent shall notify the KDHE project coordinator by telephone or e-mail within ten (10) working days of the force majeure occurrence, identifying: 1) the cause of any delay or other condition which may prevent compliance with this CAFO; 2) the anticipated time to comply; and 3) such other information as KDHE may reasonably request. Upon receipt of such notice to KDHE, any deadline or other obligation shall be extended or modified for such time as is necessary to complete the affected obligations. If KDHE does not approve the force majeure notice from Respondent, KDHE shall notify the Respondent in writing within ten (10) days of receipt of Respondent's force majeure notice, and Respondent may invoke Dispute Resolution.

60. **Waiver of Appeal and Review Rights.** The Parties acknowledge that this CAFO, upon execution by the Secretary of KDHE, shall be a final agency order. Respondent voluntarily and knowingly waives any and all rights conferred upon it by KAPA and the Kansas Judicial Review Act, K.S.A. 77-601 *et seq.*, to seek appeal or review of the issuance of this CAFO. Respondent reserves the right to appeal such final KDHE decision(s) that occur after the Date of this CAFO.

61. **Dispute Resolution.**

- a. In the event Respondent disputes any decision of KDHE pursuant to this CAFO, except an initial denial or other designation pursuant to Paragraph

49, Respondent may within thirty (30) days of receipt of KDHE's final decision, invoke dispute resolution by sending written notice to the KDHE project coordinator, stating the specific terms of the KDHE action in dispute, and providing copies of relevant information. Within thirty (30) days of receipt of any such notice of dispute from Respondent, KDHE and Respondent shall meet by telephone or in person to attempt to reach agreement on the matter in dispute. If the parties cannot reach agreement by consent during this period, KDHE shall issue a final written decision on the dispute. The final decision or resolution shall be incorporated as a part of this CAFO.

- b. In the event that Respondent seeks dispute resolution concerning a date for performance of an act set out in the Work Plan, the date for performance of such act shall be extended for a period equal to the delay resulting from the invocation of the dispute resolution provision. However, such extension does not alter the schedule for performance of completion of any other tasks required by this CAFO unless also specifically altered by the amendment to this CAFO.

62. Contribution.

- a. The Parties agree that this CAFO constitutes an administrative settlement

for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and that Respondent is entitled, as of the Date of this CAFO, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for the work to be performed and payments to be made under this CAFO.

- b. The Parties agree that this CAFO constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. §9613(f)(3)(B), pursuant to which Respondent has, as of the Date of this CAFO, resolved its liability to the State of Kansas for the work to be performed and the payments to be made under this CAFO.
- c. Nothing herein shall effect the right of the state of Kansas, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2) and (3), to pursue any other persons to obtain additional response costs or response action and to enter into other settlements that give rise to contribution protection pursuant to Section 113(f)(2).

63. **Choice of Law, Jurisdiction and Venue.** The laws of the State of Kansas shall govern the terms of this CAFO. Any judicial action related to the provisions of this CAFO shall be brought in the District Court of Shawnee County, Kansas.

64. **Entire Agreement.** This CAFO contains the entire agreement between the Parties, and may only be modified in writing signed by the Parties or their duly appointed agents. All prior agreements and understandings between the Parties concerning the subject matter hereof are superseded by the terms of this CAFO.

65. **Successors, Assigns and Agents.** The obligations of this CAFO are binding upon and shall inure to the benefit of Respondent and its agents, employees, affiliates, successors and assigns, or other entities or persons otherwise bound by law. Respondent shall provide a copy of this CAFO to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this CAFO. Unless otherwise agreed by KDHE, no transfer of ownership or operation of the facility or property associated with the Site, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Respondent of its obligation to ensure that the terms of this CAFO are implemented. KDHE may require successors and assigns wishing to assume the terms, conditions and performance of the CAFO to execute an amendment or other writing attesting to such assumption.

66. **Authority.** Each Party has full knowledge of and has consented to this CAFO, and represents and warrants that each person who signs this CAFO on its behalf is duly authorized to execute this CAFO on behalf of the respective Party and legally bind the Party represented to this CAFO.

67. **Amendment.** This CAFO may be amended by mutual consent of KDHE and

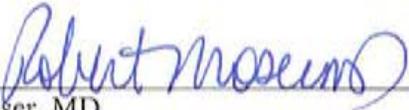
Respondent, and any such amendment shall be in writing.

68. **Termination.** The provisions of this CAFO shall terminate upon Respondent's receipt of written notice from KDHE, which notice shall not be unreasonably withheld, that Respondent has demonstrated that the terms of this CAFO, including any additional tasks which KDHE has determined to be necessary, have been satisfactorily completed.

IT IS SO ORDERED.

KANSAS DEPARTMENT OF
HEALTH AND ENVIRONMENT

By:



Robert Moser, MD
Secretary

5/10/13
Date

NUSTAR PIPELINE OPERATING PARTNERSHIP L.P.
BY AND THROUGH NUSTAR PIPELINE COMPANY, LLC,
ITS GENERAL PARTNER

By: 

Karen M. Thompson
Vice President

5/1/2013

Date

**STATE OF KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT**

In the Matter of:)

Environmental Contamination at the)
NuStar Pipeline Release North Andover Site)

Case No. 12-E-36 BER

NuStar Pipeline Operating Partnership L.P.,)
Respondent.)
)
)

CERTIFICATE OF MAILING

I hereby certify that on the 10th day of May, 2013, I caused a true and correct copy of the foregoing Consent Agreement and Final Order to be deposited in the United States Mail, First Class, postage prepaid and addressed as follows:

MICHAEL DILLINGER
NUSTAR PIPELINE OPERATING PARTNERSHIP L.P.
P.O. BOX 781609
SAN ANTONIO, TX 78278

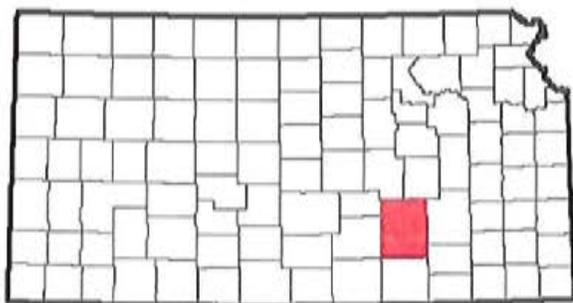

KDHE Staff Member

In the Matter of:
NuStar Pipeline Release North Andover Site
NuStar Pipeline Operating Partnership, L.P.
BER File No. C2-008-72928
CAFO CASE NO. 12-E-36 BER

LIST OF EXHIBITS

MAPS	---
SITE LOCATION MAP	1
SCOPE(S) OF WORK	---
IM SCOPE OF WORK	2A
CI SCOPE OF WORK	2B
CAS SCOPE OF WORK	2C
WORK PLAN(S) APPROVED BY KDHE¹	---
IM WORK PLAN/DESIGN	3A
CI/CAS WORK PLAN	3B
PROJECT DELIVERABLE AND MILESTONE SCHEDULE(S)	4
IM SCHEDULE ¹	4A
CI/CAS SCHEDULE ¹	4B
FIELD ACTIVITIES NOTIFICATION FORM	5
FORM OF INVOICE FOR COSTS	6

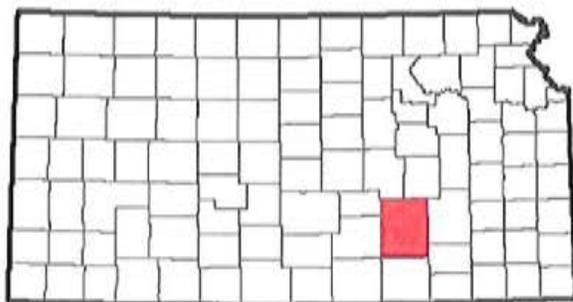
¹ To be attached as exhibits upon KDHE approval or issuance.



Butler County, Kansas

Exhibit 1

**Site Location Map
NuStar Pipeline Release
North Andover Site
Andover, Kansas**



Butler County, Kansas

Exhibit 1

**Site Location Map
NuStar Pipeline Release
North Andover Site
Andover, Kansas**

EXHIBIT 2A

BUREAU OF ENVIRONMENTAL REMEDIATION/REMEDIAL SECTION POLICY and SCOPE OF WORK INTERIM MEASURES

INTRODUCTION

This Kansas Department of Health and Environment—Bureau of Environmental Remediation (KDHE—BER) Remedial Section policy and scope of work establishes a management strategy and general framework for implementation of an interim measure at a given site. There are various programs within the Remedial Section responsible for direction and/or oversight of investigation and cleanup of sites throughout Kansas. This policy and scope of work has been developed to promote consistency across Remedial Section programs for which interim measure implementation may be appropriate. The expectation is that each program, through whatever agreement or enforcement mechanism might be available (e.g., consent agreement, consent order, voluntary agreement, etc.), will contemplate the need for possible interim measures at a site and include boiler-plate language to require interim measure implementation as determined necessary by KDHE in consultation with the responsible or voluntary party (hereinafter referred to as the implementing party).

There is a presumption that implementation of any interim measure will be accomplished in a cooperative, voluntary manner with the implementing party. However, under certain circumstances (e.g., implementing party hesitation or recalcitrance in an emergency situation), the KDHE—BER project manager may recommend mandatory interim measure implementation in order to protect human health and the environment from an actual or imminent threat from hazardous substances, pollutants or contaminants. Although this policy and scope of work are intended to allow flexibility in management of site risks, the need for adherence to this policy and scope of work is critical for the purpose of anticipating possible interim measures and ensuring early action is taken in as expeditious a manner as possible where deemed appropriate.

For more complex interim measures implemented under the auspices of the KDHE—BER Remedial Section, or as requested by the implementing party, a goal will be to achieve general consistency with the National Oil and Hazardous Substances Contingency Plan (NCP) to the extent practicable. Individual programs within the KDHE—BER Remedial Section may have other unique or possibly less rigorous requirements associated with an interim measure. Therefore, it is incumbent upon each KDHE—BER project manager to have a clear understanding of all program-specific guidelines, policies and regulatory requirements that may have bearing on interim measure implementation at a particular site. On a final introductory note, this policy and scope of work was written using more familiar, universally recognized terminology from the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) realm and is not intended to supplant other analogous Remedial Section program elements.

DEFINITION AND APPLICABILITY

In general, an interim measure is defined as a set of short-term actions or activities taken to quickly prevent, mitigate or remedy unacceptable risk(s) posed to human health and the

environment by an actual or potential release of a hazardous substance, pollutant or contaminant. An interim measure is generally a less complex type of remedial response, requiring minimal design effort, and somewhat presumptive in nature, thereby negating the need for rigorous treatability study or pilot testing. An interim measure may be warranted in either an emergency (immediate response) or non-emergency situation to manage the source(s) of contamination, control the exposure pathway(s) and/or control the hazard(s) to human and environmental receptors. An interim measure may be conducted without extensive investigation at any time during the investigation or remedial alternatives evaluation process with approval by the KDHE—BER project manager. Minimally, implementation of an interim measure must be conducted in a manner consistent with the concept of best management practices (BMPs) wherein overall improvement in site conditions is achieved. Depending upon site-specific circumstances or conditions, one or more interim measures may be determined necessary.

Factors to be considered in assessing the need for interim measure implementation include the following:

- Actual or imminent threat of exposure to hazardous substances, pollutants or contaminants by nearby human populations, ecological receptors or ecosystem food web;
- Actual or imminent threat of contamination of drinking water supplies or sensitive ecosystems;
- Hazardous substances or wastes in drums, barrels, tanks, piles or other bulk storage containers that may pose an imminent threat of release;
- High levels of hazardous substances, pollutants or contaminants in predominantly surface soils that may readily migrate;
- Weather conditions that may cause hazardous substances, pollutants or contaminants to migrate or be released;
- Threat of fire or explosion; and,
- Other situations or factors that may pose imminent threats to public health or welfare or the environment.

In order to assess the relative magnitude of an actual or imminent threat to human health and the environment and the need for possible interim measure implementation, the KDHE—BER project manager must consider all applicable federal and state regulatory standards or threshold screening levels for the media of interest including, but not limited to, the following:

- U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs);
- U.S. EPA numeric removal action levels (RALs) for contaminated drinking water sites;
- Tier 2 screening levels as provided in the Risk-Based Standards for Kansas RSK Manual – 3rd Version (or as further revised); and,
- Kansas surface water quality standards.

An interim measure would be expected to comply with all applicable or relevant and appropriate requirements (ARARs) and to be considered (TBC) guidance identified to that point in time consistent with BER Policy #BER-RS-015.

If gross measurable or visible contamination to the environment is evident (e.g., catastrophic release of separate phase liquid waste), this may serve as a threshold criterion for interim

measure implementation as required by the KDHE—BER project manager.

The intent in allowing interim measure implementation is not to circumvent the more linear investigation, remedial alternatives evaluation, remedial design and remedial action processes established by the various Remedial Section programs. However, if site characteristics suggest the site may be amenable to interim measures designed to control or abate imminent threats or prevent or minimize the further spread of contamination, the KDHE—BER project manager may consider the appropriateness of interim measure implementation as an element of the final remedy.

GOALS/OBJECTIVES AND TIMING

The ultimate goal of an interim measure is to control or abate threats to human health and/or the environment from releases of or exposures to hazardous substances, pollutants or contaminants, and to prevent or minimize the further spread of contamination while long-term remedies are evaluated. An interim measure is intended to provide a partial, albeit more immediate, solution while being consistent with the final site remedy. Implementation of an interim measure often results in significant overall reduction in cost and scope of the final remedy. In some instances, the interim measure may prove to be all that is necessary to achieve site remedial goals should all significant threats to human health and the environment be mitigated or eliminated. In terms of timing, an interim measure is generally conducted before the investigation and evaluation of remedial alternatives are completed.

PROCESS ELEMENTS AND EXAMPLES

Again, an interim measure is intended to be a generally less complex type of remedial response requiring only focused characterization, as necessary; “back of the envelope” target receptor identification and exposure pathway analysis; focused interim measure identification/selection; and, minimal design effort with emphasis on “off-the-shelf” remedial system components. The KDHE—BER project manager should limit the scope and duration of treatability study or pilot testing activities. A typical interim measure may include, but is not limited to, one or more of the following:

- Removal of abandoned drums or other waste containers;
- Excavation of contaminated soil “hot spots”;
- Hydraulic control of groundwater contaminant plume;
- Removal of non-aqueous phase liquid (NAPL) from groundwater;
- Provision of alternate water supply or point-of-use treatment;
- Installation of indoor air vapor mitigation systems;
- Construction of perimeter fencing to limit uncontrolled site access;
- Construction of surface (e.g., dike or berm for runoff/runoff control) or subsurface barriers (e.g., French drain or interceptor trench);
- Receptor point monitoring (e.g., periodic residential well or public water supply sampling).

PLAN/DESIGN AND REPORTING REQUIREMENTS

Whether conducted in an emergency or non-emergency situation, the decision process leading to the selection and implementation of an interim measure, and the resultant action itself, must be appropriately documented. Before an emergency interim measure is implemented, the KDHE—BER project manager must prepare a brief proposed action memorandum to the file (with appropriate chain-of-command sign-off through the Remedial Section Chief). Essentially, the proposed action memorandum is to provide a description, implementation schedule and justification for the proposed emergency interim measure. Upon completion of the emergency interim measure, the KDHE—BER project manager must prepare a summary final action memorandum to the file in order to document the emergency action taken while noting any deviations from the original proposal. If the emergency interim action is performed by an implementing party, the KDHE—BER project manager may allow the implementing party to generate the requisite “before and after” documentation subject to KDHE—BER review and approval. However, given an emergency interim measure designation, the KDHE—BER project manager must recognize the need to complete the review and approval process within a more expedited timeframe (e.g., seven days).

For all non-emergency interim measures, an Interim Measure Work Plan/Design must be submitted for KDHE review and approval. This Work Plan/Design may vary in detail depending on the requirements of the participating Remedial Section program. The Work Plan/Design will include, at a minimum, a summary of available site information and available investigation results; a detailed description of the proposed interim measure; justification and benefit of interim measure implementation including interim remedial action objectives; depending on the complexity of the interim measure, complete design specifications and drawing/schematics, including any relevant figures and/or site system engineering layouts (e.g., process flow diagram, piping and instrumentation diagram, etc.) and engineering design basis; cost estimate; and, a detailed working schedule presented graphically in the form of a milestone chart (e.g., Gantt chart) to show the duration and interdependencies of the various activities. Depending on the complexity of the proposed interim measure and requirements of the specific Remedial Section program, the Interim Measure Work Plan/Design may need to address operation and maintenance (O&M) as well as performance monitoring needs. Please refer to BER Policy #BER-RS-023 (Section 1.4), for a discussion of typical performance monitoring elements, and to Attachment A, as an example outline of an Interim Measure Work Plan/Design package. Attachment A is not intended to be prescriptive in nature, rather a model from which to work. The exact elements and content of any Interim Measure Work Plan/Design package will be determined by the KDHE—BER project manager dependent upon the overall complexity of the anticipated interim measure while being consistent with the specific requirements of the respective Remedial Section program.

Once the non-emergency interim measure is determined by the KDHE—BER project manager to be complete (e.g., alternate water supply provided) or fully operational and functional (e.g., soil vapor extraction system installed in accordance with the KDHE-approved design and achieves performance expectations), the implementing party must submit an Interim Measure Report documenting the nature of the threat, the action(s) taken and the success in mitigating the threat. The KDHE—BER project manager will determine the appropriate form or content of the Interim Measure Report. If the interim measure continues as an on-going effort (e.g., subsurface interceptor trench operation), then the implementing party must submit a monitoring/progress

report at a frequency specified in the KDHE—approved Interim Measure Performance Monitoring Plan (e.g., quarterly).

PUBLIC INVOLVEMENT

Given that interim measure implementation will normally precede the final remedy and any associated site decision documents, the KDHE—BER project manager should prepare a fact sheet describing the interim measure and distribute to interested parties in the immediate site vicinity. This is not for the intent of soliciting public comment on a proposed interim measure, but rather to keep local government officials and area residents informed as to site activities. Depending on the site-related complexities or sensitivities, conduct of a public availability session may be warranted. Public involvement requirements may vary for the various Remedial Section programs.

REFERENCES

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. § 9601 et seq. as amended by the Superfund Amendments and Reauthorization Act)

Resource Conservation and Recovery Act of 1976 (42 U.S.C. § 6901 et seq. as amended by the Hazardous and Solid Waste Amendments of 1984 and 1986, the Federal Facilities Compliance Act of 1992 and the Land Disposal Program Flexibility Act of 1996)

National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300)

U.S. EPA National Primary Drinking Water Regulations and Implementation (40 C.F.R. 141 and 142) (i.e., establishment of MCLs)

U.S. EPA OSWER Directive 9360.1-01 (October 1993) (i.e., establishment of numeric removal action levels (RALs) for contaminated drinking water sites) as supplemented by November 10, 1998 U.S. EPA Memorandum entitled "Retransmittal of latest Superfund Removal Action Levels"

KDHE—BER *Risk-Based Standards for Kansas RSK Manual – 3rd Version* (March 1, 2003)

KDHE—BER *Voluntary Cleanup and Property Redevelopment Program Manual* (May 20, 2005) (includes VCPRP statutes and regulations)

Kansas Water Pollution Control Regulations, K.A.R. 28-16 (i.e. establishment of surface water quality standards).

Attachment A
Interim Measure Work Plan/Design Package
Example Outline

- I. Site Background
- II. Previous Investigations and Summary of Results
- III. Description of Proposed Interim Measure
- IV. Interim Remedial Action Objectives
- V. Interim Measure Design
 - a. Design Basis
 - b. Design Specifications
 - c. Drawings/Schematics
 - d. Cost Estimate
 - e. Detailed Working Schedule (to be periodically updated)

APPENDICES

- Appendix A – Data Acquisition Plan (optional)
- Appendix B – Quality Assurance Project Plan (or reference existing document)
- Appendix C – Treatability Study Testing Plan (optional)
- Appendix D – Health and Safety Plan (or reference existing document)
- Appendix E – Operations and Maintenance Plan

Exhibit 2B

**BUREAU OF ENVIRONMENTAL REMEDIATION/REMEDIAL SECTION
GUIDANCE
SCOPE OF WORK (SOW) FOR A COMPREHENSIVE
INVESTIGATION**

BER POLICY # BER-RS-018

DATE: 1991

Revised: May 23, 1996

Revised: March 29, 2001

Revised: December 19, 2005

PAGES: 5

The goals of the Comprehensive Investigation are to determine the nature and extent of environmental contamination at the site, assess potential human health and environmental risks posed by the site, and develop a preliminary list of remedial action objectives and corresponding potential corrective action alternatives that will be evaluated in detail during the subsequent Corrective Action Study process. The primary objectives of the Comprehensive Investigation are to:

- 1) Identify and characterize all potential source areas, including identifying all chemicals of concern, determining the mechanisms of release, estimating the quantities of release, and determining whether these releases are ongoing or inactive;
- 2) Delineate and characterize the full lateral and vertical extent of contamination for each of the impacted environmental media at the site;
- 3) Characterize the environmental setting, including regional and local geology, hydrogeology, and hydrology; particularly as those site physical characteristics may pertain to contaminant transport and fate mechanisms for the site or may affect the evaluation, selection and design of cleanup alternatives for the site;
- 4) Characterize the physicochemical properties of the contaminants, their mobility and persistence in the environment, and their important fate and transport mechanisms as they relate to the site physical characteristics;
- 5) Identify human and environmental targets that may be threatened or affected by the site;
- 6) Perform a quantitative human health risk and/or ecological risk assessment to determine whether and the extent to which the site requires remediation;
- 7) Perform bench or pilot treatability tests as necessary to support the development of potential corrective action alternatives; and,
- 8) Develop a preliminary list of remedial action objectives and corresponding potential corrective action alternatives.

This Scope of Work outlines activities necessary to satisfy these objectives. A Comprehensive Investigation Work Plan describing in detail all activities proposed to satisfy the CI objectives shall be developed and submitted to KDHE for approval. The CI Work Plan must include an implementation schedule defining the dates for initiating and completing the various tasks associated with this Scope of Work and for submitting work plans and reports defined as deliverable documents within the Consent Order. In addition, the CI Work Plan must include the following site-specific supporting documents: 1) quality assurance project plan; 2) field sampling plan; and 3) health and safety plan. A quality assurance project plan describes the policy, organization, functional activities, and quality assurance and quality control protocols necessary to achieve the data quality objectives dictated by the intended use of the data. A field-sampling plan provides the guidance for all fieldwork by defining in detail the sampling and data-gathering methods to be used on a project. The field-sampling plan should be written so that a field sampling team unfamiliar with the site would be able to gather the samples and field information required. A health and safety plan prepared to support the field effort must conform to the firm's or agency's health and safety program, which must, in turn, be in compliance with requirements of the Occupational Safety and Health Administration.

The Scope of Work for a Comprehensive Investigation shall, at a minimum, include the following components:

1.0 HISTORICAL EVALUATION AND SITE DESCRIPTION

A description of the site location should be generated, including a legal description of the site, facility address, and facility layout, as appropriate. An ownership history for the source facility and the ownership status of other affected properties should be documented. A description of all past and present activities or operations conducted at the site must be included in the CI Report including: the nature of business operations conducted at the site, chemicals used at the facility, wastes generated by facility operations, chemical and waste disposal methods, and records or descriptions of all known spills or leaks. Environmental permits issued relative to past or present business operations should be identified. Descriptions of any previous environmental investigations conducted at the site and summaries of the significant findings of those investigations should be included. The historical evaluation and site description component of the Comprehensive Investigation may be excluded if a KDHE-approved Preliminary Investigation was conducted at the site or if sufficient background information about the site has been previously documented and submitted to KDHE.

2.0 STUDY AREA INVESTIGATION

A description of the physical characteristics of the study area must be provided including, but not limited to: geology, soils, hydrogeology, surface water hydrology, and meteorology. Past and present land use on and adjacent to the site must be described. Current city and/or county land use zoning classifications that may affect any potential remedy for the site must be documented. The physical characteristics of the study area should be determined to the extent necessary to facilitate the evaluation of appropriate remedial responses.

3.0 SOURCE CHARACTERIZATION

A detailed description of all field activities completed to identify the source(s), extent, and release mechanisms for environmental contamination and the findings of those activities must be provided. This may include several components: review of facility records; personnel interviews; waste and/or soil sampling; equipment testing (tank, pipeline, or sewer line testing, etc.), geophysical surveys, aerial photograph review, and land elevation surveys, among others.

4.0 NATURE AND EXTENT CHARACTERIZATION

A study to determine the full horizontal and vertical extent of environmental contamination must be performed. Potential media to be investigated include surface and subsurface soils, ground water, surface water, sediment, air, and biota. An evaluation of the significant contaminant fate and transport mechanisms should be performed. This component of the CI may include monitoring well or piezometer installation, soil borings, soil or ground water probing, field and laboratory analyses, geophysical surveys, hydrogeological evaluations, surveying, computer modeling, and biota studies, among others. Analytical data should be collected of appropriate data quality and quantity to support the completion of a Risk Assessment, if one is to be performed, and to support the evaluation of potential remedial alternatives. All data should be validated at the appropriate field or laboratory quality control level to determine whether it is appropriate for its intended use.

5.0 RISK ASSESSMENT (Optional)

Information and environmental data collected and validated as representative of site conditions may be used to qualitatively or quantitatively describe the potential excess human health risk and/or ecological risk posed by the site in the absence of remediation. This Risk Assessment process is used to characterize the risk posed to human health or the environment by environmental conditions at a contaminated site. In lieu of performing a site-specific Risk Assessment to evaluate risk and arrive at cleanup goals for a site, the participating party may elect, with the concurrence of the KDHE project manager, to use the risk-based cleanup goals for soil and ground water under Tier 2 of the Risk-Based Standards for Kansas manual (RSK manual). If KDHE determines that the completion of a quantitative Risk Assessment is appropriate, the participating party may, at their option, perform such risk assessment for submittal to KDHE for approval. Prior to performing the risk assessment, the participating party must submit a baseline risk assessment work plan that, among other items, provides a site-specific exposure conceptual model, which either graphically illustrates or states the impacted media and all the primary and secondary exposure pathways, lists all contaminants of concern, standard exposure parameters, land use, methodologies for determining reasonable maximum exposure point concentrations, proxy determinations, and other statistical considerations. The quantitative baseline risk assessment should be performed in accordance with "Risk Assessment Guidance for Superfund" EPA/540/1-89/002 and other associated guidance such as "Dermal Exposure Factors Handbook" and OSWER Directive, "Standard Exposure Factors". The work plan must be approved by KDHE prior to commencing the Baseline Risk Assessment. Alternatively, the participating party may elect to have KDHE's contractor perform the Risk Assessment at the party's

expense. Coordination with KDHE is required throughout the risk characterization and cleanup goal determination process.

6.0 IDENTIFICATION OF CORRECTIVE ACTION ALTERNATIVES

Information and data generated during the Comprehensive Investigation, including the Risk Assessment, if performed, should be evaluated to develop a preliminary list of remedial action objectives and to identify applicable or relevant and appropriate cleanup standards or cleanup goals. In addition, an initial list of general response actions or potential corrective action alternatives to be evaluated in detail during the Corrective Action Study (CAS) should be developed.

7.0 PILOT TREATABILITY STUDIES/DATA GATHERING

To keep the CI/CAS process on schedule, it may be appropriate to identify and initiate any pilot testing necessary to evaluate corrective action alternatives early in the CI process. Treatability studies are conducted to provide sufficient data to allow treatment alternatives to be fully developed and evaluated during the CAS process and to support the subsequent remedial design of the corrective action alternative ultimately selected by KDHE. Treatability investigations also serve to reduce cost and performance uncertainties for treatment alternatives to acceptable levels to permit a more reliable remedy selection process. Examples of treatability data gathering activities that might be performed during the CI include aquifer pumping tests, soil vapor extraction pilot tests, or pilot-scale applications of innovative technologies to evaluate their applicability to site wastes. Pilot treatability studies and other treatability data gathering activities should be completed consistent with a KDHE-approved work plan.

8.0 CI REPORT

Upon completion of all Comprehensive Investigation activities necessary to achieve the objectives of the CI Scope of Work, a Comprehensive Investigation Report must be submitted to KDHE, in a time frame consistent with the implementation schedule in the approved CI Work Plan, for review and approval. The CI Report should include all information and data collected from during the investigation and describe in detail the work performed to accomplish the objectives as set forth within this SOW. The CI Report format shall be consistent with this Scope of Work and include appropriate tables, figures, well logs, laboratory analytical data, references, appendices, etc. to effectively portray the data generated during the investigation and to support any conclusions drawn in the CI Report.

KDHE/BER strongly recommends that any persons performing Comprehensive Investigation and/or Corrective Action Study activities with State of Kansas oversight obtain and familiarize themselves with the following documents. These documents provide guidance for the preparation, implementation, and reporting of CI/CAS activities, and constitute much of the technical basis on which KDHE/BER reviews work plans, reports, and other submittals related to the CI/CAS process. Information on obtaining the EPA documents is available on-line at <http://www.epa.gov/epahome/publications.htm>. Information on the State Cooperative Program administered by the Remedial Section of the Bureau of Environmental Remediation can be found on-line at the KDHE web site, <http://www.kdhe.state.ks.us/ber/remedial/sru.html>.

REFERENCES:

EPA/600/R-98/018 February 1998; "EPA Guidance for Quality Assurance Project Plans (EPA QA/G-5)."

EPA/540/G-89/004 (OSWER Directive 9355.3-01) October 1988; "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA."

EPA/600/R-96/055 August 2000; "Guidance for the Data Quality Objectives Process (EPA QA/G-4)."

EPA/540/1-89/002 December 1989; "Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part A)."

EPA/540/R-92/003 December 1991; "Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part B, Development of Risk-Based Preliminary Remediation Goals)."

"Risk-Based Standards for Kansas (RSK Manual)", March 1, 2003 (available from KDHE/BER).

Exhibit 2C

BUREAU OF ENVIRONMENTAL REMEDIATION/REMEDIAL SECTION
GUIDANCE
**SCOPE OF WORK (SOW) FOR A CORRECTIVE ACTION
STUDY**

BER POLICY # BER-RS-019

DATE: 1991

Revised: May 23, 1996

Revised: March 29, 2001

PAGES: 3

The Corrective Action Study (CAS) provides an objective and standardized process for evaluating, comparing, and contrasting potential corrective action alternatives. The primary objectives of the Corrective Action Study (CAS) are described as follows:

- 1) to evaluate the feasibility, effectiveness, and cost of at least two (2) potential remedial actions based on the findings of the Comprehensive Investigation (CI), and to compare and contrast those alternatives to each other and the "no action" alternative;
- 2) to recommend and justify a specific corrective action for the site; and
- 3) to determine the health and environmental effects of the remedial action.

This Scope of Work outlines activities to be completed as part of the CAS. Submission of a CAS Work Plan may be necessary if additional data gathering is necessary following completion of the CI in order to evaluate potential corrective action alternatives.

The Scope of Work shall at a minimum include the following components:

1.0 CAS SCHEDULE

Submission of a schedule which summarizes the CAS tasks, provides a date for the completion of the CAS and submission of the CAS report, and briefly describes the corrective actions to be evaluated during the CAS.

2.0 EVALUATION OF CORRECTIVE ACTIONS

The Corrective Action Study is the process through which detailed assessments of at least two plausible corrective action alternatives and the "no action" alternative are performed. The evaluation must include: 1) a description of the contaminants of concern within each environmental media; 2) an identification of all real and potential human and environmental targets and an evaluation of all direct and indirect exposure

pathways; 3) a description of the site-specific corrective action goals; 4) treatability studies for corrective actions considered innovative or unproven; and 5) a detailed individual and comparative analysis of each of the proposed corrective actions, and the "no action" alternative, to evaluate their ability to satisfy the following criteria:

- a) overall protection of human health and environment;
- b) compliance with Federal and State applicable, or relevant and appropriate requirements (ARARs);
- c) long-term effectiveness and permanence;
- d) reduction of toxicity, mobility and volume of contamination through treatment;
- e) short-term effectiveness;
- f) implementability;
- g) cost; and
- h) community acceptance.

For potential corrective action alternatives that would not result in short-term restoration of the site, the evaluation of those alternatives should also address the time frame in which the alternative might reasonably be expected to achieve the corrective action goals for the site.

3.0 RECOMMENDATION OF A CORRECTIVE ACTION

The detailed evaluation of potential corrective action alternatives shall provide the basis for recommending and supporting a specific corrective action or group of corrective actions for the site, which satisfies the requirements as defined in Section 2.0.

4.0 CAS REPORT

The Corrective Action Study Report shall include: 1) a brief summary of the findings of previous environmental investigations, including a risk assessment, if performed; 2) a description of the site-specific corrective action goals; 3) a detailed description of each corrective action alternative evaluated, including the "no action" alternative; 4) a detailed discussion of each corrective action alternative evaluated in the context of satisfying the criteria defined in Section 2.0; 5) a recommendation for corrective action at the site; and 6) an Appendix containing any background information or literature which was used to evaluate each corrective action alternative.

KDHE/BER strongly recommends that any persons performing Comprehensive Investigation and/or Corrective Action Study activities with State of Kansas oversight obtain and familiarize themselves with the following documents. These documents provide guidance for the preparation, implementation, and reporting of CI/CAS activities, and constitute much of the technical basis on which KDHE/BER reviews work plans, reports, and other submittals related to the CI/CAS process. Information on obtaining the EPA documents is available on-line at

<http://www.epa.gov/epahome/publications.htm>. Information on the State Cooperative Program administered by the Remedial Section of the Bureau of Environmental Remediation can be found on-line at the KDHE web site, <http://www.kdhe.state.ks.us/ber/remedial/sru.html>.

EPA/600/R-98/018 February 1998; "EPA Guidance for Quality Assurance Project Plans (EPA QA/G-5)."

EPA/540/G-89/004 (OSWER Directive 9355.3-01) October 1988; "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA."

EPA/600/R-96/055 August 2000; "Guidance for the Data Quality Objectives Process (EPA QA/G-4)."

EPA/540/1-89/002 December 1989; "Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part A)."

EPA/540/R-92/003 December 1991; "Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part B, Development of Risk-Based Preliminary Remediation Goals)."

"Risk-Based Standards for Kansas (RSK Manual)", March 1, 2003 (available from KDHE/BER).

Exhibit 4
Project Deliverable and Milestone¹ Schedule

Deliverable/Milestone	Due Date
Draft Interim Measure (IM) Work Plan/Design ²	Due within 45 days of the effective date of the Consent Order if specifically ordered in the CO or within 45 days of the date requested by KDHE, if not specifically ordered in the CO
Commence implementation of IM Work Plan/Design	Per the IM Schedule established in KDHE-approved IM Work Plan/Design
Complete IM implementation/construction and reporting	Per the IM Schedule established in KDHE-approved IM Work Plan/Design
Draft Comprehensive Investigation Work Plan ³	Due within 30 days of the effective date of the Consent Order or as otherwise directed by KDHE
Commence implementation of CI Work Plan	Per the CI/CAS Schedule established in KDHE-approved CI Work Plan
Complete CI activities and reporting	Per the CI/CAS Schedule established in KDHE-approved CI Work Plan
Draft CAS Work Plan ⁴	Due within 60 days of the KDHE-approved CI Report.
Quarterly Progress Reports ⁵	Due each quarter, 45 days after the end of each quarter or as otherwise agreed by KDHE
Monitoring Reports	Per the KDHE-approved schedule(s) or as otherwise directed by KDHE

¹ One hard copy plus one electronic copy of each deliverable shall be provided unless otherwise directed by KDHE; revised deliverable(s) shall be provided within 30 days of receipt of KDHE comments.

² In the event KDHE requests Respondent perform IM activities; in accordance with Scope of Work #BER-RS-029, incorporated herein as Exhibit 2A, and including other associated documents as described in the IM Scope of Work.

³ In accordance with Scope of Work #BER-RS-018, incorporated herein as Exhibit 2B and including other associated documents as described in the CI Scope of Work.

⁴ In accordance with Scope of Work #BER-RS-019, incorporated herein as Exhibit 2C, and including other associated documents as described in the CAS Scope of Work.

⁵ As approved by the KDHE Project Coordinator, quarterly progress may be documented in other routine monitoring report submittals.

KDHE-BER Remedial Section Field Activities Notification Form

This field notification form is only applicable to sites managed by the Remedial Section and is **not** intended for use by other programs such as the Underground Storage Tank Program. If internet access is unavailable to provide the advance written notification via our website (<http://www.kdheks.gov/remedial/index.html>), please complete this form and fax to 785-296-7030. If you have any problems completing this form, please call 785-296-1673.

Note: If you are amending or canceling a previous notification, please enter the exact ID number (if known).

- I want to submit a new notification.
- I want to amend a previous notification. (Enter ID number if known) _____
- I want to cancel a previous notification. (Enter ID number if known) _____

(*denotes required fields)

*Project Name: _____

*KDHE Project Manager: _____

Location of work:

*County: _____

City (or nearest city): _____

Anticipated dates and duration of work:

*Start Date (mm/dd/yy): _____

*Duration of work (days): _____

- Check this box if work is expected to occur on any weekend or holiday days.

Primary Field Contact:

*Name: _____

*Affiliation/Company: _____

*Primary Phone Number: _____ Alternate Phone Number: _____

Email Address: _____

Alternate Contact:

*Name: _____

*Affiliation/Company: _____

*Primary Phone Number: _____ Alternate Phone Number: _____

Email Address: _____

***Brief Description of Work to be Performed:**

EXHIBIT 7
Form of Invoice for Oversight Costs
(Payroll and Expense Detail Entries are for Example Purposes Only)



KDHE/Bureau of Environmental Remediation
 Attn: Linda Benson
 1000 SW Jackson, Suite 410
 Topeka, KS 66612-1367

Period: XX/XX/XX through XX/XX/XX
 Date: XX/XX/XX

Payment Due in 30 days

Bill To: XXXXXXXXXXXXXXXX
 XXXXXXXXXXXXXXXX
 XXXXXXXXXXXXXXXX
 XXXXXXXXXXXXXXXX

This invoice is for oversight costs for the State Cooperative Program. Please make check payable to the Bureau of Environmental Remediation and enclose a copy of the invoice with payment to the above address to ensure your account is credited appropriately. Questions regarding this invoice should be directed to Linda Benson at (785) 291-3248 lbenson@kdheks.gov.

Project Name: XXXXXXXXXXXXXXXXXXXX
 Consent Order: XX-E-XXXX Cost Acct: XXX

Payroll Details:

Title:	Program Consultant 1
Total Hours:	x.xx
Title:	Administrative Assistant
Total Hours:	x.xx
Title:	Administrative Specialist
Total Hours:	x.xx
Title:	Prof Geologist IV
Total Hours:	x.xx
Title:	Environmental Scientist II
Total Hours:	x.xx
Title:	Prof Environmental Eng II
Total Hours:	x.xx

Expense Details:

Type of Expense:	Lab Analysis
Vendor Name:	XXXX
Amount:	\$xxx.xx
Type of Expense:	Field Supplies
Vendor Name:	XXXX
Amount:	\$x.xx
Type of Expense:	Travel (SCP)
Vendor Name:	XXXX
Amount:	\$xx.xx

Payroll Costs: \$xxx.xx
 Other Costs: \$xxx.xx
 Internal Costs: \$xxx.xx
TOTAL DUE: \$x,xxx.xx

Please Note: The Kansas Department of Health and Environment's (KDHE) internal office expenses which are administrative costs, computer use, rent, utilities and other support services are included with this invoice. This amount equals 40% of the payroll and other costs totals, except for contractual, field supplies, KDHE equipment use, and lab analysis, which are computed at 12.5%.

THIS IS AN INVOICE

KDHE now accepts DiscoverCard. A 2.5% convenience fee will be assessed on all DiscoverCard transactions. If paying by DiscoverCard, contact Teresa Hattan at (785)296-8049 or thattan@kdheks.gov for details.