UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 7 11201 RENNER BOULEVARD LENEXA, KANSAS 66219

In the Matter of:)	Docket No. CERCLA 07-2013-0004
Iowa-Nebraska Light & Power)	Docket No. CERCLA 07-2015-0004
Former Manufactured Gas Plant Site Norfolk, Nebraska)	
Centel Corporation)	
)	
Work Respondent,)	
And)	
Black Hills/Nebraska Gas Utility)	
Company, LLC)	
and Nebraska Public Power District)	
Owner Respondents.)	

Proceedings under Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response Compensation, and Liability Act of 1980 (42 U.S.C. §§ 9604, 9606(a), 9607 and 9622).

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTION

TABLE OF CONTENTS

I.	JURISDICTION AND GENERAL PROVISIONS	3
II.	PARTIES BOUND.	4
III.	DEFINITIONS	4
IV.	FINDINGS OF FACT	8
v.	CONCLUSIONS OF LAW AND DETERMINATIONS	14
VI.	SETTLEMENT AGREEMENT AND ORDER	16
VII.	DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND	ON-
	SCENE COORDINATOR	16
VIII.	WORK TO BE PERFORMED	18
IX.	SITE ACCESS AND INSTITUTIONAL CONTROLS	24
X.	ACCESS TO INFORMATION	26
XI.	RECORD RETENTION	28
XII.	COMPLIANCE WITH OTHER LAWS	30
XIII.	EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES	30
XIV.	AUTHORITY OF ON-SCENE COORDINATOR	31
XV.	PAYMENT OF RESPONSE COSTS	31
XVI.	DISPUTE RESOLUTION	34
XVII.	FORCE MAJEURE	35
XVIII.	STIPULATED PENALTIES	37
XIX.	COVENANT NOT TO SUE BY EPA	41
XX.	RESERVATIONS OF RIGHTS BY EPA	41

XXI.	COVENANTS NOT TO SUE BY WORK RESPONDENT	43
XXII.	OTHER CLAIMS	44
XXIII.	EFFECT OF SETTLEMENT/CONTRIBUTION	45
XXIV.	INDEMNIFICATION	46
XXV.	INSURANCE	47
XXVI.	FINANCIAL ASSURANCE	48
XXVII.	MODIFICATIONS	50
XXVIII.	ADDITIONAL REMOVAL ACTION	51
XXIX.	NOTICE OF COMPLETION OF WORK	52
XXX.	INTEGRATION/APPENDICES	52
XXXI.	SIGNATURE BY PARTIES	53
XXXII.	EFFECTIVE DATE	53

I. JURISDICTION AND GENERAL PROVISIONS

- 1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Centel Corporation ("Centel"), Black Hills/Nebraska Gas Utility Company, LLC, d/b/a Black Hills Energy ("BHE") and Nebraska Public Power District ("NPPD"). This Settlement Agreement provides for the performance of a removal action by Work Respondent and the reimbursement of certain response costs incurred by the United States at or in connection with the Iowa-Nebraska Light & Power Former Manufactured Gas Plant Site ("Site"), which is located in the city of Norfolk, Madison County, Nebraska.
- 2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622, as amended ("CERCLA").
- 3. EPA has notified the state of Nebraska of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
- 4. The Parties recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by the Work Respondent and Owner Respondents in accordance with this Settlement Agreement do not constitute an admission of any liability. The Work Respondent and the Owner Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and

determinations in Sections IV and V of this Settlement Agreement. The Work Respondent and Owner Respondents agree to comply with and be bound by the terms of this Settlement Agreement and further agree that they will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

- 5. This Settlement Agreement applies to and is binding upon EPA and uponWork Respondent or Owner Respondents and their successors and assigns. Any change in ownership or corporate status of the Work Respondent or an Owner Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter that Work Respondent's or Owner Respondents' responsibilities under this Settlement Agreement.
- 6. Work Respondent is liable for the performance of the Work required by this Settlement Agreement and shall ensure that their contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement.
- 7. Work Respondent shall be responsible for any noncompliance with this Settlement Agreement.

III. DEFINITIONS

8. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations.

Whenever terms listed below are used in this Settlement Agreement or in the appendices

attached hereto and incorporated hereunder, the following definitions shall apply:

- a. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, et seq.
- b. "Day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.
- c. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXXII.
- d. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.
- e. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Paragraphs 39 and 40 (costs and attorneys fees and any monies paid to secure access or institutional controls, including the amount of just compensation), and Paragraph 50 (emergency response), Paragraph 72 (work takeover); and shall include all such costs not pursuant to this Settlement Agreement but incurred by the United States with respect to the Site from the date of the notice of completion of the Administrative Order on Consent for Engineering Evaluation/Cost Analysis, Docket

No. CERCLA-07-2006-0265, to the effective date of this Settlement Agreement.

Future Response Costs shall also include Agency for Toxic Substances and Disease

Registry ("ATSDR") costs regarding the Site.

- f. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.
- g. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.
- h. "NDEQ" shall mean the Nebraska Department of Environmental Quality and any successor departments or agencies of the State.
 - i. "Owner Respondents" shall mean BHE and NPPD.
- j. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.
 - k. "Parties" shall mean EPA, Work Respondent and Owner Respondents.
- 1. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, et seq. (also known as the Resource Conservation and Recovery Act).
 - m. "Removal Action Memorandum" shall mean the EPA Enforcement Action

Memorandum relating to the Site signed by the Regional Administrator, EPA Region 7, or his/her delegate, and all attachments thereto. The "Removal Action Memorandum" is attached as Appendix A.

- n. "Respondents" shall mean Work Respondent and Owner Respondents.
- o. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.
- p. "Settlement Agreement" shall mean this Administrative Settlement
 Agreement and Order on Consent and all appendices attached hereto (listed in Section
 XXX). In the event of conflict between this Settlement Agreement and any appendix,
 this Settlement Agreement shall control.
- q. "Site" shall mean the Iowa-Nebraska Light & Power Former

 Manufactured Gas Plant Site located at 701 Norfolk Avenue in Norfolk, Nebraska, and
 all areas where hazardous substances from the Site have come to be located. The Site is
 depicted generally on the Site Map attached as Appendix B.
 - r. "State" shall mean the state of Nebraska.
- s. "Statement of Work" or "SOW" shall mean the statement of work for implementation of the removal action, as set forth in Appendix D to this Settlement Agreement, and any modifications made thereto in accordance with this Settlement Agreement.
- t. "Waste Material" shall mean (1) any "hazardous substance" under
 Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant

under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (4) any "hazardous material" under Neb. Rev. St. § 81-1567(2).

- u. "Work" shall mean all activities Work Respondent is required to perform under this Settlement Agreement.
 - v. "Work Respondent" shall mean Centel.

IV. FINDINGS OF FACT

9. The Iowa-Nebraska Light & Power Former Manufactured Gas Plant Site is located in Norfolk, Madison County, Nebraska, west of 7th Street between Norfolk and Madison Avenues, and includes an alley running east-west between 7th and 8th Streets. The legal description of the Site is as follows:

Lots 1 and 2 of Chas. B. Durland's subdivision of Lots 1, 2, and 3 in Block 1 of Koenigstein's Third Addition to Norfolk, Madison County, Nebraska; and Lot 4, Block 1, Koenigstein's Third Addition to Norfolk, Madison County, Nebraska; and, adjoining property where hazardous substances have come to be located including Lots 5-13, Block 1, Koenigstein's Third Addition to Norfolk, Madison County, Nebraska.

10. The east portion of the Site north of the alley, as well as the northeast portion of the area south of the alley (Lots 1 and 2 and Lot 4), is currently owned by BHE ("BHE Parcel"). The BHE Parcel features two historical manufactured gas plant ("MGP") buildings. The building north of the alley is a one-story building with the northern half designed for administration offices the southern half designed for use as a garage and storage area. The south side of the alley features a two-story building formerly used for administration offices and one modern single story warehouse building. The building north of the alley and the two-

story building south of the alley are unoccupied. The remainder of the Site (Lots 5-13) is owned by the Nebraska Public Power District ("NPPD Parcel"). The NPPD Parcel features a two-story building in the southwest corner formerly used for administration offices and equipment maintenance and storage which has been unoccupied since September 2010. The NPPD parcel also contains an electrical substation and a storage building in the northwest corner. There is a concrete slab in the north- central portion of the NPPD Parcel used for equipment storage (including transformers). The eastern portion of the NPPD Parcel is gravel-covered and used for parking and equipment storage. The NPPD Parcel is surrounded by an eight-foot high chain link fence. The Site in its existing condition, including the boundaries of the BHE Parcel and the NPPD Parcel is shown in Appendix B of this Settlement Agreement.

- adjacent to the Site are zoned for multiple uses, including downtown/mixed use, public facilities, office/financial, restaurants/entertainment, retail and single family residential. The commercial properties near the Site include a paint, wallpaper and carpet store; a restaurant; an antique store; a tattoo parlor; a tire repair shop; a pizza delivery restaurant; and a building supply center/lumber yard. The Norfolk Chamber of Commerce has constructed a new administration building along the south side of Norfolk Avenue east of 7th Street. The closest residences are located along the west side of 8th Street, approximately 250 feet west of the BHE Parcel.
- 12. The Norfolk Light & Fuel Company began acquiring the parcels now owned by BHE in 1902 and began operating a manufactured gas plant ("MGP") on the property (Lots 1

and 2) in 1903. The MGP originally produced gas by the Tenney water gas process, but was converted to carbureted water gas in 1932. The water gas process produces gas by reacting coal or coke with steam to yield a gas rich in hydrogen and carbon monoxide. The major types of wastes and byproducts from MGP sites include coal tar residues and sludges, spent oxide waste and ash materials. Coal tars are primarily composed of PAHs such as benzo(a)pyrene, naphthalene, anthracene, acenaphthalene and phenanthrene; some phenolic compounds; some light, aromatic compounds such as benzene, toluene and xylenes; and various organics such as dibenzofuran. Spent oxide waste resulted from removing nitrogen-containing impurities or hydrogen sulfide from the manufactured gas by adsorbing them onto iron oxide. Manufactured gas was produced at the Site until 1948 when the MGP was converted to a propane-air plant.

- 13. Sanborn Fire Insurance maps from 1909, 1916, 1925, and 1946 show that significant changes were made to the MGP during its operating life. The 1909 Sanborn map shows the following features on the BHE Parcel:
 - A 10,000-cubic foot gas holder (identified as a gas tank on the Sanborn map)
 - A cylindrical oil tank immediately north of the gas holder
 - Coal storage adjacent to and east of the gas holder
 - A small circular structure in the southwest corner of the original gas plan building (north of the gas holder and west of oil tank)

In 1916, the following changes and additions to the MGP on the BHE Parcel were noted on the Sanborn map:

- Removal of the cylindrical oil tank and small circular structure
- Addition of the condenser, scrubber, and generator along the east wall of the gas plant building
- Addition of two larger cylindrical storage tanks north of the oil tank

The 1925 map is the first to show MGP structures at the Site south of the alley on the BHE Parcel and records the following changes and additions:

- Addition to two 10,000-cubic foot cylindrical gas holders south of the alley
- Addition of four purifiers adjacent to the gas storage tanks north of the gas holder

The 1946 Sanborn map shows the following changes:

- Removal of cylindrical gas holders, purifiers, condenser, scrubber, and generator on the BHE Parcel
- Addition of three 10,000-cubic foot cylindrical gas holders south of the alley for a total of five holders on the BHE Parcel
- Addition of two purifiers east of the gas holders south of the alley on the BHE Parcel
- 14. In 1992, a Site investigation was performed by HDR Engineering for Minnegasco, owner of the BHE Parcel from 1976 until 1992. Polynuclear aromatic hydrocarbons (PAHs), benzene, toluene, ethylbenzene and total xylenes (BTEX) were detected in soil borings and in all monitoring well samples.
- 15. The EPA conducted an Expanded Site Investigation in 2001 to determine the extent of soil and groundwater contamination at the Site. Soil samples analyzed by the EPA Region 7 laboratory showed the presence of PAHs (pyrene, naphthalene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, phenanthrene, chrysene and indeno(1,2,3-c,d) pyrene). Benzene and PAHs (naphthalene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, phenanthrene and indeno(1,2,3-cd)pyrene) were detected at groundwater probe locations. The 10,000-cubic foot gas holder formerly located beneath the building on the northern portion of the BHE Parcel was determined to be the main source contributing to the soil and groundwater contamination at the

Site.

- 16. On April 5, 2007, EPA entered into an Administrative Settlement Agreement and Order on Consent with Centel Corporation and Aquila, Inc., to perform an Engineering Evaluation/Cost Analysis (EE/CA) for a non-time-critical removal at the Site. The EE/CA process included performing a field investigation and completing a risk assessment to characterize and understand Site conditions in order to assess, develop, and evaluate alternative response technologies to address soil and groundwater contamination at the Site. Site field investigation activities were conducted in November and December 2007, June and July 2009, and January 2010 and included advancing soil, electrical conductivity, laser-induced fluorescence (LIF), and groundwater probes; advancing soil borings, installing and developing monitoring wells; measuring groundwater elevations; and collecting soil, groundwater and air samples.
- 17. Visible contamination and tar and petroleum odors were observed during soil probe and well installation during the site field investigation activities. BTEXs and PAHs were detected in all soil probes advanced at the Site. The highest concentrations were present in samples collected in areas near the location of former MGP source structures. A summary of the compounds detected in soil at the Site is set forth in Appendix C-1.
- 18. Twenty-nine volatile organic compounds (VOCs) were detected in the groundwater probe and monitoring well samples. The VOCs with the highest concentrations were naphthalene and BTEX. The highest concentrations were detected in probes and wells on, or immediately downgradient of, the Site. Twenty-one PAHs were detected in

groundwater probe samples and 16 PAHs were detected in monitoring well samples. The most prevalent contaminants in the groundwater are benzene and naphthalene which are common contaminants associated with MGP sites. LIF probes also indicated potential dense nonaqueous phase liquid ("DNAPL") from approximately eight to 34.5 feet below ground surface (bgs). A summary of analytical data for groundwater at the Site is set forth in Appendix C-2.

- 19. Indoor air samples were collected from the BHE building above the below grade gas holder in June 2009 and January 2010 to evaluate the potential for soil vapor intrusion into the onsite structures. MGP-related VOCs, including naphthalene and BTEXs were detected in the indoor air samples. The EE/CA Site Characterization Report air analytical results are set forth in Appendix C-3.
- 20. A baseline risk assessment, including both a human health risk assessment and a screening-level (qualitative) ecological risk assessment, was completed for the Site to evaluate the potential risks to current and future receptor populations resulting from exposure to chemicals associated with the Site. The assessment determined that there is the potential for an unacceptable risk from the exposure of a future commercial/industrial worker to indoor air in the building over the gas holder. This carcinogenic risk is associated with naphthalene, hexachlorobutadiene, and p-dichlorobenzene. The potential future risks associated with the presence of benzene, PAHs and arsenic in the groundwater are also above acceptable levels. The ecological assessment determined that there is no exposure of ecological populations to contaminated soil or groundwater associated with the Site because the property is covered by

pavement and the extent of the MGP-related groundwater plume has been defined within a few blocks of the Site.

- 21. Thirty leaking underground storage tank (LUST) sites are located within 0.5 mile of the Site, including four sites immediately upgradient (Shorty's Conoco, Hudson Energy Corp., Hansen Agency and NPPD) and two sites side and downgradient (Norfolk Daily News and Sacred Heart Church). Petroleum-related environmental impacts have occurred at both the Hudson Energy Corp. and Sacred Heart Church LUST sites. Co-mingling of the MGP and LUST plumes is likely.
- 22. The administrative record for the proposed removal action at the Site was made available for public review and comment on July 18, 2012 in Norfolk, Nebraska and at the EPA Region 7 offices in Lenexa, Kansas. And, on July 26, 2012, the EPA hosted a public availability session at the Norfolk Public Library in Norfolk, Nebraska to provide information regarding the proposed removal action to the public. The public comment period ended on August 17, 2012.
- 23. EPA issued a Removal Action Memorandum (Appendix A) which documents the removal action selected by EPA for implementation at the Site. The selected removal action for the Site includes excavation and off-Site disposal or treatment of contaminated soils; limitations on future land use, including, but not limited to prohibiting future residential development of the Site and restrictions on groundwater usage.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

24. Based on the Findings of Fact set forth above, and the Administrative Record

supporting this removal action, EPA has determined that:

- a. The Iowa-Nebraska Light & Power Former Manufactured Gas Plant Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- c. Respondents are each a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- d. Centel Corporation, may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), as the successor to prior owners and/or operators of the facility at the time of the disposal of hazardous substances at the facility.
- e. Respondents BHE and NPPD may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), as the current "owners" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).
- f. The conditions described in the Findings of Fact above constitute an actual or threatened of "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C.§ 9601(22).
- g. The removal action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be consistent with the

NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

25. Based upon the foregoing Findings of Fact, Conclusions of Law,

Determinations, and the Administrative Record for this Site, it is hereby Ordered and Agreed that Work Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

- 26. Work Respondent shall retain one or more contractors to perform the Work and shall notify EPA of the name(s) and qualifications of such contractor(s) within 10 days of the Effective Date. Work Respondent shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 10 days prior to commencement of such Work. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Work Respondent. If EPA disapproves of a selected contractor, Work Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within 30 days of EPA's disapproval.
- 27. Work Respondent has designated Trey Pitts as its Project Coordinator, who shall be responsible for administration of all actions by Work Respondent required by this Settlement Agreement. Copies of all notices and submissions required under this Settlement Agreement shall be sent to Mr. Pitts at Sprint Corporation, 6450 Sprint Parkway, KSOPHN0404-4B302, Overland Park, Kansas 66251, trey.d.pitts@sprint.com. Copies of all

notices and submissions required under this Settlement Agreement shall be sent to Owner Respondents, as set forth below:

For BHE:

Mike Pogany P.O. Box 1400 Rapid City, SD 57709-1400 mike.pogany@blackhillscorp.com

For NPPD:

Bonnie Hostetler Nebraska Public Power District 1414 15th Street P.O. Box 499 Columbus, NE 68602-0499

To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. EPA retains the right to disapprove of the designated Project Coordinators. If EPA disapproves of a Work Respondent's designated Project Coordinator, the Work Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, email address and qualifications within 30 days following EPA's disapproval. Receipt by a Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by the respective Respondent.

28. EPA has designated Mr. Owens Hull of the EPA Region 7 Superfund Division as its On-Scene Coordinator ("OSC"). Except as otherwise provided in this Settlement Agreement, Respondents shall direct all submissions required by this Settlement Agreement to the OSC at the United States Environmental Protection Agency, Region 7, 11201 Renner

Boulevard, Lenexa, Kansas 66219. Mr. Hulls' phone number is (913) 551-7226 and his email is hull.owens@epa.gov.

29. EPA and Work Respondent shall each have the right, subject to Paragraph 27 to change their respective designated OSC or Project Coordinator. Notice of such a change shall be provided to EPA 10 days before such a change is made, or as soon as practicable if 10 days advance notice is not possible. The initial notification may be made orally, but shall be promptly followed by a written notice.

VIII. WORK TO BE PERFORMED

30. Work Respondent shall perform, at a minimum, all actions necessary to implement the Statement of Work. The actions to be implemented generally include, but are not limited to, the following:

31. Work Plan and Implementation

a. Within 60 days after the Effective Date, Work Respondent shall submit to EPA for approval a draft Remedial Action Work Plan ("RAWP") for performing the removal action generally described in Paragraph 23 above. The draft RAWP shall provide a description of, and an expeditious schedule for completion of, the actions required by this Settlement Agreement. A Quality Assurance Project Plan ("QAPP") is required as part of the RAWP. The October 2007 QAPP for the Site prepared for Centel and approved by EPA, may be submitted, with a QAPP addendum to update the revised project organization and responsibilities, quality assurance objectives, quality assurance procedures for laboratory and field activities including any revised laboratory

methods and detection limits, and quality assurance reports. Work Respondent shall ensure that the laboratory used to perform analyses under this Settlement Agreement participates in a QA/QC program that complies with the guidance documents set out in Appendix D. Work Respondent shall include in their contracts with all laboratories and personnel utilized for sample collection and analysis and other field work a provision allowing EPA representatives access to such laboratories and personnel for auditing purposes.

- b. EPA may approve, disapprove, require revisions to, or modify the draft RAWP in whole or in part. If EPA requires revisions, Work Respondent shall submit a revised draft RAWP within 30 days of receipt of EPA's notification of the required revisions or such other time as specified by EPA. Work Respondent shall implement the RAWP as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the RAWP, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.
- c. Work Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement. Work Respondent shall not commence implementation of the RAWP developed hereunder until receiving written EPA approval pursuant to Paragraph 31.
- 32. <u>Health and Safety Plan</u>. Within 60 days after the Effective Date, Work Respondent shall submit for EPA review and comment a plan that ensures the protection of the

public health and safety during performance of on-Site work under this Settlement Agreement. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. Work Respondent shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the removal action.

33. Quality Assurance and Sampling

a. All sampling and analyses performed pursuant to this Settlement
Agreement shall conform to EPA direction, approval, and guidance regarding sampling,
quality assurance/quality control ("QA/QC"), data validation, and chain of custody
procedures. Work Respondent shall ensure that the laboratory used to perform the
analyses participates in a QA/QC program that complies with the appropriate EPA
guidance. Work Respondent shall follow, as appropriate, "Quality Assurance/Quality
Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation
Procedures" (OSWER Directive No. 9360.4-01, April 1, 1990), as guidance for QA/QC
and sampling. Work Respondent shall only use laboratories that have a documented
Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and
Guidelines for Quality Systems for Environmental Data Collection and Environmental
Technology Programs" (American National Standard, January 5, 1995), and "EPA

Requirements for Quality Management Plans (QA/R-2) (EPA/240/B-01/002, March 2001; Reissued May 2006)," or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP") as meeting the Quality System requirements.

- b. Upon request by EPA, Work Respondent shall have such a laboratory analyze samples submitted by EPA for QA monitoring. Work Respondent shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.
- c. Upon request by EPA, Work Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples. Work Respondent shall notify EPA not less than 15 days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Work Respondent to take split or duplicate samples of any samples it takes as part of its oversight of Work Respondent's implementation of the Work.
- 34. <u>Post-Removal Site Control.</u> In accordance with the RAWP schedule, or as otherwise directed by EPA, Work Respondent shall submit a proposal for post-removal Site control consistent with Section 300.415(l) of the NCP and OSWER Directive No. 9360.2-02. Upon EPA approval, Work Respondent shall implement such controls and shall provide EPA with documentation of all post-removal Site control arrangements.

35. Reporting.

- a. Work Respondent shall submit monthly written progress reports to EPA concerning actions undertaken pursuant to this Settlement Agreement. Beginning with the first full month following the effective date of this Settlement Agreement, such reports shall be due by the 15th day of each month, until termination of this Settlement Agreement, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next two reporting periods, including a schedule of actions to be performed, anticipated problems or delays, and planned resolutions of past or anticipated problems.
- b. Work Respondent shall submit one (1) electronic and two (2) paper copies of all plans, reports or other submissions required by this Settlement Agreement, the Statement of Work, or any approved work plan.
- c. BHE and NPPD shall, at least 30 days prior to the conveyance of any interest in real property at the Site, give written notice to EPA of the proposed conveyance, including the name and address of the transferee, and shall require that their successors comply with the immediately preceding sentence and Section IX (Site Access).
- 36. <u>Final Report</u>. Within 90 days after completion of all Work required by this Settlement Agreement, Work Respondent shall submit for EPA review and approval a final

report summarizing the actions taken to comply with this Settlement Agreement. The final report shall, at a minimum, conform to the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports" and "Superfund Removal Procedures: Removal Response Reporting – POLREPS and OSC Reports" (OSWER Directive No. 9360.3-03, June 1, 1994). The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement Agreement, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is 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.

37. Off-Site Shipments. Work Respondent shall, prior to any off-Site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the OSC. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not

exceed 10 cubic yards. Work Respondent shall include in the written notification the following information: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Work Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state. The identity of the receiving facility and state will be determined by Work Respondent following the award of the contract for the removal action. Work Respondent shall provide the information required by this Paragraph as soon as practicable after the award of the contract and before the Waste Material is actually shipped. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off- Site location, Work Respondent shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Work Respondent shall only send hazardous substances, pollutants, or contaminants from the Site to an off-Site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

IX. SITE ACCESS AND INSTITUTIONAL CONTROLS

38. BHE and NPPD shall, commencing on the Effective Date, provide EPA and its authorized representatives, including contractors, with access at all reasonable times to the Site for the purpose of conducting any activity related to this Settlement Agreement.

- Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than NPPD or BHE, Work Respondent shall use its best efforts to obtain all necessary access agreements within 90 days after the EPA's written approval of the RAWP, or as otherwise specified in writing by the OSC. Work Respondent shall immediately notify EPA if after using its best efforts Work Respondent is unable to obtain such agreements. For purposes of this Paragraph, "best efforts" may include the payment of reasonable sums of money in consideration of access. Work Respondent shall describe in writing their efforts to obtain access. EPA may then assist Work Respondent in gaining access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, using such means as EPA deems appropriate. Work Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XV (Payment of Response Costs).
- 40. Upon completion of the physical construction activities required under the RAWP, institutional controls shall be implemented as follows:
 - a. Proprietary institutional controls for Site property owned by BHE and NPPD shall be filed in substantially the same form as Appendix F-1, within 30 days after approval of the final document by EPA.
 - b. Proprietary institutional controls for property not owned by BHE or NPPD but determined to be potentially affected by vapor intrusion as a result of releases from the Site shall be filed in substantially the same form as Appendix F-2, within 90 days after approval of the final documents and affected properties by EPA.

Work Respondent shall use its best efforts to obtain cooperation by affected property owners to file such proprietary institutional controls. Work Respondent shall immediately notify EPA if after using its best efforts they are unable to obtain such cooperation. For purposes of this Paragraph, "best efforts" may include the payment of reasonable sums of money in consideration of filing the proprietary controls. Work Respondent shall describe in writing their efforts to obtain cooperation. EPA may then assist Work Respondent in gaining cooperation, to the extent necessary to file such proprietary controls, using such means as EPA deems appropriate. Work Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such proprietary controls, in accordance with the procedures in Section XV (Payment of Response Costs).

- c. If EPA determines that land/water use restrictions in the form of state or local laws, regulations, ordinances or other governmental controls are needed to implement the Removal Action Memorandum, Work Respondent shall cooperate with EPA's and the state's efforts to secure such governmental controls.
- 41. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, as well as all of its rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

42. Work Respondent shall provide to EPA, upon request, copies of all documents

and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Work Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

- 43. Work Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if EPA has notified Work Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Work Respondent.
- 44. Work Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Work Respondent asserts such a privilege in lieu of providing documents, Work Respondent shall provide EPA with the following: (1) the title of the

document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the document, record, or information; and (6) the privilege asserted by Work Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

45. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

XI. RECORD RETENTION

46. Until ten years after Work Respondent's receipt of EPA's notification pursuant to Section XXIX (Notice of Completion of Work), Work Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in their possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until ten years after Work Respondent's receipt of EPA's notification pursuant to Section XXIX (Notice of Completion of Work), Work Respondent shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature, or description relating to performance of the Work.

- 47. At the conclusion of this document retention period, Work Respondent shall notify EPA at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA, Work Respondent shall deliver any such records or documents to EPA. Work Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Work Respondent asserts such a privilege, it shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Work Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.
- 48. Work Respondent hereby certifies that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XII. COMPLIANCE WITH OTHER LAWS

49. Work Respondent shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable state and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-Site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Work Respondent shall identify ARARs in the Work Plan subject to EPA approval.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

50. In the event of any action or occurrence during performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Work Respondent shall immediately take all appropriate action. Work Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Work Respondent shall also immediately notify the OSC and the National Response Center at telephone number (800) 424-8802 of the incident or Site conditions. In the event that Work Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Work Respondent shall reimburse EPA all costs of the response action not inconsistent with

the NCP pursuant to Section XV (Payment of Response Costs).

51. In addition, in the event of any release of a hazardous substance from the Site, Work Respondent shall immediately notify the OSC and the National Response Center at (800) 424-8802. Work Respondent shall submit a written report to EPA within seven days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, et seq.

XIV. AUTHORITY OF ON-SCENE COORDINATOR

52. The OSC shall be responsible for overseeing Work Respondent's implementation of this Settlement Agreement. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

XV. PAYMENT OF RESPONSE COSTS

- 53. Payments for Future Response Costs.
- a. Work Respondent shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Work Respondent a bill requiring payment that includes a reconciled Regional Itemized Cost Summary, which

includes direct and indirect costs incurred by EPA and its contractors. Work

Respondent shall make all payments within 30 days of receipt of each bill requiring

payment, except as otherwise provided in Paragraph 55 of this Settlement Agreement.

b. Work Respondent shall make all payments required by this Section by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party(ies) making payment and EPA Site/Spill ID number A778. Work Respondent shall send the check(s) to:

U.S. Environmental Protection Agency Superfund Payments Cincinnati Finance Center P.O. Box 979076 St. Louis, Missouri 63197-9000.

c. At the time of payment, Work Respondent shall send notice that payment has been made to by email to acctsreceivable.cinwd@epa.gov, and to:

Owens Hull
U.S. Environmental Protection Agency
Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219.

- d. The total amount to be paid by Work Respondent pursuant to this

 Section shall be deposited by EPA in the Norfolk, Nebraska Iowa-Nebraska Light &

 Power FMGP Site Special Account within the EPA Hazardous Substance Superfund to

 be retained and used to conduct or finance response actions at or in connection with the

 Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.
- 54. In the event that the payments for Future Response Costs are not made within 30 days of Work Respondent's receipt of a bill, Work Respondent shall pay Interest on the

unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Work Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII.

55. Work Respondent may contest payment of any Future Response Costs billed under this Section if it determines that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if it believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the OSC. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Work Respondent shall, within the 30-day period, pay all uncontested Future Response Costs to EPA in the manner described in this Section. Simultaneously, Work Respondent shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Work Respondent shall send to the EPA OSC a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account.

Simultaneously with establishment of the escrow account, Work Respondent shall initiate the Dispute Resolution procedures in Section XVI (Dispute Resolution). If EPA prevails in the dispute, within five days of the resolution of the dispute, Work Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in this Section. If Work Respondent prevails concerning any aspect of the contested costs, Work Respondent shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to EPA in the manner described in this Section. Work Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVI (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Work Respondent's obligation to reimburse EPA for its Future Response Costs.

XVI. DISPUTE RESOLUTION

- 56. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. EPA and Work Respondent shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.
- 57. If Work Respondent objects to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, it shall notify EPA in writing of its objection(s) within 30 days of such action, unless the objection(s) has/have been resolved informally. EPA and Work Respondent shall have 30 days from EPA's receipt of Work Respondents' written objection(s) to resolve the dispute through formal negotiations (the

"Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA.

58. Any agreement reached by EPA and Work Respondent pursuant to this Section shall be in writing and shall, upon signature by the parties, be incorporated into and become an enforceable part of this Settlement Agreement. If EPA and Work Respondent are unable to reach an agreement within the Negotiation Period, an EPA management official at the Division Director of EPA Region 7 Superfund level or higher will issue a written decision on the dispute to Work Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Work Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Work Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

XVII. FORCE MAJEURE

Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a force majeure. For purposes of this Settlement Agreement, a force majeure is defined as any event arising from causes beyond the control of Work Respondent, or of any entity controlled by Work Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Work Respondent's best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the Work, increased cost of performance, or a

failure to attain performance standards/action levels set forth in the Removal Action Memorandum, SOW and RAWP.

- obligation under this Settlement Agreement, whether or not caused by a force majeure event, Work Respondent shall notify EPA orally within 48 hours of when Work Respondent first knew that the event might cause a delay. Within five days thereafter, Work Respondent shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Work Respondent's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Work Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Work Respondent from asserting any claim of force majeure for that event for the period of time of such failure to comply and for any additional delay caused by such failure.
- 61. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Settlement Agreement that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay

has been or will be caused by a force majeure event, EPA will notify Work Respondent in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Work Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

XVIII. STIPULATED PENALTIES

62. Work Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in this Section for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (Force Majeure). "Compliance" by Work Respondent shall include completion of the activities under this Settlement Agreement or any work plan or other plan approved under this Settlement Agreement identified below in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

63. Stipulated Penalty Amounts.

a. The following stipulated penalties shall accrue per violation per day for failure to submit to EPA any submittal (except progress reports) required by the Settlement Agreement, SOW or RAWP by the date required:

7

b. The following stipulated penalties shall accrue per violation per day for failure to submit a progress report by the date required:

Penalty Per Violation Per Day	Period of Noncompliance
\$50	1st through 14th day
\$100	15th through 30th day
\$150	31st day and beyond

c. The following stipulated penalties shall accrue per violation per day for material failure to complete the Work specified in the Settlement Agreement, SOW or RAWP as required, for days after Work Respondent receive notice of such material failure from EPA:

Penalty Per Violation Per Day	Period of Noncompliance
\$250	1st through 14th day
\$500	15th through 30th day
\$1,000	31st day and beyond

d. The following stipulated penalties shall accrue per violation per day for failure to pay Future Response Costs as required:

Penalty Per Violation Per Day	Period of Noncompliance
\$250	1st through 14th day
\$500	15th through 30th day
\$1,000	31st day and beyond

64. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section VIII (Work to be Performed), during the period, if any, beginning on the 31st day after EPA's receipt of such

submission until the date that EPA notifies Respondents of any deficiency; and (2) with respect to a decision by the EPA Management Official at the Division Director of EPA Region 7

Superfund level or higher, under Paragraph 58 of Section XVI (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA management official issues a final decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

- 65. Following EPA's determination that Work Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Work Respondent written notification of the failure and describe the noncompliance. EPA may send Work Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Work Respondent of a violation.
- 66. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Work Respondent's receipt from EPA of a demand for payment of the penalties, unless Work Respondent invokes the dispute resolution procedures under Section XVI (Dispute Resolution). All payments to EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to:

U.S. Environmental Protection Agency, Region 7 Superfund Payments Cincinnati Finance Center P.O. Box 979076 St. Louis Missouri 63197-9000; and shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number A778, the EPA Docket Number CERCLA-07-2013-0004, and the name and address of the party(ies) making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to EPA as provided in Paragraph 53(c).

- 67. The payment of penalties shall not alter in any way Work Respondents' obligation to complete performance of the Work required under this Settlement Agreement.
- 68. Penalties shall continue to accrue during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision. If Work Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Work Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 66. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Work Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. § 9606(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 106(b) or 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Section, except in the case of a willful violation

of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XIX. COVENANT NOT TO SUE BY EPA

69. In consideration of the actions that will be performed and the payments that will be made by Work Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Work Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Work Respondent of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XV. This covenant not to sue extends only to Respondent and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY EPA

70. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of EPA or the United States 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 in this Settlement Agreement and subject to Section XIX, nothing in this

Settlement Agreement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Work Respondent or Owner Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.

- 71. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Work Respondent with respect to all other matters, including, but not limited to:
 - a. liability for failure by Work Respondent to meet a requirement of this Settlement Agreement;
 - b. liability for costs not included within the definition of Future Response Costs;
 - c. liability for performance of response action other than the Work;
 - d. criminal liability;
 - e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
 - f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
 - g. liability for costs incurred or to be incurred by the Agency for Toxic

 Substances and Disease Registry related to the Site not paid as Future Response Costs

 under this Settlement Agreement.

Work Takeover. In the event EPA determines that Work Respondent has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Work Respondent may invoke the procedures set forth in Section XVI (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Work Respondent shall pay pursuant to Section XV (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. COVENANTS NOT TO SUE BY WORK RESPONDENT

- 73. Work Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including, but not limited to:
 - a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
 - b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Nebraska

Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

- c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or Future Response Costs.
- 74. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXII. OTHER CLAIMS

- 75. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Work Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Work Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.
- 76. Except as expressly provided in Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Work Respondent or Owner Respondents or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

77. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIII. EFFECT OF SETTLEMENT/CONTRIBUTION

- 78. Nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).
- 79. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and that Work Respondent and Owner Respondents are entitled, as of the Effective Date, 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 "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Future Response Costs. The Parties further agree that this Settlement Agreement 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 Respondents have, as of the Effective Date, resolved their liability to the United States for the Work and Future Response Costs.

80. Work Respondent and Owner Respondents shall, with respect to any suit or claim brought by them individually or jointly with the other, for matters related to this Settlement Agreement, notify EPA in writing no later than 10 days after the initiation of such suit or claim. Work Respondent and Owner Respondents shall, with respect to any suit or claim brought against it individually or jointly with the other, for matters related to this Settlement Agreement, notify EPA in writing within 10 days after service of the complaint or claim upon it. In addition, Work Respondent and Owner Respondents shall notify EPA within 10 days after service or receipt of any Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial, concerning it individually or jointly with the other, for matters related to this Settlement Agreement.

XXIV. INDEMNIFICATION

81. Work Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Work Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Work Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement,

arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Work Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Work Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Work Respondent nor any such contractor shall be considered an agent of the United States.

- 82. The United States shall give Work Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Work Respondent prior to settling such claim.
- 83. Work Respondent waives all claims against the United States for damage or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Work Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Work Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Work Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

XXV. INSURANCE

84. At least ten days prior to commencing any on-Site work under this Settlement

Agreement, Work Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance (\$1,000,000 per event/\$2,000,000 annual aggregate) and automobile insurance (\$1,000,000 combined single limit), naming EPA as an additional insured. Within the same time period, Work Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Work Respondent shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Work Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Work Respondent in furtherance of this Settlement Agreement. If Work Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Work Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

- 85. Within 30 days of the Effective Date, Work Respondent shall establish and maintain financial security for the benefit of EPA in the amount of \$2.1 million in one or more of the following forms, in order to secure the full and final completion of the Work by Work Respondent:
 - a. a surety bond unconditionally guaranteeing payment and/or performance

of the Work;

- b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA;
- c. a trust fund administered by a trustee acceptable in all respects to EPA; and/or
- d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work.
- shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Work Respondent shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed above. In addition, if at any time EPA notifies Work Respondent that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Work Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Work Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.
- 87. If, after the Effective Date, Work Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 85 of

this Section, Work Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by EPA and Work Respondent, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed.

Work Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Work Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). Work Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

88. Work Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Work Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXVII. MODIFICATIONS

- 89. The OSC may make modifications to any plan or schedule or Statement of Work in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly within 30 days, but shall have as its effective date the date of the OSC's oral direction. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the parties.
- 90. If Work Respondent seeks permission to deviate from any approved work plan or schedule or Statement of Work, Work Respondent's Project Coordinator shall submit a

written request to EPA for approval outlining the proposed modification and its basis. Work Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to this Section.

91. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Work Respondent shall relieve Work Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXVIII. ADDITIONAL REMOVAL ACTION

92. If EPA determines that additional removal actions not included in an approved plan are necessary to protect public health, welfare, or the environment, EPA will notify Work Respondent of that determination. Unless otherwise stated by EPA, within 60 days of receipt of notice from EPA that additional removal actions are necessary to protect public health, welfare, or the environment, Work Respondent shall submit for approval by EPA a Work Plan for the additional removal actions. The plan shall conform to the applicable requirements of Section VIII (Work to Be Performed) of this Settlement Agreement. Upon EPA's approval of the plan pursuant to Section VIII, Work Respondent shall implement the plan for additional removal actions in accordance with the provisions and schedule contained therein. This Section does not alter or diminish the OSC's authority to make oral modifications to any plan or schedule pursuant to Section XXVII (Modifications).

XXIX. NOTICE OF COMPLETION OF WORK

93. When EPA determines, after EPA's review of the Final Report, that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including holders' enforcement of proprietary institutional controls, maintenance of vapor intrusion controls, maintenance of Site cover, payment of Future Response Costs, and record retention, EPA will provide written notice to Work Respondent and Owner Respondents. If EPA reasonably determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Work Respondent, provide a list of the deficiencies, and require that Work Respondent modify the Work Plan if appropriate in order to correct such deficiencies. Work Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Work Respondent to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXX. INTEGRATION/APPENDICES

94. This Settlement Agreement and its appendices constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

Appendix A Removal Action Memorandum

Appendix B Site Map

Appendix C-1 Soil, Arsenic, BTEX and PAH Analytical Data Summary

Appendix C-2 Groundwater, BTEX and PAH Analytical Data Summary

Appendix C-3 Indoor Air Analytical Data Summary

Appendix D Statement of Work

Appendix E Guidance Documents

Appendix F-1 Proprietary Institutional Control for Site Property

Appendix F-2: Proprietary Institutional Control for Property Not Owned By

Respondents

XXXI. SIGNATURE BY PARTIES

95. This Settlement Agreement may be executed in any number of counterparts, each of which when executed and delivered to EPA shall be deemed to be an original, but such counterparts shall together constitute one and same document. The undersigned representative(s) of the Respondents certify that they are fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the parties they represent to this document.

XXXII. EFFECTIVE DATE

96. This Settlement Agreement shall become effective upon receipt by Respondents of a fully executed copy of this Settlement Agreement. IT IS SO AGREED.

For the United States Environmental Protection Agency:

Cecilia Tapia

Director

Superfund Division

Barbara L. Peterson

Attorney

Office of Regional Counsel

<u>August 6, 2013</u>
Date

[REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK] [SIGNATURE PAGES FOLLOW]

In the Matter of Iowa-Nebraska Light & Power Former Manufactured Gas Plant Site, Docket No. CERCLA-07-2013-0004. Proceedings under Sections 104, 106, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. §§ 9604, 9606, 9607 and 9622)

For Centel Corporation, a Delaware Corporation:

Name

5 AUGUST 2013

Date

Title CENTURY LIME INC.

In the Matter of Iowa-Nebraska Light & Power Former Manufactured Gas Plant Site, Docket No. CERCLA-07-2013-0004. Proceedings under Sections 104, 106, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. §§ 9604, 9606, 9607 and 9622)

For Black Hills/Nebraska Gas Utility Company, LLC d/b/aBlackHillsEnergy:

VP, NEBMSLA CAS

In the Matter of Iowa-Nebraska Light & Power Former Manufactured Gas Plant Site, Docket No. CERCLA-07-2013-0004. Proceedings under Sections 104, 106, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. §§ 9604, 9606, 9607 and 9622)

For Nebraska Public Power District:

Name Joseph L. Citta, Jr.

Date

Corporate Environmental Manager

Title

Appendix A

Removal Action Memo



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 7

11201 Renner Boulevard Lenexa, Kansas 66219 AUG 0 7 2013

ENFORCEMENT ACTION MEMORANDUM

SUBJECT: Request for a Non-Time-Critical Removal Action, Norfolk, Madison County, Nebraska

Iowa-Nebraska Light & Power Co. Former Manufactured Gas Plant Site,

Pready 1. Dalal

FROM: Owens Hull, Remedial Project Manager

Iowa/Nebraska Remedial Branch

THRU: Pradip L. Dalal, P.E., Chief

Iowa/Nebraska Remedial Branch

TO: Cecilia Tapia, Director

Superfund Division

Site ID : A778

CERCLIS Sequence : BB001

I. PURPOSE

The purpose of this Enforcement Action Memorandum is to request approval for a non-time-critical removal action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, at the Iowa-Nebraska Light & Power Co. Former Manufactured Gas Plant (FMGP) site (Site) in Norfolk, Madison County, Nebraska. This Enforcement Action Memorandum incorporates the findings in the approved June 2012 Engineering Evaluation/Cost Analysis (EE/CA) Removal Alternatives Evaluation Report.

The removal action for on-site contaminated soils is excavation of contaminated soils to a depth of ten feet below ground surface (bgs) followed by confirmation soil sampling on the walls and floor of the excavated areas. If confirmation soil sampling results are above the cleanup goals, excavation will continue until the concentrations are below the cleanup goals or until groundwater is encountered, whichever occurs first. Preliminary remediation goals (PRGs) for soil have been developed in the EE/CA in accordance with U.S. Environmental Protection Agency guidance. The PRGs are chemical-specific and were developed for soil contaminants of concern (COCs) from 0 to 10 feet bgs. The contaminated soil will either be treated by thermal desorption or disposed of off-site at a licensed landfill. The excavated areas will be backfilled with clean fill and an environmental covenant will be imposed on the Site. Activity and use limitations including but not limited to prohibiting future residential development of the Site, as well as restrictions on groundwater usage, will be recorded for the property and associated groundwater contaminant plume with environmental covenants pursuant to the Nebraska Uniform Environmental Covenants Act (UECA).

The removal action objective for groundwater is groundwater monitoring for ten years as a post-removal site control to document plume stability and/or a decreasing plume. Groundwater monitoring will continue until the EPA makes the determination that the removal action objective has been achieved.

This removal action is estimated to cost \$2,835,000. There are no significant or precedent-setting issues associated with this response action.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID#:

NED986373678

Site ID#:

A778

Category of Removal:

Non-Time-Critical

Nationally Significant:

No

A. Site Description

1. Site history

The Site is the location of an FMGP that was operated by a series of owners from 1902 until 1948. Waste products from the manufactured gas process include coal tar and other coal-tar-related contaminants which are present in the soil and groundwater at the Site.

A Preliminary Assessment was conducted by the EPA in 1990, which was then followed by a Site Inspection in 1992. An Expanded Site Inspection (ESI) was completed in March 2001. The ESI confirmed the main source contributing to soil and groundwater contamination was the location of a former 10,000-cubic foot gasholder inside the FMGP building on the northern portion of the Site. Subsurface soil and groundwater samples collected were found to be contaminated with MGP-related compounds: polynuclear aromatic hydrocarbons (PAHs), benzene, toluene, ethylbenzene and xylenes (BTEXs) and metals. However, the coal-tar contamination was found beneath the concrete floor and in areas covered by concrete or gravel pavement. The property is surrounded by a fence, and, therefore, wastes are inaccessible to the public.

The ESI determined further action under CERCLA was warranted. In 2007, the EPA entered into an Administrative Settlement Agreement and Order on Consent to conduct an EE/CA with the potentially responsible parties (PRPs) to further characterize the Site and evaluate removal action alternatives to address the coal-tar contamination.

Soil contamination includes coal-tar-contaminated materials including but not limited to:

- Volatile organic compounds (VOCs) including BTEXs
- Semi-VOCs including PAHs
- Metals

Groundwater contamination includes coal-tar-contaminated materials including but not limited to:

- VOCs including benzene
- PAHs
- Dense nonaqueous phase liquid (DNAPL)

2. Physical location

The city of Norfolk is in the northeastern portion of the state of Nebraska in Madison County and has a population of 24,210 according to the 2010 U.S. Census Bureau. The Site is located downtown in the center of the city at 701 Norfolk Avenue and occupies approximately one-half acre within Section 27, Township 24 North, Range 1 East, Latitude 41°52'05" N, Longitude 97°25'00" W. The Site is west of 7th Street between Norfolk and Madison Avenues and is bisected by the alley running east/west between 7th and 8th Streets. The MGP groundwater contaminant plume associated with the Site is migrating to the east.

The Site is in an area zoned for multiple uses including downtown and mixed use, public facilities, retail and single-family residential. The commercial properties near the Site include a custom cabinet shop, an equipment rental store, an antique store, a tire repair shop, a building supply center/lumber yard and the Norfolk Chamber of Commerce. The closest residences are located approximately 400 feet west of the Site along the west side of 8th Street. The Site is located approximately one-half mile upgradient from the east municipal well field which supplies drinking water to the city of Norfolk. Groundwater flow in the Site area is to the east, migrating toward the east municipal well field. Multiple leaking underground storage tank (LUST) sites surround the Site with documented contaminant releases that have likely impacted the groundwater quality near the Site. The EE/CA Removal Alternatives Evaluation Report located in the Administrative Record (AR) identifies the locations and status of the LUST sites.

The Bald Eagle, Interior Least Tern and Piping Plovers are identified as endangered or threatened species in the Norfolk, Nebraska, area. The migration corridor for the Eskimo Curlew, which is also identified as an endangered or threatened species, runs through Norfolk, Nebraska. However, since the Site is located in downtown Norfolk, it is not expected that existing MGP-related contamination will impact any of these species.

3. Site characteristics

The Site is an FMGP. The Site covers approximately one-half acre and it is owned by Black Hills/Nebraska Gas Utility Company, LLC and Nebraska Public Power District (NPPD). The buildings located on the Site are currently not in use. All above-grade FMGP-related structures have been removed from the Site. The Black Hills portion of the Site is covered by a building, and the majority of the NPPD portion is covered by concrete and gravel. Access to the Site is restricted by an eight-foot-tall, chain-link security fence. The Site is bordered to the north by a restaurant, to the west by a commercial property, to the south by a church and to the east by the Norfolk Chamber of Commerce building.

4. Release or threatened release into the environment of a hazardous substance, pollutant or contaminant

PAHs including benzo(a)pyrene and naphthalene, VOCs including benzene and other hazardous wastes, pollutants and/or contaminants from MGP-related processes have been found in the soil and groundwater at the Site above acceptable health-based levels. These compounds are listed as hazardous substances pursuant to 40 Code of Federal Regulations (CFR) § 302.4. As such, they are "hazardous substances" as defined in Section 101(14) of CERCLA 42 U.S.C. § 9601(14).

5. NPL status

The Site is not on the NPL.

6. Maps, pictures and other graphic representations

Attached to this Enforcement Action Memorandum is Figure 1 which displays the Site and the FMGP structures based on historic Sanborn fire insurance maps. Figure 2 illustrates the estimated extent of MGP-contaminated soil to be excavated. Figures 3 through 6 depict the shallow and deep groundwater contaminant plume.

A. Other Actions to Date

1. Previous actions

No previous response actions have taken place at the Site.

2. Current actions

No current response actions are taking place at the Site.

B. State and Local Authorities Roles

1. State and local actions to date

No state or local response actions have been taken to date.

2. Potential for continued state/local response

The Nebraska Department of Environmental Quality (NDEQ) is expected to continue in a support role.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATATORY AND REGULATORY AUTHORITIES

40 CFR § 300.415(b)(2)(i) – Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants.

The contaminants detected on the Site include benzene, a known human carcinogen; ethylbenzene, a probable human carcinogen; benzo(a)pyrene, a probable human carcinogen; and naphthalene, a possible human carcinogen which pose the greatest threats to human health and the environment. Contaminants detected above industrial indoor-air screening levels within the FMGP building on the Black Hills parcel included naphthalene and p-dichlorobenzene.

Surface soils are contaminated with MGP-related contaminants including coal tar, VOCs including BTEX and semi-VOCs including PAHs. Contaminants from MGP processes have also migrated into the groundwater which flows toward the east municipal well field. The groundwater is being used as a source of drinking water for the city of Norfolk.

Soil samples collected at the Site found MGP-related contaminants including source material with concentrations of naphthalene at 1,950 milligrams per kilogram (mg/kg): benzene at 45 mg/kg and benzo(a)pyrene at 114 mg/kg. Soil with coal-tar/DNAPL staining was observed across the Site. Groundwater samples collected on or near the Site exceeding maximum contaminant levels (MCLs) include benzene at 4,000 micrograms per liter (μ g/L) with an MCL of 5μ g/L; ethylbenzene at 3,000 μ g/L with an MCL of 700μ g/L; and benzo(a)pyrene at 444μ g/L with an MCL of 0.2μ g/L.

40 CFR § 300.415(b)(2)(ii) – Actual or potential contamination of drinking water supplies or sensitive ecosystems.

The groundwater aquifer under the Site is used as a source of drinking water for the city of Norfolk. The east municipal well field for the city of Norfolk is located approximately one-half mile east of the Site. Groundwater flow in the Site area is to the east, migrating toward the east municipal well field.

40 CFR § 300.415(b)(2)(iv) – High levels of hazardous substances, pollutants or contaminants in soils largely at or near the surface that may migrate.

Contaminated soils exceeding the PRGs are located at the Site from the soil surface down to groundwater. MGP-related contaminants including coal-tar/DNAPL are found in the near surface and subsurface soils at the Site which have migrated into the groundwater.

40 CFR § 300.415(b)(2)(v) – Weather conditions that may cause hazardous substances, pollutants or contaminants to migrate or be released.

During a heavy precipitation event, the increased surface water flow and infiltration may cause a release to groundwater or surface soil contamination to off-site receptors at the properties downgradient of the Site.

40 CFR § 300.415(b)(2)(vii) – The availability of other appropriate federal or state response mechanisms to respond to the release.

No other federal or state response mechanism is available at this time. NDEQ has been involved in the regulatory process for this Site in an advisory capacity and is expected to continue to provide document review support.

The EPA is the lead agency for addressing the Site under CERCLA.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response action selected in this Enforcement Action Memorandum, may present an imminent and substantial endangerment to public health, welfare or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The threat of exposure due to hazardous substances present at the Site and in the groundwater at and downgradient from the Site can be prevented by the soil removal. Groundwater monitoring will be conducted for a period of ten years as a post-removal site control to document plume stability and/or a decreasing plume. The removal action is protective of human health and the environment.

The removal action for on-site contaminated soils is excavation of contaminated soils to a depth of ten feet bgs followed by confirmation soil sampling on the walls and floor of the excavated areas. If confirmation soil-sampling results are above the cleanup goals, excavation will continue until the concentrations are below the cleanup goals or until groundwater is encountered, whichever occurs first. The contaminated soil will either be treated by thermal desorption or disposed of off-site at a licensed landfill. The excavated areas will be backfilled with clean fill and an environmental covenant will be imposed on the Site. Activity and use limitations including but not limited to prohibiting future residential development of the Site, as well as restrictions on groundwater usage, will be recorded for the property and associated groundwater contaminant plume with environmental covenants pursuant to the Nebraska UECA.

No contaminated soils located off-site will be excavated due to the close proximity of commercial businesses and the possibility of impacting the integrity of Norfolk Avenue and 7th Street. However, an environmental covenant may be necessary for contamination not actively addressed by the removal of contaminated soils. Any residual contamination remaining on-site due to the inability to access these areas will be addressed through the environmental covenant.

The removal action to address the contaminated groundwater at the Site is groundwater monitoring for ten years as a post-removal site control to document plume stability and/or a decreasing plume. Groundwater monitoring will continue until the EPA makes the determination that the removal action objective has been achieved. An environmental covenant will also be placed to limit groundwater usage in areas of the MGP contaminant plume.

The excavation will be completed in lifts to allow intermediate soil samples to be collected from the walls and floor of the excavation to determine if contaminant concentrations in the surrounding soil meet the cleanup goals. If confirmatory soil sampling shows that soil concentrations are above the cleanup goals at ten feet bgs, additional excavation will be completed until the cleanup goals, as outlined in the June 2012 EE/CA and within this Enforcement Action Memorandum, are achieved or groundwater is encountered, whichever occurs first.

PRGs are chemical-specific concentration goals for specific media and land use combinations at Superfund sites. The PRGs serve as a target to use during the initial development, analysis and selection of the cleanup alternatives. The removal action will use the following PRGs as the cleanup goals to confirm the soil COCs have been removed.

maphthene 36,700 17,831 macene 183,000 87,567 enic 1.77 13.3 zene 5.96 108 zo(a)Anthracene 2.34 21.3 zo(a)pyrene 0.234 2.13 zo(b)fluoranthene 2.34 21.3 zo(k)fluoranthene 23.4 213 ysene 234 2,130 ysene 29.8 377 oranthene 24,400 11,891 orene 24,400 11,891 eno(1,2,3-cd)pyrene 2.34 21.3 shthalene 20 444 ene 18,300 8,944	Contaminant of Concern	Commercial-Industrial Worker PRG	Construction Worker PRG
bracene 183,000 87,567 enic 1.77 13.3 zene 5.96 108 zo(a)Anthracene 2.34 21.3 zo(a)pyrene 0.234 2.13 zo(b)fluoranthene 2.34 21.3 zo(k)fluoranthene 23.4 213 zysene 234 2,130 zylbenzene 29.8 377 pranthene 24,400 11,891 con(1,2,3-cd)pyrene 2.34 21.3 chthalene 20 444 ene 18,300 8,944		(0-2 feet) (mg/kg)	(2-10 feet) (mg/kg)
enic 1.77 13.3 zene 5.96 108 zo(a)Anthracene 2.34 21.3 zo(a)pyrene 0.234 2.13 zo(b)fluoranthene 2.34 21.3 zo(k)fluoranthene 23.4 213 ysene 234 2,130 ylbenzene 29.8 377 oranthene 24,400 11,891 ene 24,400 11,891 eno(1,2,3-cd)pyrene 2.34 21.3 ene 18,300 8,944	Acenaphthene	36,700	17,831
zene 5.96 108 zo(a)Anthracene 2.34 21.3 zo(a)pyrene 0.234 2.13 zo(b)fluoranthene 2.34 21.3 zo(k)fluoranthene 23.4 213 ysene 234 2,130 ylbenzene 29.8 377 oranthene 24,400 11,891 orene 24,400 11,891 eno(1,2,3-cd)pyrene 2.34 21.3 ohthalene 20 444 ene 18,300 8,944	Anthracene	183,000	87,567
zo(a)Anthracene 2.34 21.3 zo(a)pyrene 0.234 2.13 zo(b)fluoranthene 2.34 21.3 zo(k)fluoranthene 23.4 213 ysene 234 2,130 ysene 29.8 377 oranthene 24,400 11,891 orene 24,400 11,891 eno(1,2,3-cd)pyrene 2.34 21.3 ohthalene 20 444 ene 18,300 8,944	Arsenic	1.77	13.3
zo(a)pyrene 0.234 2.13 zo(b)fluoranthene 2.34 21.3 zo(k)fluoranthene 23.4 213 ysene 234 2,130 ylbenzene 29.8 377 oranthene 24,400 11,891 orene 24,400 11,891 oreno(1,2,3-cd)pyrene 2.34 21.3 oththalene 20 444 one 18,300 8,944	Benzene	5.96	108
zo(b)fluoranthene 2.34 21.3 zo(k)fluoranthene 23.4 213 ysene 234 2,130 ylbenzene 29.8 377 oranthene 24,400 11,891 orene 24,400 11,891 eno(1,2,3-cd)pyrene 2.34 21.3 ohthalene 20 444 ene 18,300 8,944	Benzo(a)Anthracene	2.34	21.3
zo(k)fluoranthene 23.4 213 ysene 234 2,130 ylbenzene 29.8 377 pranthene 24,400 11,891 prene 24,400 11,891 proo(1,2,3-cd)pyrene 2.34 21.3 phthalene 20 444 pene 18,300 8,944	Benzo(a)pyrene	0.234	2.13
ysene 234 2,130 ylbenzene 29.8 377 pranthene 24,400 11,891 prene 24,400 11,891 eno(1,2,3-cd)pyrene 2.34 21.3 phthalene 20 444 ene 18,300 8,944	Benzo(b)fluoranthene	2.34	21.3
ylbenzene 29.8 377 pranthene 24,400 11,891 prene 24,400 11,891 proo(1,2,3-cd)pyrene 2.34 21.3 phthalene 20 444 pene 18,300 8,944	Benzo(k)fluoranthene	23.4	213
branthene 24,400 11,891 brene 24,400 11,891 cno(1,2,3-cd)pyrene 2.34 21.3 chthalene 20 444 cene 18,300 8,944	Chrysene	234	2,130
brene 24,400 11,891 eno(1,2,3-cd)pyrene 2.34 21.3 chthalene 20 444 ene 18,300 8,944	Ethylbenzene	29.8	377
eno(1,2,3-cd)pyrene 2.34 21.3 hthalene 20 444 ene 18,300 8,944	Fluoranthene	24,400	11,891
hthalene 20 444 ene 18,300 8,944	Fluorene	24,400	11,891
ene 18,300 8,944	Indeno(1,2,3-cd)pyrene	2.34	21.3
	Naphthalene	20	444
50,200 10,005	Pyrene	18,300	8,944
19,885 19,885	Toluene	50,200	19,885
al Xylenes 3,010 2,642	Total Xylenes	3,010	2,642

The storage and former operations building on-site will be demolished prior to excavation of contaminated soils. Asbestos-containing material will be assessed and abated consistent with state and federal regulations prior to the demolition of the structures.

Following the removal of on-site contaminated soils, the PRPs will conduct additional sampling to further assess the risk of vapor intrusion to nearby buildings.

2. Contribution to remedial performance

Currently no remedial actions are planned at the Site. Decisions regarding future actions will be based on the results of the vapor intrusion assessment and groundwater monitoring. This removal action is expected to be appropriate and consistent with any future potential remedial actions.

3. EE/CA, June 2012

The EE/CA identified other alternative actions for the Site:

a. <u>Excavation, In Situ Chemical Oxidation (ISCO) and Groundwater</u> <u>Monitoring</u>

This alternative includes excavation of subsurface soils and the injection of a chemical oxidant into the groundwater to treat both the DNAPL and dissolved-phase groundwater contamination. Due to the surrounding properties, subsurface obstructions and subsurface utilities, it is technically impracticable to apply oxidant to all residual DNAPL. The estimated time to observe changes in groundwater concentrations following the initial treatment could be from one to two years.

b. Excavation and Permeable Reactive Barrier (PRB)

This alternative includes excavation of subsurface soils, establishing institutional controls and installing a funnel and gate PRB to treat the dissolved-phase groundwater contaminants. The PRB would consist of reactive materials through which a dissolved contaminant plume would pass through and be treated in situ under natural gradient. PRBs have been effective at treating dissolved-phase contamination; however, it would not be effective in treating DNAPL. A significant number of challenges would need to be overcome to successfully implement this alternative including avoiding subsurface utilities and surface structures. It was estimated that treatment media in the PRB would be replaced once every five years.

c. <u>In Situ Electrical Resistance Heating (ERH) and Groundwater</u> <u>Monitoring</u>

This alternative would incorporate large-scale heating of the subsurface to thermally treat contaminated soil without the need for excavation. Because of the extensive heating process and stripping of VOCs from the subsurface and the possibility of odor release, air monitoring would be conducted during implementation. It was estimated that system installation, treatment and site restoration could take up to one year.

d. <u>In Situ ERH and ISCO</u>

This alternative combines in situ ERH to treat subsurface soil contamination and ISCO to treat the groundwater. These alternatives would take a considerable amount of time to achieve the removal goals. ISCO would not be implemented until the soil removal goals were achieved by ERH, which could take up to one year. The ISCO treatment could take an additional year to two years.

e. <u>In Situ ERH and PRB</u>

This alternative combines in situ ERH to treat subsurface soil contamination and installation of a PRB to treat the groundwater. These two alternatives were determined to be the most expensive and would take the longest time to achieve the removal action objectives.

4. Description of alternative technologies

The EPA's policy regarding the use of alternative technologies for removal actions described in the Office of Solid Waste and Emergency Response Directive 9380.2-1, "Administrative Guidance for Removal Program Use of Alternatives to Land Disposal," is that the alternative technology must provide for timely response and protection of human health and the environment. The policy also establishes three criteria in considering the use of alternative technologies: effectiveness, implementability and cost. At this time, conventional removal of contaminated soils and off-site disposal at a licensed landfill or treatment by thermal desorption technologies are believed to represent the most expeditious and cost-effective approaches that can be employed at the Site.

5. Applicable or relevant and appropriate requirements (ARARs)

40 CFR § 300.415(j) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) requires removal actions to attain ARARs under federal or state environmental or facility siting laws to the extent practicable considering the exigencies of the situation. Other state and federal advisories, criteria or guidance may, as appropriate, be considered in formulating the removal action. In determining whether compliance with ARARs is practicable, the EPA may consider factors such as the urgency of the situation or the scope of the removal action to be conducted.

Federal ARARs

- 40 CFR part 61, National Emission Standards for Hazardous Air Pollutants, establishes emission standards for specific hazardous contaminants including asbestos.
- 40 CFR part 257, Criteria for Classification of Solid Waste Disposal Facilities and Practices, establishes criteria to determine which solid waste disposal facilities and practices pose a reasonable probability of adverse effects on health and thereby constitute prohibited open dumps. This provides for protection of groundwater at disposal facilities.
- 40 CFR part 261, Identification and Listing of Hazardous Wastes defines those solid wastes that are subject to regulation as hazardous wastes under 40 CFR parts 262-265 and parts 124, 270 and 271.
- 40 CFR part 262, Standards Applicable to Generators of Hazardous Waste, establishes standards for generators of hazardous wastes.

- 40 CFR part 263, Standards Applicable to Transporters of Hazardous Wastes, establishes standards which apply to persons transporting hazardous waste within the U.S. if the transportation requires a manifest under 40 CFR part 262.
- 40 CFR parts 264 and 265, Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities, establishes minimum standards that define acceptable management of hazardous waste for owners and operators of treatment, storage or disposal facilities.
- 40 CFR part 268, Land Disposal Restrictions, establishes a timetable for restriction of land disposal of wastes and other hazardous materials.

State ARARs

- 2006 NDEQ Voluntary Cleanup Program Standards, establishes standards for soil and groundwater established by the NDEQ Voluntary Cleanup Program.
- Title 129 Nebraska Air Regulations, establishes regulations/standards for emission of air pollutants and odors, incinerators and air pollution prevention.
- Title 128 Nebraska Hazardous Waste Regulations establishes rules regarding the generation, transportation, treatment, disposal and storage of hazardous waste and material including waste burned in boilers, industrial furnaces and incinerators to protect Nebraska's natural resources including public land.
- Title 118 Nebraska Groundwater Protection, establishes regulations for protection of groundwater.
- Title 178 Nebraska Health and Human Services System Regulations, addresses well construction requirements, personnel qualifications and well abandonment requirements.
- Title 132 Integrated Solid Waste Management Regulations, establishes regulations for nonhazardous wastes that may be defined as special wastes.
- Nebraska Rev. State 76-2601 to 76-2603 Uniform Environmental Covenants Act, establishes regulations for placing an environmental covenant on a property.

6. Project schedule

Cleanup activities will be initiated at the Site as soon as possible following approval of the Enforcement Action Memorandum and entering into an Administrative Settlement Agreement and Order on Consent for Removal Action with the PRPs. On-site activities will take approximately 8 to 12 weeks and will be scheduled for the winter months to reduce chemical volatilization and air emissions.

7. Estimated costs

The costs associated with conducting this non-time-critical removal action will be approximately \$2,835,000.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Should these actions be delayed or not taken, contaminants from the Site will remain in surface and subsurface soils and continue to migrate to groundwater.

VII. OUTSTANDING POLICY ISSUES

The removal action involves no nationally significant or precedent-setting issues.

VIII. ENFORCEMENT

The PRPs identified with respect to the Site are Centel Corporation; the Nebraska Public Power District; and Black Hills/Nebraska Gas Utility Company, LLC. It is anticipated that the PRPs will enter into an Administrative Settlement Agreement and Order on Consent for Removal Action with the EPA which requires the PRPs to fund and carry out the removal actions described in this Enforcement Action Memorandum. The work will be performed under EPA oversight, pursuant to an EPA-approved work plan.

The cost of the removal action to be conducted by the PRPs is estimated at approximately \$2,835,000. The only EPA costs for this removal action are direct and indirect costs. The expenditure of extramural funds is not anticipated. The EPA direct and indirect costs, although cost recoverable, do not count toward the total removal project ceiling for this removal action.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Site, in the city of Norfolk, Madison County, Nebraska, and was developed in accordance with CERCLA, as amended and is not inconsistent with the NCP. This decision is based on the AR for the Site.

Conditions at the Site meet the NCP, 40 CFR § 300.415(b) criteria for a removal action and your approval is recommended for the proposed removal action.

Approved by:

Cecilia Tapia, Director

Superfund Division

Attachments:

- 1. Figure 1 Site Map
- 2. Figure 2 Onsite Soil Areas Exceeding PRGs
- 3. Figure 3 Benzene Isoconcentration Shallow Groundwater
- 4. Figure 4 Naphthalene Isoconcentration Map Shallow Groundwater
- 5. Figure 5 Benzene Isoconcentration Map Deep Groundwater
- 6. Figure 6 Naphthalene Isoconcentration Map Deep Groundwater

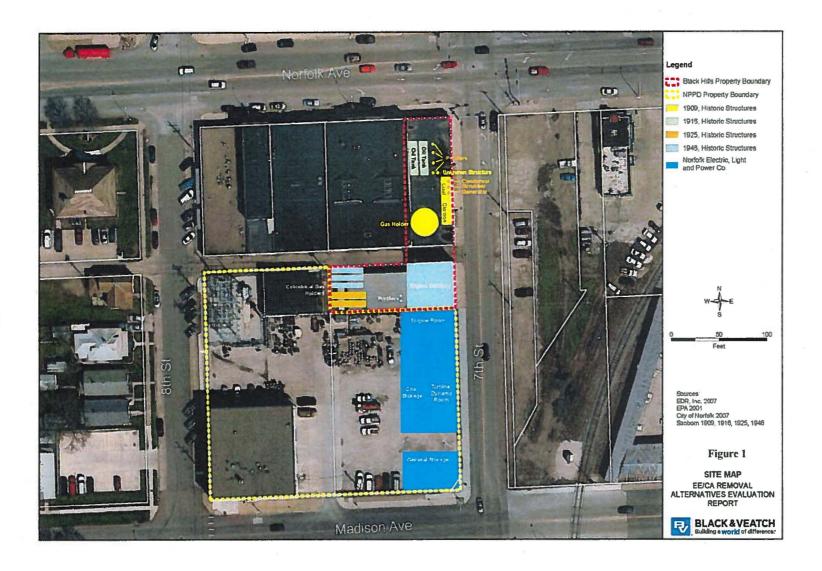


Figure 1

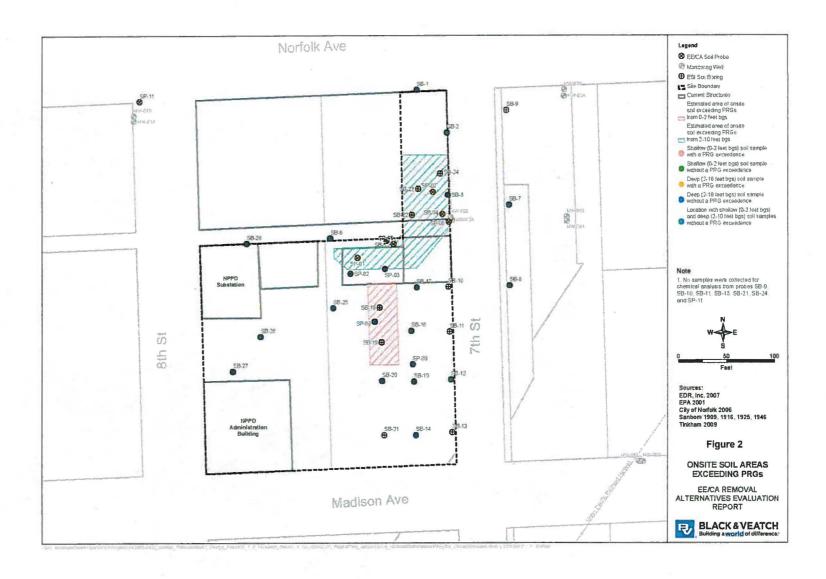


Figure 2

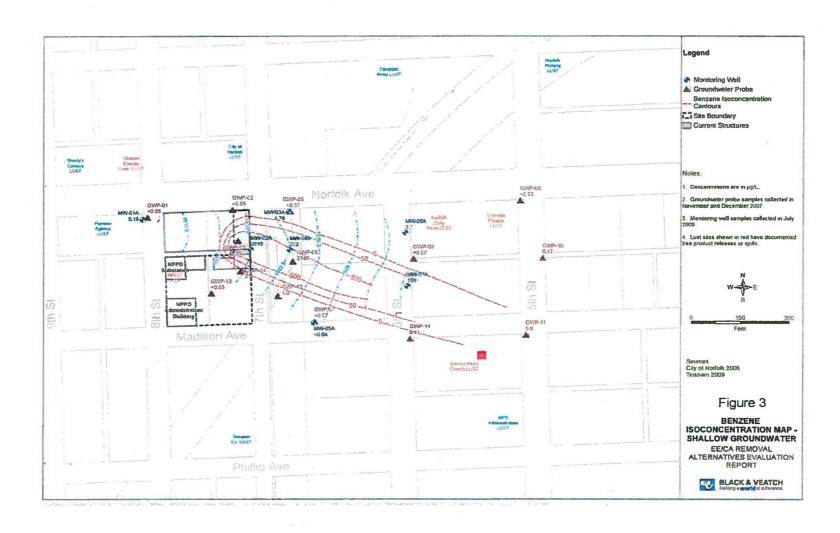


Figure 3

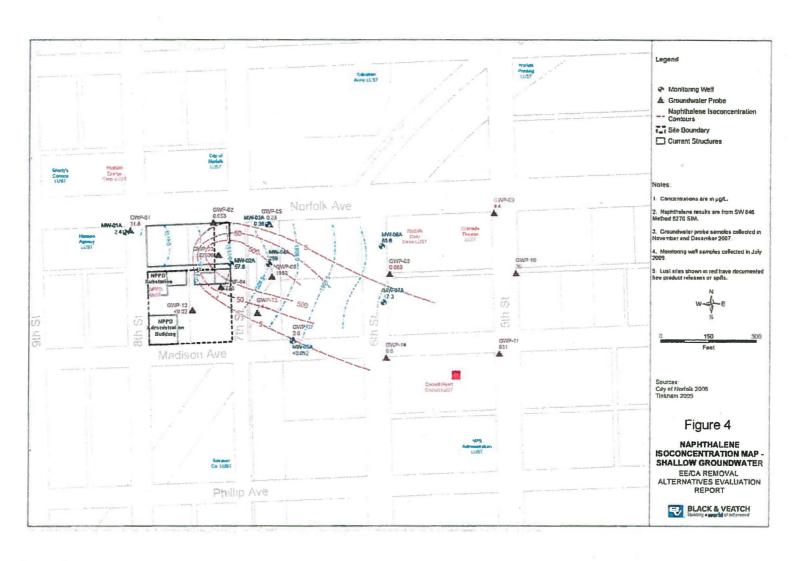


Figure 4

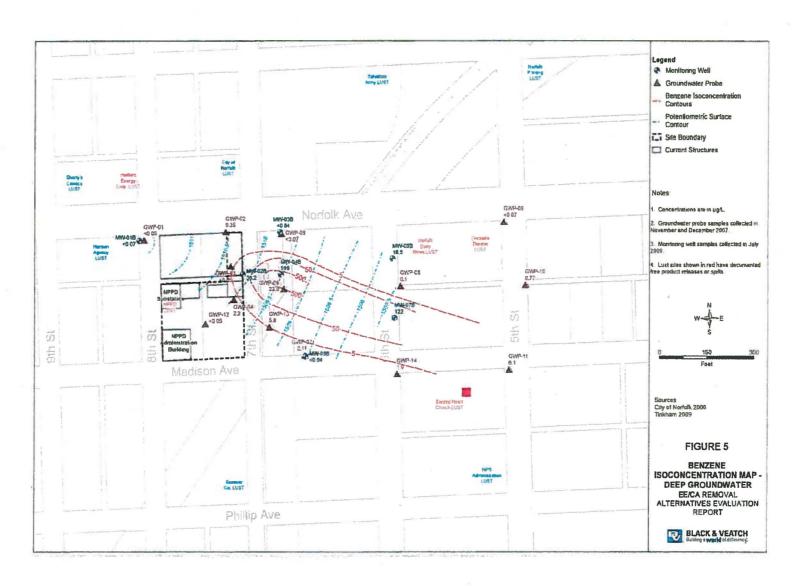


Figure 5

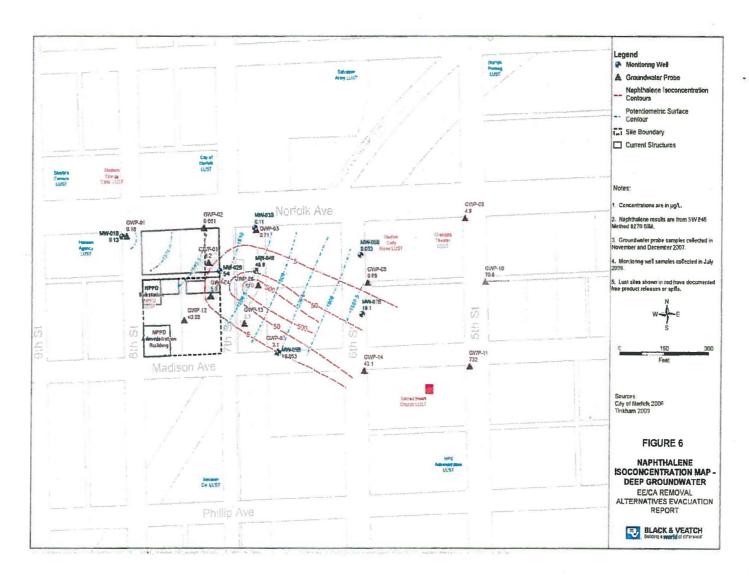
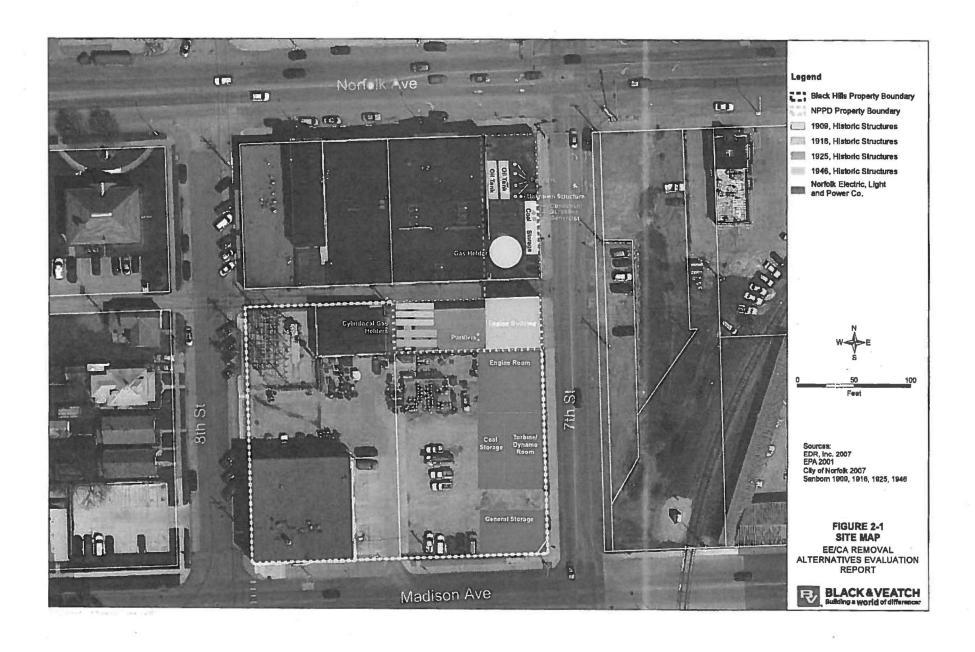


Figure 6

Appendix B

Site Figure



Appendix C-1

Soil, Arsenic, BTEX and PAH Analytical Data Summary

TABLE 4-2 SOIL ARSENIC, BTEX AND AND PAH ANALYTICAL DATA SUMMARY(1)

Probe	Sample Depth (feet)	Arsenic	Benzene	Ethylbenzene	Toluene	Total Xylenes	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Chrysene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenauthrene	Pyrene
	4-5	6.5J	0.09	2.08	0.102	13.6	13	6.34	7.41	4,87	2.21	2.86	1.22	3.82	7.25	12.1	0.795	24.6	31.4	10.7
SP-1	8.5-10	2.6J	1.91	29.7	1.34	77.7	40.4	8.46	24	12.7	5.33	7.16	1.87	9.70	17.4	30.6	1.82	77.1	81.7	34
	15-16	5.6J	29.4	109	7.93	218	92.4	19.7	38.7	18.7	9.39	12.2	4.68	16.3	31.5	55.9	3.26	373	177	44.3
SP-1 (Duplicate)	8.5-10	2.8J	2.23	29.3	1.38	76.8	90.8	15.8	45.5	17.3	8.98	12.5	4.36	15.1	30.1	58.1	3.02	139	148	48.l
	4-5	0.64J	< 0.0003	<0.00024	<0.00024	<0.00092	0.0545	0.0271	0.0224	0.0291	0.0252	0.0517	0.0238	0.024	0.0234	0.0318	0.0163	0.0381	0.0824	0.0383
SP-2	9-10	5.3J	0.114	5.36	0.0958	6.02	2.06	0.376	0.82	0.62	0.301	0.426	0.181	0.491	0.619	1,45	0.124	6.87	3.88	1.55
	12-12.5	3.6J	0.117	5.62	0.17	7.97	1.9	0.34	0.72	0.277	0.138	0.189	0.0697	0.258	0.477	1.05	0.0475	9.02	3.12	0.775
	4.5-5.5	4J	< 0.00037	< 0.00029	< 0.00029	0.0019	0.304	1.1	0.299	0.728	0.918	1,72	0.708	0.914	0.667	0.3	0.603	0,932	0.767	1.94
SP-3	8-8.6	4.73	0.0714	0.717	< 0.0144	1.09	1.93	0.416	0.801	0.601	0.264	0.413	0.135	0.447	0.997	1.52	0.098	7.28	3.71	1.4
	12-13	15.43	0.277	1.92	0.0352	2.96	0.577	0.23	0.303	0.19	0.192	0.3	0.131	0.198	0.335	0.38	0.115	3.42	1.47	0.514
	2-2.5	4.4J	0.0308	0.0931	< 0.0015	0.0761	13.8	2.94	14.6	4.62	2.6	4.51	2.14	3.94	31.1	12.7	1.36	45.7	43.5	15.7
SP-4	7-8	8.4J	<0.0873	5.06	<0.0692	6.78	31.8	15.2	77.2	43.5	26.6	38.2	12.1	31.8	87	69.9	10.6	493	331	105
	12.5-13	8.8J	0.434	2.84	0.164	3.44	17.4	3.59	6.79	5	2.93	4.2	1.32	3.96	8.44	9.90	1,1	55.2	34.9	10.8
	2.5-3.5	6.9J	1.3	7.39	0.695	14.3	32.3	5.31	11.8	6.39	3.42	5.11	1.51	5.1	10.7	16.3	1.29	89.9	53.5	15.1
SP-5	8-9	3.8J	41.6	88.5	9.39	146	143	21	49.3	29.5	15.7	21.7	6.17	22.9	46.8	70	6.11	385	221	67.3
	11-12	5.25	17.8	32.8	1.5	54	18.7	2.61	8.69	2.6	2.55	2.75	0.946	2.83	5.36	11.1	0.448	79.4	24.9	8.34
SP-6	3-4	7.1	<0.00037	0.0040	0.0046	0.0030	<0.0013	<0.0025	<0.0032	<0.0025	<0.0038	<0.0044	0.0025	<0.0019	<0.0044	<0.0019	<0.0038	<0.0019	<0.0038	<0.0032
35.50	9-10	6.4	0.0795	2.86	0.0403	3.86	18.3	2.62	10.9	8.2	6.18	9.47	3.24	6.68	16.5	13.2	2.8	11.8	42.7	20.4
SP-7	5-6	10.7J	45	116	37	118	628	215	332	206	114	174	79.2	160	298	484	47.8	1950	1230	449
SP-8	5-6	7.9	<0.00037	<0.00029	0.0068	0.0060	<0.0013	0.0641	0.0723	0.232	0.134	0.422	0.113	0.202	0.321	<0.0019	0.112	0.214	0.548	0.35
	7-8	5.7	<0.00035	<0.00028	0.0016	<0.0011	<0.00024	<0.00048	0.0020	<0.00048	<0.00073	<0.00085	<0.00048	<0.00036	<0.00085	<0.00036	<0.00073	<0.00036	0.0100	<0.00061
SP-9	3-4	7.1	0.0030	0.0026	0.0077	0.0103	0.542	0.386	0.73	1.72	1	2.25	0.329	1.29	2.88	0.482	0.461	2.63	4.09	2.37

Note:

Concentrations are in mg/kg.

Abbreviations:

Analyte was not detected at or above the method detection limit, which is presented.

Concentration qualified as estimated.

Appendix C-2

Groundwater, BTEX and PAH Analytical Data Summary

TABLE 4-3 GROUNDWATER BTEX AND PAH ANALYTICAL DATA SUMMARY

	i	Ī	RT	EXs		DUND							PAI				-		-		
											2		v	13	9			au			
							2		Brene	۰	enzo(b)fluoranthene	ylene	Benzo(k)fluoranthen		Dibenzo(a,h)anthracen			ndeno(1,2,3-cd)pyrene			
				2	(Jak	Pene	Acenaphthylene	9	Senzo(a)anthrace	enzo(a)pyrene	Jan	enzo(ghi)pery	luon		å.	爿	-	7,00	e e	Ē	1
ocation	-5	200	8	<u> </u>	Kylene (lotal)	cenaphthene	abyt	Anthracene	ş	(8)	ê	49)	O(k)	20	s)ozı	auth	5	5	뷸	henamhren	٠,
Loca	Depth	Benzene	Toluene	Ethylbenzene	Xyle	Acen	Acen	Anth	Benz	Benz	Berr	Benz	Benzo	Chrysene	暑	Fluoranthene	Juorene	nden	Naphthalent	hen	Pyrene
						C. C.	5000		Up	gradient	Samples	FRE	15 E 150	STEEL ST						£1900	de la constitución de la constit
GWP-I	9-13	<0.05	<0.07	2.3	9	0.48	0.12	0.25	0.050	<0.0082	0.23	0.28	<0.013	<0.0068	<0.0093	0.19	0.40	0.19J	31.8	1.5	0.23
GWP-I	17-21	3.0	0.96	124	392	0.25	0.063	0.28	0.068	0.018	0.22	0.26	<0.013	0.062J	<0.0088	0.32	0.24	0.18J	24.4	1.3	0.3
GWP-I MW-IA	26-30 10 3-19.8	<0.05	<0.07	0.16	0.48 22.8	0.15	0.015 <0.05[J	0,082 <0,051J	0.013 <0.0511	<0.0076	<0.20	<0.0060	<0.012	0.0064J <0.05iJ	<0.0087 <0.051	0.033	0.086 0.12J	<0.0056	0.18	0.29	0,03
MW-IB	23-27.8	<0.07	<0.08	<0.11	<0.33	<0.05	<0.05	<0.051	<0.05	<0.031	<0.05	<0.05	<0.05	<0.051	<0.05	0,12	<0.053	<0.05	2.4J 0.13	<0.051 <0.05	<0.05
		014	7/5			77.0		20083	On p	r Near SI	e Sampl						1130	2030	500	0000	
GWP-2	14-18	<0.05	<0.07	<0.08	<0.18	0.035	0,014	0.062	0.023	<0 0076	<0.014	0.26	<0.012	<0.0063	<0.0086	0.075	<0.041	0.173	0.053	0.24	0.09
GWP-2	21-25	0.15	<0.11	<0.15	<0.14	0.040	0.0087	0.12	0.027	<0 0077	0.21	0.26	<0.012	0.018J	<0.0088	11.0	0.044	0.181	0.094	0.32	0.09
GWP-3	33-37	0.35	0.54	1.3	1.4	0.024	<0 0083	0.040	0.011	<0.0077	<0.015	0.26	<0.012	<0.0064	<0.0088	0.034	<0.042	0.18J	0.061	0.11	0.02
GWP-3	14-18 26-30	186	978	2430 3000	2510 2930	2380 2120	562 346	962 802	602 459	338	280	192 178	165	502J 368J	<5.4	1330	1440	134J 118J	21500	4810	189
GWP-3	33-37	<0.05	<0.07	<0 08	<0.18	0.63	0.28	0.32	9.10	0.044	0.23	0.28	0.023	0.094J	<0.0088	0.29	0.40	0.193	8.2	3720	0.3
GWP-4	18-22	2.0	15.4	41.5	107	19.8	5.4	2.1	0.22	0.085	0.29	0.33	0.046	0.173	<0.0089	1.0	5.2	0.23J	220	11.1	0.8
GWF-4	18-22	1.9	13,6	32.5	75.8	20.5	5.0	2.1	0.18	0.069	0.27	0.30	0.038	0.16J	<0 00BS	0.98	5.5	0.213	218	11.3	0.8
(Duplicate) GWP-4	22-26	3.6	326	112	260	45.2	11.2	3.4	0.16	0.037	0,23	0.27	0.020	0.153	<0.0088	1.3	8.8	0.193	701	15.5	1.3
GWP-4	34-38	2.2	0.35	1.4	6.5	5.9	2.3	0,62	0.054	0.015	0.21	0.26	<0.012	0.049J	<0.0087	0,30	1.2	0.18J	5.0	2.4	0,3
GWP-5	15-19	<0 07	<0.08	<0.11	<0.33	0.18	0.074	0.22	0.016	<0.0080	0.21	<0 0062	<0.013	<0.0066	<0.0090	0.14	0.12	<0.0058	0.28	0.63	0.1
GWP-5	26-30	0,55	0.12	<0.11	0,4	2.3	1.2	3.2	0.083	<0 0076	0.20	0.26	<0.012	0.069J	<0.0087	2.3	0.94	0.183	0.45	10.1	3.1
GWP-5	32-36	<0.07	<0.08	<0.11	<0.33	0.52	0.43	0.56	0.11	0.029	0.24	0.27	0.017	0.093J	<0.0091	0.54	0.43	0.19J	0.71	2.3	0.7
GWP-6	15-19 26-30	2340 495	103 37.8	1150 859	1010 300	112	6.3	9.3	0.66	0.34	0.40	0.34	0.14	0.56J 0.23J	<0.0087	2.4	40,1	0.25J 0.19J	1990	54.4	5.1
GWP-6	32-36	22.9	19.5	508	214	253	14.2	15.7	1.7	1.1	0.75	0.59	0.45	1.5J	<0.0093	8.3	90.9	0.19J 0.42J	744 980	76.1 95.9	9.2
GWP-7	15-19	<0.07	<0.08	0.14	<0.33	1.6	1.0	2.0	1.3	0.81	0.68	0.48	0.25	1.01	<0.0086	3.4	1.6	0.353	2.0	9.7	4.4
GWP-7	26-30	<0.07	<0.08	<0.11	<0.33	2.0	1.2	2.4	1.5	0.91	0.66	0.53	0.40	LIJ	<0.0091	4.0	1.9	0.37J	2.5	10.4	5.0
GWP-7	32-36	0.11	<0.08	0.11	<0.33	0.41	0.16	0,23	0,047	0.015	0.21	0,26	<0.012	0.037J	<0.0086	0.18	0.23	0.183	3.1	0.75	0.2
GWP-12	14-18	<0.05	0.20	<0.08	<0.18	<0.02	<0.02	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	0.056J	<0.01	<0.01	<0.02	0.14	0,08
GWP-12	22-26	<0.05	0.19	<0.08	0.18	<0.02	<0.02	<0.01	<0.01	0.064J	0.17J	<0.02	<0.02	0.17J	<0.02	0.403	180.0	<0.01	<0.02	1.1	0.5
GWP-12 GWP-13	33-37 15-19	<0.05	0.19	0.26	0.36	<0.02 5.7J	0.097 2.5	<0.01 0.52J	0.26 <0.01	<0.113	0.303	<0.074	<0.02	<0.02	<0.02	0.72J 0.24J	0.13	0.049 <0.01	<0.02	0.93	1.0
GWP-13	26-30	6.6	6.3	3.8	45.3	28.33	17.2	1.9J	0.17	0.0693	0.193	0.052	<0.02	0.143	<0.02	0.663	8.2	0.040	4.9J	13.4	0.7
GWP-13	26-30	6.5	6.2	3.7	46	31.83	19.7	2.2.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	0.43J	9.1	<0.01	5.6.1	16.3	0.4
(Duplicate) GWP-13	33-37	5.8	0.41	0.13	7.5	7.73	6.4	0.35J	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	0.161	1.2	<0.01	1.13	0.49	0,18
MW-2A	16.5-26	3010J	493	1350	1560	56.93	2.6	16.7J	1.7	1.4	1.4	0.57	<0.052	2.1J	0.12	10.9	18.5J	0.43	57.BJ	37.63	8.4.
MW-2A	16.5-26	2550J	405	1240	1430	53.3J	2.5	19.63	2.0	1.43	1.5J	0.59J	<0.0531	1.9J	0.13J	12.7J	16.6J	0.443	55.7J	46.53	9.5
(Duplicate) MW-2B	29.5-34.3	38.2	322	264	274	30.33	20.8	21.8J	0.45	0.18	0.19	0.073	<0.052	O 28J	<0.052	9.5	21.0J	<0.052	5.4	42.5	7.6.
MW-3A	16.2-25.7	0.76	0.25	<0.1	1.5	3.1	2.0	3.3	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	1.6	1.4	<0.051	0.36	11.7	2.0
MW-3B	32.8-37.6	<0.04	<0.1	<0.1	<0.3	1.2	1.6	0.26J	<0.052	<0 052	<0.052	<0.052	<0.052	<0.052J	<0.052	0,37	0.873	<0.052	0.11	1.3	<0.05
MW-4A	15.1-24.6	332	51.2	291	288	126J	2.2	9,7J	0.055	<0.054	<0.054	<0.054	<0.054	<0.0541	<0.054	3.8	37.83	< 0.054	256J	37.IJ	4.9.
MW-4B	28-32.8	599	131	962	374	86.3J	4.5	11.0J	<0.054	<0.054	<0.054	<0.054	<0.054	<0.0543	<0.054	2.8	23.2J	<0.054	48.9J	38.9J	1.8.
MW-SA	10 4-19,9	<0.04	<0,1	1.0>	<0.3	<0.052	<0.052	<0.052J	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052J	<0.052	0.073	<0.0521	<0.052	<0.052	<0.052	<0.05
MW-5B	30.6-35.4	<0.04	<0.1	<0.1	0,32	0.81	0.055	<0.053J	<0.053	<0.053	<0.053	<0.053	<0.053	<0.0531	<0.053	11.0	0.223	<0.053	<0.053	0.41	<0.05
GWP-8	12-16	<0.07	0.17	0.12	0.39	0.050	0,0087	0.040	0.013	<0 0076	<0.014	<0.0059	<0.012	<0.0063	<0.0086	0,039	<0.041	<0.0055	0.089	0.13	0.04
GWP-8	28-32	0.10	0.13	0.32	0.38	0.60	0.16	0.58	0.24	0.082	0.26	0.28	0.040	0.213	<0.0087	0.77	0.52	0,19J	0.69	2.5	1.0
GWP-8	28-32	<0.07	0.12	<0.11	<0.33	0.46	0.15	0.51	0.24	0.092	0.26	0.27	0.046	0.223	<0.0085	0.67	0.42	0.19J	0.53	2.0	0.93
(Duplicate) GWP-II	49-53	0,66	<0.08	<0.11 <0.11	Ø 33	0.73	0.11	0.64	0.18	0.034	0.23	0.26	0.019	0.15J	<0.0086	0.83	0.59	0.18J	0.61	3.1	1.1
GWP-9	15-19	<0.05	0.15	0.40	0.47	1.9	0.27	1.1	0.15	0.021	0.22	0.26	0.017	0.14J	<0.0086	1.1	1.4	0.18J	4.4	6.0	1.2
GWT-9	28-32	<0 07	<0.08	0.32	0,42	2.0	0.43	1.3	0.35	0.14	0.15	0.058	0.068	0.31J	<0.0093	1.5	1.6	0.0363	4,9	6.7	2.0
GWP-9	49-53	<0.07	0.13	1.1	1.3	2.7	0.51	13	0.23	0.073	0.25	0.27	0.042	0.23J	<0.0087	1,3	1.8	0.18J	10.9	7.2	1.6
GWP-10	15-19	<0.07	<0.11	<0.15	<0.14	5.8	1.3	1.7	0.40	0.21	0.28	0.102	0.102	0.28	0.102	1.2	3.9	D.102	36.0	9.0	1.8
GWP-10	32-36	<0.07	11.0>	18.7	20.4	18.2	5.6	8.5	7.8	3.6	5.9	1.0	0,102	4.8	0.102	13.3	13.4	1.1	70,6	71.0	25.
GWP-10	59-63 12-16	<0.07 5.6	<0 11 9.5	5.7 77.3	<0.14 87.1	10.8	74.3	132	71.1	42.6	71.1	0.34 28.4	0.102	53.0	0.102	6.5	8.2 159	19.9	45.7 931	33.7 586	21
GWP-11	28-32	6.1	9,9	82.B	94	153	42.2	71.7	29.8	16,6	29.6	11.3	7	23.6	4	67.5	92.0	8.2	732	294	93
GWP-11	59-63	<0.07	5.9	36.3	39.7	68.5	19.7	43.9	12.6	8.2	15.2	5.5	4	12.3	4	35.8	44.0	3.8	327	141	47.
GWP-14	12-16	0.41	0.24	2.7	4.8	5.8.1	1.2	2.61	1.6	0.77J	1,2,3	0.40	<0 02	1.5J	<0.02	2.83	4.7	0.25	9.93	11.8	5.
GWP-14	28-32	1.9	0.72	10.3	19	17,23	3,4	7.0J	5.0	2.23	3.2J	0.90	<0 02	3.6J	<0.02	6.BJ	9.8	0.73	43.1J	36.6	12
GWP-14	49-53	0.23	0.19	2.8	43	4.43	1.0	2.0J	1.3	0,69J	1.01	0.39	<0.02	1.23	<0.02	2.3J	3.0	0.24	8,8J	8.9	4.
MW-6A	13 3-22.8	3.7	401	<0.1	0.37	6.2	0.16	0.333	0.14	0.090	0.10	<0.051	<0.051	<0.0513	<0.051	0.80	2.4J	<0.051	88.63	3.2	0.1
MW-6B	27.3-32.1 13.2-22.7	18.5	<0.1 6.5	<0.1 110	<0.3 85.9	<0.053 71.1J	<0.053	<0 053J 1,7J	<0.053	<0.053	<0.053 <0.05	<0.053	<0.053	<0.053J	<0.053 <0.05	0.095	<0.053J 6.2J	<0.053 <0.05	0.063 17.3	<0.053	<0.0
BASH TA	13.4044.1	_		_	-	_	3.8	4.0J	<0.052	<0.052	<0.052	<0.052	<0.052	<0.053	<0.052	0.61	12.1J	<0.052	19.1	21.2J	<0.0
MW-7A MW-7B	27.5-32 3	122	4.6	2.0	[61.R																
MW-7A MW-7B Abbreviations:		122	4.6	2.0	61.8	77.83					4.032	0,000	4.033	-0 032		0,01	1	1 0.000	1 12.1		
MW-7B	Analyte was	not det	ected at	or abov	ve the m						4.032	1 4.55	0.033	1 0 000		4,00	1	1 5.055	1 12-1	1 -1	
MW-7B		not det	ected at	or abov	ve the m						1 4.032	1 0.35	0.033	1 0000	,		1	1	1 15.1	1 21-20	

Appendix C-3 Indoor Air Analytical Data Summary

TABLE 4-7 INDOOR AIR ANALYTICAL DATA SUMMARY(1)

	Screening	AA-1	AA-2	AA-3	AA-4	AA-5	AA-6
Chemical	Level ⁽²⁾	(ambient)	(garage)	(office)	(office)	(garage)	(ambient)
1,1-Dichloroethylene	880	1.3	<0.6	<0.6	<0.51	<0.56	<0.51
2-Hexanone	130	<0.61	2.5	<0.61	<0.52	<0.57	<0.52
Acetone	140,000	99.0	90.7	41.1	1.4	2.8	<0.3
Benzene	1.6	1.1	1.2	0.98	0.67	1.4	<0.41
1,2,4-Trimethylbenzene	31	16.7	15.3	8.6	<1.6	<1.7	<1.6
cis-1,2-Dichloroethylene	None	35.0	<0.6	<0.6	<0.51	< 0.56	<1.51
Chlorobenzene	220	<0.7	<0.7	<0.7	< 0.59	2.8	< 0.59
Cyclohexane	26,000	<0.5	7.6	<0.5	0.97	1.6	<0.42
1,3-Dichlorobenzene	None	NR	NR	NR	<0.75	1.5	<0.75
Dichlorodifluoromethane	880	2.4	<0.74	4.0	<0.62	<0.69	< 0.62
Ethyl Acetate	None	9.2	<0.54	<0.54	1.1	<0.5	<0.46
Ethylbenzene	4.9	3.8	3.6	2.2	1.6	1.4	<0.55
n-Heptane	None	<0.61	<0.61	<0.61	<0.52	1.4	<0.52
Hexachlorobutadiene	0.56	<1.6	<1.6	<1.6	<1.4	2.7	<1.4
Methyl Chloride	390	2.8	<0.31	2.2	< 0.26	0.54	<0.26
Methyl Ethyl Ketone	22,000	45.5	125	5.3	<0.38	<0.41	<0.38
Methyl Isobutyl Ketone (MIBK)	13,000	4.5	3.3	2.5	<0.52	<0.57	<0.52
Methylene Chloride	260	120	< 0.53	<0.53	2.3	0.66	<0.44
Naphthalene	0.36	8.4	13.6	8.1	<1.7	<1.9	<1.7
n-Hexane	3,100	15.5	25.7	19.6	1.3	3.3	< 0.45
o-Xylene	3,100	4.9	4.4	4.1	1.3	1.6	< 0.55
p-Dichlorobenzene	1.1	<0.89	1.48	2.8	<0.75	1.7	<0.75
p-Ethyltoluene	None	5.2	<1.8	5.2	<1.6	<1.7	<1.6
Propylene	13,000	2.2	< 0.26	<0.26	<0.22	<0.24	<0.22
Tetrahydrofuran	None	46.0	140J	<0.44	<0.38	<0.41	<0.38
Toluene	22,000	7.8	10.5	5.9	4.3	1.9	<0.48
Trichloroethylene	6.1	73.8	<0.81	<0.81	<0.69	<0.76	<0.69
Trichlorofluoromethane	3,100	1.48	1.48	1.48	<0.69	0.98	< 0.69
Xylene (total)	440	15.3	15.3	11.7	6.4	6.5	<1.1
A blancaiction.					100000		

Abbreviation:

Analyte was not detected at or above the method detection limit, which is reported.

NR Analyte was not reported.

Notes: Concentrations are in micrograms per cubic meter. Bolded and shaded values are those that exceeded the screening level.

(2) Screening levels are EPA's Industrial Indoor Air Screening Levels, Revised December 2009. The most conservative screening level between the carcinogenic and non-carcinogenic values was used.

Appendix D Statement of Work

APPENDIX D

STATEMENT OF WORK FOR REMOVAL ACTION

IOWA-NEBRASKA LIGHT & POWER FORMER MANUFACTURED GAS PLANT NORFOLK, MADISON COUNTY, NEBRASKA

1. Purpose

1.1. The purpose of this Statement of Work (SOW) is to define the tasks, standards and guidelines which will be followed by the Respondents: (1) to remove, treat and/or properly dispose of contaminated surface and subsurface soil at the Site; (2) to implement Institutional Controls (ICs) that will minimize the potential for human exposure to contamination and/or protect the integrity of the removal action; (3) to conduct groundwater monitoring, and; (4) to conduct additional vapor intrusion assessment at residential and commercial properties adjacent to the Site following the removal of contaminated soils. In accomplishing the above tasks, the Respondents shall comply with the provisions of the attached Administrative Settlement Agreement and Order on Consent (Consent Order), this SOW, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the National Oil and Hazardous Substances Pollution Contingency Plan and EPA guidance (including, but not limited to the guidance documents referenced in this SOW).

2. Work to be Performed

- 2.1. Respondents shall perform the tasks set forth below in designing and implementing the work required for the Site. Respondents shall ensure the design and implementation of the removal action meets or exceeds the performance standards, specifications and applicable or relevant and appropriate requirements (ARARs) set forth below. The work to be completed under this SOW shall consist of the following four tasks:
 - Task I Preparation of Removal Action Work Plan (RAWP)
 - Task II Performance of Removal Action
 - Task III Preparation of Vapor Intrusion Investigation Work Plan
 - Task IV Reports

3. Task I – Preparation of Removal Action Work Plan (RAWP)

3.1. Within sixty (60) calendar days of the effective date of the Consent Order, the Respondents shall prepare and submit to the EPA for review and approval, a RAWP that shall describe the proposed tasks and schedules associated with excavation,

processing and treatment or off-site disposal of soils and any other FMGP structures, the establishment of ICs in accordance with the Nebraska Uniform Environmental Covenants Act and the establishment of a groundwater monitoring plan. The RAWP shall be prepared to require the response action to be performed in accordance with EPA standards set forth and shall include the following information:

- 3.1.1. A clear and concise description of roles, relationships and assignment of responsibilities among the Respondents, Project Coordinator, Quality Assurance Officer, Removal Supervisor and Removal Personnel;
- 3.1.2. A proposed schedule for the removal action that will require commencement within thirty (30) days of EPA's approval of the RAWP;
- 3.1.3. A detailed description of pre-removal activities including an on-site building inspection/assessment to determine if lead-based paint and/or asbestos materials are present within the structures and installation of additional monitoring wells to measure plume stability;
- 3.1.4. A detailed description of site preparation activities, including establishment of security and control, definition of clearing and grubbing limits, establishment of work and support areas and definition of decontamination areas; for the excavation of soils and structural materials at the Site, in general agreement with the conceptual excavation plan described in the Engineering Evaluation/Cost Analysis (EE/CA), a plan view which is included in the EE/CA;
- 3.1.5. A detailed plan for shoring/stabilization of adjacent commercial buildings as well as a plan to ensure the integrity of 7th Street and Norfolk Avenue is maintained;
- 3.1.6. Plans for conducting air monitoring for emissions during removal activities including contingency plans in the event that emissions exceed health-based standards, and plans for a water containment and treatment program to be used during Site excavation and material handling activities;
- 3.1.7. A description of proposed sampling and analytical procedures, including field screening and laboratory methods, to be conducted on soil samples collected during excavation activities;
- 3.1.8. A description of any traffic control plans with concurrence from the city of Norfolk, Nebraska, for any traffic disruption caused during the removal action;

- 3.1.9. A description of the methods proposed to be used to control odors, fugitive dust and/or volatilization of BTEXs and PAHs from excavation at the Site;
- 3.1.10. A description of the method of transportation for all contaminated materials, manifesting requirements in accordance with federal and state Department of Transportation regulations and material quantity accounting procedures. Disposal of contaminated materials must be in compliance with CERCLA's Off-Site Rule. In addition, Respondents shall provide written notice prior to any out-of-state shipment of waste material;
- 3.1.11. A detailed description of sampling and quality assurance/quality control (QA/QC) measures to be taken during the sampling activities;
- 3.1.12. A description of Site restoration requirements and completion of removal action. This description shall include all work necessary to restore property to its original pre-removal condition, including but not limited to the placement of clean fill, trees, reseeding or placement of sod on grass areas, and the replacement of driveways, walkways, streets, alleys, parking areas;
- 3.1.13. A plan for identifying and complying with applicable permitting requirements and environmental statutes;
- 3.1.14. A plan for community relations activities to be conducted before, during and following the completion of the removal action; and
- 3.1.15. A plan and schedule for implementing and conducting groundwater monitoring including the installation of additional monitoring wells.
- 3.2. As components of the RAWP, Respondents shall develop and submit the following project plans to support field activities:
 - Quality Assurance Project Plan (QAPP);
 - Sampling and Analysis Plan (SAP);
 - Field Sampling Plan (FSP); and
 - Health and Safety Plan (HASP)
 - 3.2.1. A Quality Assurance Project Plan (QAPP), which describes policy, organization, and functional activities and the data quality objectives and measures necessary to achieve adequate data for use in planning and documenting the removal action. The QAPP shall be prepared in accordance with EPA Requirements for Quality Assurance Project Plans, EPA QA/QR-5,

- EPA/240/B-01/003, or the most recent version of the guidance. The EPA will also consider modification to all previously approved QAPPs submitted, reviewed and approved for this Site.
- 3.2.2. The Sampling and Analysis Plan (SAP) shall provide a process for obtaining data of sufficient quality and quantity to satisfy data needs to characterize the Site. No field activities shall take place until EPA has reviewed and approved the SAP.
- 3.2.3. A Field Sampling Plan (FSP) which describes the estimated number, type, and location of samples to be collected at the Site to further define the extent of contamination or to confirm when certain actions have achieved the desired results, or to conduct tests on the material for treatability. Respondents shall include provisions for split samples provided to EPA, its contractors, or the state of Nebraska as appropriate. No less than five (5) working days notice must be given to EPA prior to collecting samples. The plan shall also include the types of analyses to be conducted for each sample and a brief rationale for collecting the sample and performing the analysis.

The FSP shall require that all sample collection and analysis be performed in compliance with EPA approved methods, including timing of analysis and documentation of sample collection, handling, and analysis. Any proposed sampling scheme shall be capable of producing representative and statistically valid samples, and generally conform to the following EPA guidance documents:

- 3.2.3.1. Compendium of ERT Field Analytical Procedures Office of Emergency and Remedial Response, Publication 9360.4-04, May 1992 or the most recent EPA guidance.
- 3.2.3.2. Compendium of ERT Waste Sampling Procedures Office of Solid Waste and Emergency Response, EPA/540/P-91/008, January 1991 or the most recent EPA guidance.
- 3.2.3.3. QA/QC Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures Office of Emergency and Remedial Response, EPA/540/G-90/004, April 1990 or the most recent EPA guidance.
- 3.2.3.4. Removal Program Representative Sampling Guidance, Volume 1: Soil- Office of Emergency and Remedial Response, publication 9360.4-10, November 1991 or the most recent EPA guidance.

- 3.2.3.5. Compendium of ERT Soil Sampling and Surface Geophysics
 Procedures Office of Solid Waste and Emergency Response,
 EPA/540/P-91/006, January 1991 or the most recent EPA guidance.
- 3.2.3.6. The FSP shall require that all samples be analyzed by a laboratory that participates in a quality assurance/quality control program equivalent to that specified in "USEPA Contract Laboratory Program Statement of Work for Analysis," Exhibit E, EPA SOW No. 788, July 1988 or the most recent EPA guidance.
- 3.2.4. The Health and Safety Plan shall be prepared in accordance with 40 C.F.R. Part 300.150 and all applicable OSHA requirements at 29 C.F.R. 1910. In addition to the requirements addressed in these regulations, this plan shall generally follow the guidelines established in EPA's "Standard Operating Safety Guides," Office of Emergency and Remedial Response, publication 9285.1-03, June 1992 or the most recent EPA guidance.

4. Task II - Performance of Removal Action

- 4.1. The Removal Action shall be conducted in accordance with the following performance standards, as set forth in the approved RAWP:
 - 4.1.1. Site preparation work, including building demolition, asbestos abatement, shoring/stabilization of adjacent commercial building, etc.;
 - 4.1.2. Excavation and off-site treatment or disposal of the contents and surrounding contaminated soils from the accessible FMGP structures as described in the EE/CA and located generally as indicated on the attached map, to remove potential source material to reduce the potential for continued release or leaching of impacts to soil and groundwater (the cleanup concentrations will be as set out in the attached table);
 - 4.1.3. Establish controls, designed and implemented in conjunction with current and future on-site and off-site conditions to prevent exposure to impacted soil and groundwater;
 - 4.1.4. If on-site staging of contaminated materials is necessary at any time during the removal activity, such material must be stored in such a manner as to prevent migration of contaminants;
 - 4.1.5. Establish groundwater monitoring program in accordance with the EE/CA.
 - 4.1.6. Utilize these cleanup levels for soil contaminants of concern:

	Commercial-Industrial	Construction Worker
:	Worker PRG	PRG
Contaminant of Concern	(0-2 feet) (mg/kg)	(2-10 feet) (mg/kg)
Acenaphthene	36,700	17,831
Anthracene	183,000	87,567
Arsenic	1.77	13.3
Benzene	5.96	108
Benzo(a)anthracene	2.34	21.3
Benzo(a)pyrene	0.234	2.13
Benzo(b)fluoranthene	2.34	21.3
Benzo(k)fluoranthene	23.4	213
Chrysene	234	2,130
Ethylbenzene	29.8	377
Fluoranthene	24,400	11,891
Fluorene	24,400	11,891
Indeno(1,2,3-cd)pyrene	2.34	21.3
Naphthalene	20	444
Pyrene	18,300	8,944
Toluene	50,200	19,885
Total Xylenes	3,010	2,642

5. Task III - Preparation of Vapor Intrusion Investigation Work Plan

- 5.1. Within thirty (30) calendar days following completion of the on-site removal/excavation activities the Respondents shall prepare and submit to the EPA for review and approval, a Vapor Intrusion Investigation Work Plan that shall describe the proposed tasks and schedules associated with further evaluation of the vapor intrusion pathway at residential and/or commercial properties near the Site.
- 5.2. The areas likely to be included in the vapor intrusion investigation will include, but are not limited to:
 - The adjacent properties west of the Black Hills/Nebraska Gas Utility Company building; and
 - Properties located between 7th and 5th Streets, bordered by Norfolk and Madison Avenues.

Additional properties may require sampling based on the initial results of the vapor intrusion investigation.

- 5.3 The Vapor Intrusion Investigation Work Plan shall be prepared to require the response action to be performed in accordance with the EPA standards set forth and shall include the following information:
 - 5.3.1 A detailed description of sampling and quality assurance/quality control (QA/QC) measures to be taken during the sampling activities;
 - 5.3.2 A detailed plan and schedule for conducting the vapor intrusion investigation.
- 5.4 As components of the Vapor Intrusion Investigation Work Plan, Respondents shall develop and submit the following project plans to support field activities:
 - QAPP;
 - SAP; and
 - FSP
 - 5.4.1 A QAPP, which describes policy, organization, and functional activities and the data quality objectives and measures necessary to achieve adequate data for use in planning and documenting the removal action. The QAPP shall be prepared in accordance with EPA Requirements for Quality Assurance Project Plans, EPA QA/QR-5, EPA/240/B-01/003, or the most recent version of the guidance. The EPA will also consider modification to all previously approved QAPPs submitted, reviewed and approved for this Site.
 - 5.4.2 The SAP shall provide a process for obtaining data of sufficient quality and quantity to satisfy data needs to characterize the Site. No field activities shall take place until the EPA has reviewed and approved the SAP.
 - 5.4.3 A FSP which describes the estimated number, type and location of samples to be collected at the Site to further evaluate the vapor intrusion pathway. Respondents shall include provisions for split samples provided to the EPA, its contractors, or the state of Nebraska as appropriate. No less than five (5) working days notice must be given to the EPA prior to collecting samples. The plan shall also include the types of analyses to be conducted for each sample and a brief rationale for collecting the sample and performing the analysis.

The FSP shall require that all sample collection and analysis be performed in compliance with EPA approved methods, including timing of analysis and documentation of sample collection, handling, and analysis.

6. Task IV - Reports

- 6.1. Respondents shall prepare the workplans and reports set forth in Task I, Task II and Task III to accomplish the design, implementation and monitoring of the Removal Action. In addition, the Respondents shall provide the following documentation:
- 6.2. Periodic Progress Reports: Unless a longer time period is approved in writing by the EPA, Respondents shall submit a monthly written progress report to EPA and NDEQ on or before the 10th day of each month concerning actions undertaken pursuant to this Order starting from the receipt of EPA's approval of the RAWP until termination of this Order. The periodic progress reports shall be of similar content as a Pollution Report (POLREP) as described in "Superfund Removal Procedures, Removal Response Reporting: POLREPS and OSC Reports", U.S. EPA, Office of Solid Waste and Emergency Response, Publication 9360.3-03, June 1994 or the most recent EPA guidance. At a minimum, the periodic progress reports shall include the following information:
 - 6.2.1. A summary of actions which have been taken to comply with the Consent Order during the reporting period;
 - 6.2.2. Copies of results of sampling and tests and all other raw data received by Respondents;
 - 6.2.3. A description of work planned for the month with scheduling related to such work and the overall project schedule for the removal;
 - 6.2.4. A summary of problems encountered and any anticipated problems, any actual delays and solutions developed and implemented to address any actual or anticipated problems or delays; and
 - 6.2.5. Summaries of all contacts with representatives of the local community, public interest groups, state and federal governments during the reporting period.
- 6.3. Final Removal Action Report. Within ninety (90) days after completion of all Removal Work required by the Consent Order, Respondents shall submit for EPA review and approval a Final Removal Action Report, summarizing the actions taken to comply with the Consent Order. The Final Removal Action Report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC

Reports." At a minimum, the Final Removal Action Report shall include the following information:

- 6.3.1.1. A description of the Site: the Site location, a facility description including past and present facility operations, existing structures, surrounding land use, site physiography, including topography, geology and hydrogeology;
- 6.3.1.2. A description of the work performed: a summary of all Site work performed including all removal activities, any investigative activities, all laboratory analysis reports, a summary of all analytical data associated with the investigation including quality control data, and a sample results table covering all sampling;
- 6.3.1.3. A description of the nature and extent of contamination addressed during removal activities;
- 6.3.1.4. Copies of all manifests reflecting off-Site shipment of hazardous substances except samples; and
- 6.3.1.5. Copies of any photographs taken during the removal action.
- 6.3.1.6. The following certification signed by a person who supervised or directed the preparation report:

"Under penalty of law, I certify that to the best of my knowledge, after appropriate inquires of all relevant persons involved in the preparation of the report, the information submitted is 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."

7. Schedule of SOW Submission

- 7.1. Submit Removal Action Work Plan within sixty (60) days after the Effective Date of the Consent Order.
- 7.2. Implement Removal Action Within thirty (30) days of receipt of written EPA approval of the RAWP.
- 7.3. Submit Vapor Intrusion Investigation Work Plan Within thirty (30) days following completion of on-site removal/excavation activities.
- 7.4. Implement Vapor Intrusion Investigation Within thirty (30) days following approval of the Vapor Intrusion Work Plan.

8. Reporting Schedule

- 8.1. Weekly progress reports shall be submitted during on-site removal activities.
- 8.2. Unless a longer time period is approved in writing by the OSC/Project Manager,
 Respondents shall submit a monthly written report to EPA and the NDEQ concerning
 actions undertaken pursuant to this Order starting from the receipt of EPA's approval of
 the RAWP until EPA Issues the Removal Certificate of Completion.
- 8.3. Submit Final Vapor Intrusion Investigation Report within sixty (60) days after all analytical data has been received.
- 8.4. Submit Removal Final Report within ninety (90) days after completion of all removal work.

Appendix E

Guidance Documents

GUIDANCE DOCUMENTS

"Compendiums of the Environmental Response Team's (ERT) Standard Operating Procedures (SOPs) for Sampling and Analytical Protocols," January 1991, OSWER Directives Nos. 9360.4-02, 9360.4-03, 9360.4-05, 9360.4-06, 9360.4-07, and 9360.4-08.

"Removal Program, Representative Sampling Guidance," November 1991, OSWER Directive No. 9360.4-10.

"Data Quality Objectives for the Superfund Process," September 1993, OSWER Directive No. 9355.9-01.

"EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations," October 1997, U.S. EPA, Quality Assurance Division, EPA QA/R-5.

"Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan and Data Validation Procedures," April 1990, OSWER Directive No. 9360.4-01.

"USEPA Contract Laboratory Program Statement of Work for Organic Analysis," August 1994, OLM03.1, EPA 540/R-94/073.

"National Oil and Hazardous Substances Contingency Plan: Final Rule," Vol. 55, No. 46 Fed Reg. 8666 (March 8, 1990).

"Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA," August 1993, EPA 540-R-93-057.

"USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," (June, 2008).

EPA 2002. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, *Draft Guidance for Evaluating the Vapor Intrusion and Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)*, November 2002.

EPA 2008. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, U.S. EPA's Vapor Intrusion Database: Preliminary Evaluation of Attenuation Factors, March 2008.

Appendix F-1

Proprietary Institutional Control for Site Property

Space Above for Recorder's Use Only
ENVIRONMENTAL COVENANT
This Environmental Covenant is entered into this day of, 2013, by and between Black Hills /Nebraska Gas Utility Company, LLC, a Delaware limited liability company, ("Grantor" and "Holder/Grantee"), and the United States Environmental Protection Agency (EPA) ("Agency") pursuant to the Nebraska Uniform Environmental Covenants Act, Neb. Rev. Stat. §§ 76-2601 to 76-2613.
RECITALS:
A. Grantor is the owner of certain real property located at 701 Norfolk Avenue, Norfolk, Madison County, Nebraska, which is legally described as follows (the "Property"):
Lots 1 and 2 of Chas. B. Durland's subdivision of Lots 1, 2, and 3 in Block 1 of Koenigstein's Third Addition to Norfolk, Madison County, Nebraska; and Lot 4, Block 1, Koenigstein's Third Addition to Norfolk, Madison County, Nebraska.
B. Holder/Grantee is Black Hills /Nebraska Gas Utility Company, LLC, a Delaware limited liability company, owner of the Property.
C. The Property was previously owned and operated by Centel Corporation, a Delaware corporation ("Centel") and its corporate predecessors used the Property for the production of manufactured gas from approximately 1902-1948.
D. The Property was identified as the site of potential releases of hazardous substances, pollutants and/or contaminants onto the ground and into the groundwater underlying the Property, and is referred to as the Iowa/Nebraska Light & Power Former Manufactured Gas Plant ("MGP") Superfund site, EPA ID No. NED986373678.
E. Pursuant to a, 2013 Administrative Settlement Agreement and Order on Consent issued by the U.S. Environmental Protection Agency ("EPA") under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and

Liability Act of 1980, 42 U.S.C. §§ 9604, 9607 and 9622, as amended ("CERCLA"), Centel conducted an environmental response project at the Property and certain adjoining areas. This environmental response project involved the removal and off-site disposal of the most heavily contaminated soils at the Property, however, residual contamination remains at various depths in the saturated soils beneath the Property and in the groundwater underlying the Property and certain adjoining areas. These contaminants include polynuclear aromatic hydrocarbon ("PAH") constituents; benzene, toluene, ethylbenzene and total xylenes ("BTEX") compounds; and/or contaminants from MGP-related processes; hereinafter known collectively as "Site Contaminants."

F. Grantor and Centel have entered into that certain Easement Agreement dated as of
, 20, and recorded in the Office of the Register of Deeds of Madison County,
Nebraska, on, 20, Book, Page, wherein Grantor granted to Centel
an easement for purposes of Centel completing the following: (a) carrying out
investigation and remediation work, engineering controls or institutional controls on the
Property in accordance with the Administrative Settlement Agreement and Order on
Consent For Removal Action and any such administrative or judicial orders and
agreements, including those arising from or as may be ordered by a local, state or federal
government, regulatory agency or authority; or (c) carrying out the intention of the
Allocation, Indemnification and Access Agreement dated as of, 20, by and
between Grantor and Centel.

- F. The Agency, as defined in Neb. Rev. Stat. § 76-2602, is the EPA.
- H. The administrative record for the Iowa/Nebraska Light & Power FMGP Superfund Site is available to the public and is located at the Norfolk Public Library, 308 Prospect Avenue, Norfolk, Nebraska, 68701, and at EPA's offices located at 11201 Renner Boulevard, Lenexa, Kansas, 66219.

NOW, THEREFORE,

Grantor hereby declares that the Property will hereinafter be bound by, held, sold and conveyed subject to the terms, conditions, obligations, and restrictions set forth herein, which will run with the land, in perpetuity, unless amended or terminated pursuant to Paragraph 10 below.

- 1. <u>Representations and Warranties.</u> Grantor warrants to the other signatories to this Covenant that:
 - a. The Grantor is the sole fee title owner of the Property;
 - b. The Grantor holds sufficient fee title to the Property to grant the rights and interests described in this Environmental Covenant free of any conflicting legal and equitable claims; and
 - c. The Grantor has identified all other persons holding legal or equitable interests, including but not limited to contract buyers, mortgage holders, other consensual lien holders, and lessees and secured their consent [by signature on this Environmental Covenant OR by a separate subordination and consent agreement attached as Exhibit ___ OR recorded at [doc/book/page]].

- 2. <u>Purpose</u>. The purpose of this Environmental Covenant is to ensure protection of human health and the environment by minimizing the potential for exposure to the contamination that remains on the Property and to ensure that the Property is not developed, used, maintained or operated in a manner which may result in unacceptable exposures to residual contamination.
- 3. Running with the Land. This Environmental Covenant is perpetual and conveys to the Holder/Grantee real property rights that run with the land, and gives to the Agency the right to enforce the activity and use limitations set forth in Paragraph 4 below. The terms, conditions, obligations, and limitations in this Environmental Covenant are binding on Grantor, its successors, assigns, and transferees, and all persons, corporations or other entities obtaining or succeeding to any right, title or interest in the Property. Acceptance of any conveyance, transfer, lease or sublease of the Property, or any part thereof, will bind each transferee, and it successors, transferees, heirs, and assigns to the terms, conditions, obligations, and limitations set forth herein during their respective period of ownership or occupancy, as applicable. Notice of any transfer of any interest in the Property must be promptly provided to EPA by the transferor. Grantor is bound by the terms, conditions, obligations and limitations in this Environmental Covenant only during its period of ownership or occupancy after the effective date. This Environmental Covenant in no way amends, modifies, limits, or releases Grantor or Centel from their duties and obligations, if any, under the above-referenced Administrative Settlement Agreement and Order on Consent For Removal Action.
- 4. <u>Activity and Use Limitations.</u> The Property is subject to the following activity and use limitations:
 - a. The Property shall not be used for residential, child care or school use.
 - b. Existing remedial systems to control and/or abate vapor intrusion of Site Contaminants into any existing enclosed buildings at the Property must be operated and maintained in accordance with standards for protectiveness of human health and the environment.
 - c. Any new construction of enclosed buildings at the Property must prevent, or include remedial systems to control and/or abate, vapor intrusion of Site Contaminants into any such new construction at the Property, and must be operated and maintained in accordance with standards for protectiveness of human health and the environment.
 - d. Extraction and use of the groundwater underlying the Property, except for investigation or remediation approved by EPA is prohibited.
 - e. Except where such excavation is necessary to prevent or address a substantial previously unknown threat to human health or the environment, including without limitation a natural gas pipeline leak, any digging, drilling, excavating, constructing, earth moving, or other land disturbing activities that occur below an existing building, including any repair, renovation or demolition of existing structures on the Property that extend beyond such depth, are prohibited without five days' prior written notice to EPA.

- 5. <u>Reserved Rights of Grantor.</u> Grantor hereby reserves unto itself and its successors all rights and privileges in and to the use of the Property which are not incompatible with the activity and limitations set forth above.
- 6. Enforcement. The terms of this Environmental Covenant may be enforced in a civil action for injunctive or other equitable relief by Holder/Grantee and by the Agency in accordance with Neb. Rev. Stat. § 76-2611. Failure to exercise such rights of enforcement will in no event bar subsequent enforcement and shall not be deemed a waiver of any right to take action to enforce any non-compliance. Nothing in this Environmental Covenant shall limit the Agency from exercising any authority under applicable law. The prevailing party in any action to enforce this Environmental Covenant is entitled to recover all costs of such action, including reasonable attorney fees and damages pursuant to Neb. Rev. Stat § 76-2611(d).
- 7. <u>Rights of Access.</u> Grantor and any then-current owner hereby grants to the Agency, their agents, contractors, and employees, the right of access to the Property to monitor compliance with the terms, conditions, obligations, and limitations of this Environmental Covenant. Nothing in this Environmental Covenant shall limit or otherwise affect the Agency's right of entry and access or the Agency's authority to take response actions under applicable law.
- 8. Notice Upon Conveyance. Each instrument hereafter conveying any interest in the Property or any portion of the Property, including but not limited to, deeds, leases, and mortgages, shall contain a notice of the activity and use limitations set forth in this Environmental Covenant, and provide the recording information for this Environmental Covenant. The notice shall be in substantially the form set forth below. Within thirty (30) days of the date any such instrument of conveyance is executed, the Grantor or thenowner must provide the Agency with a certified copy of said instrument and its recording reference in the Madison County Register of Deeds.

NOTICE: THE INT	TEREST CONVEYED HEREBY IS	SUBJECT TO AN
ENVIRONMENTA	L COVENANT DATED	, RECORDED IN
THE OFFICE OF T	HE REGISTER OF DEEDS OF MA	DISON COUNTY,
NEBRASKA ON _	, IN [DOCUMENT	, BOOK,
PAGE]. THE	ENVIRONMENTAL COVENANT	CONTAINS THE
FOLLOWING ACT	TIVITY AND USE LIMITATIONS:	

- a. The Property shall not be used for residential, recreational, child care or school use.
- b. Existing remedial systems to control and/or abate vapor intrusion of Site Contaminants into any existing enclosed buildings at the Property must be operated and maintained in accordance with standards for protectiveness of human health and the environment.
- c. Any new construction of enclosed buildings at the Property must prevent, or include remedial systems to control and/or abate, vapor intrusion of Site Contaminants into any such new construction at the Property, and must be operated and maintained in accordance with standards for protectiveness of human health and the environment.

- d. Extraction and use of ground water underlying the Property, except for investigation or remediation approved by EPA is prohibited.
- e. Except where such excavation is necessary to prevent or address a substantial previously unknown threat to human health or the environment, including without limitation a natural gas pipeline leak, any digging, drilling, excavating, constructing, earth moving, or other land disturbing activities that extend beyond the depth of ten feet below ground surface, or that occur below an existing building, including any repair, renovation or demolition of existing structures on the Property that extend beyond such depth, are prohibited without the five days' prior written notice to EPA.
- 9 <u>Waiver of Certain Defenses</u>. The parties bound by this Environmental Covenant hereby waive any defense to the enforcement of this Environmental Covenant based on laches, estoppel, statute of limitations, or prescription.
- 10. Amendment and Termination. Amendment or termination of this Environmental Covenant shall comply with Neb. Rev. Stat. § 76-2610. The terms of this Environmental Covenant may be modified or terminated by written consent of EPA, the then current fee simple title owner, and all original signatories unless exempted by Neb. Rev. Stat. § 76-2610. The amendment or termination is not effective until the document evidencing consent of all necessary persons is properly recorded. If not by consent, any amendment or termination of this Environmental Covenant shall be as provided by Neb. Rev. Stat. § 76-2609 and such additional terms as specified in this Environmental Covenant. As provided in Neb. Rev. Stat. § 76-2610(c), except for an assignment undertaken pursuant to a governmental reorganization, assignment of an environmental covenant to a new holder is an amendment.
- 11. <u>Severability</u>. If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.
- 12. <u>Captions</u>. The captions in this Environmental Covenant are for convenience and reference only and are not a part of this instrument and shall have no effect upon construction or interpretation.
- 13. <u>Governing Law.</u> This Environmental Covenant shall be governed by and interpreted in accordance with the laws of the State of Nebraska.
- 14. <u>Recordation</u>. Within thirty (30) days after the date of the Agency's approval of this Environmental Covenant, the Grantor shall record the Environmental Covenant, in the same manner as a deed to the Property, with the Madison County Register of Deeds.
- 15. <u>Effective Date.</u> The effective date of this Environmental Covenant is the date upon which the fully executed Environmental Covenant has been recorded as a deed record for the Property with the Madison County Register of Deeds.

- 16. <u>Distribution of Environmental Covenant.</u> Within sixty (60) days of the effective date, the Grantor shall distribute a file- and date-stamped copy of the recorded Environmental Covenant to each person identified in Neb. Rev. Stat. §§ 76-2607(a) and 76-2608(c), including but not limited to the City of Norfolk, Nebraska.
- 17. <u>Notice</u>. Unless otherwise notified in writing by the Agency, any document or communication required by this Environmental Covenant shall be submitted to:

If to the Agency:

Director
Superfund Division
U.S. Environmental Protection Agency
11201 Renner Boulevard
Lenexa, KS 66219

If to Grantor and Holder/Grantee:

Black Hills/Nebraska Gas Utility Company, LLC P. O. Box 1400 Rapid City, SD 57709-1400

[REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]
[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this instrument the day and year first above written.

FOR GRANTOR:

BLACK HILLS/NEBRASKA GAS UTILITY COMPANY, LLC

	By:		
	Title:		
GTATE OF			
STATE OF)		
COUNTY OF)		
The foregoing instrument v		wledged before me this _, the a Gas Utility Company	, by
limited liability company, having a			
forth above and that he/she signed authority and that the instrument w stated.	the instru	ment on behalf of the c	orporation by proper
		Notary Public	

IN WITNESS WHEREOF, the parties hereto have executed this instrument the day and year first above written.

FOR HOLDER/GRANTEE:

BLACK HILLS/NEBRASKA GAS UTILITY COMPANY, LLC

	By:		4	
	Title:			
STATE OF)			
COUNTY OF)			
The foregoing instrument, 2013, by		_, the	, t	ру
of Black Hi limited liability company, having forth above and that he/she signe authority and that the instrument stated.	g acknowled ed the instrur	ment on behalf o	neld the position of the corporation	n or title set on by prope
		Notary Public		

IN WITNESS WHEREOF, the parties hereto have executed this instrument the day and year first above written.

FOR AGENCY:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

	Ву:	Cecilia Tapia Director Superfund Division
STATE OF KANSAS)	
COUNTY OF WYANDOTTE	ć	
, 2013, by Cecilia Tap Protection Agency, Region 7, Super he position set forth above and that	ia, the I fund Di she sign ency by	owledged before me this day of Director of the United States Environmental vision, having acknowledged that she holds ned the instrument on behalf of the United proper authority and that the instrument was a stated.
		Notary Public

Appendix F-2

Proprietary Institutional Control for Property Not Owned By Respondents

Space Above for Recorder's Use Only

ENVIRONMENTAL COVENANT

This Environmental Covenant is entered into by and between [individual landowner], as Grantor, and ______, Holder/Grantee, and U.S. Environmental Protection Agency (EPA) ("Agency") pursuant to the Nebraska Uniform Environmental Covenants Act, Neb. Rev. Stat. §§ 76-2601 to 76-2613.

RECITALS:

A. Grantor is the owner of certain real property located at 701 Norfolk Avenue, Norfolk, Madison County, Nebraska, legally described as follows:

[legal description],

the "Property."

- B. Holder/Grantee is [name each person signing the covenant as a holder/grantee and describe their capacity. See Neb. Rev. Stat. § 76-2603 for description of persons and entities who may be holders and name their rights.]
- C. The Property is adjacent to property known as the Iowa-Nebraska Former Manufactured Gas Plant Site, which was used for the production of manufactured gas (1902-1948), EPA ID No. NED986373678, ("Source Area"). The Source Area and was the site of releases of certain hazardous substances, pollutants or contaminants which have come to be located on the Property.
- E. The Property is the subject of an environmental response project or action pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601 et. seq. ("CERCLA").
- G. The Agency, as defined in Neb. Rev. Stat. § 76-2602, the EPA.

H. The selected environmental response project or action is documented in
The administrative record for the Iowa/Nebraska Light &
Power FMGP Site is available to the public and is located at the Norfolk Public Library,
308 Prospect Avenue, Norfolk, Nebraska, 68701, and at EPA's offices located at 11201
Renner Boulevard, Lenexa, Kansas 66219.

NOW, THEREFORE,

Grantor hereby declares that the Property will hereinafter be bound by, held, sold and conveyed subject to the terms, conditions, obligations, and restrictions set forth herein, which will run with the land, in perpetuity, unless amended or terminated pursuant to Paragraph 11 below.

- 1. <u>Representations and Warranties.</u> Grantor warrants to the other signatories to this Covenant that:
 - a. [He/She] is the sole fee title owner of the Property;
 - b. [He/She] holds sufficient fee title to the Property to grant the rights and interests described in this Environmental Covenant free of any conflicting legal and equitable claims; and
 - c. [He/She] has identified all other persons holding legal or equitable interests, including but not limited to contract buyers, mortgage holders, other consensual lien holders, and lessees and secured their consent [by signature on this Environmental Covenant OR by a separate subordination and consent agreement attached as Exhibit ____ OR recorded at [doc/book/page]].
- 2. <u>Purpose</u>. The purpose of this Environmental Covenant is to ensure protection of human health and the environment by minimizing the potential for exposure to the contamination that remains on the Property and to ensure that the Property is not developed, used, maintained or operated in a manner which may result in unacceptable exposures to residual contamination.
- 3. Running with the Land. This Environmental Covenant is perpetual and conveys to the Holder/Grantee real property rights that run with the land, and gives to the Agency the right to enforce the activity and use limitations set forth in Paragraph 4 below. The terms, conditions, obligations, and limitations in this Environmental Covenant are binding on Grantor, its successors, assigns, and transferees, and all persons, corporations or other entities obtaining or succeeding to any right, title or interest in the Property. Acceptance of any conveyance, transfer, lease or sublease of the Property, or any part thereof, will bind each transferee, and it successors, transferees, heirs, and assigns to the terms, conditions, obligations, and limitations set forth herein during their respective period of ownership or occupancy, as applicable. Notice of any transfer of any interest in the Property must be promptly provided to the Agency by the transferor. Grantor is bound by the terms, conditions, obligations and limitations in this Environmental Covenant only during his/her period of ownership or occupancy after the effective date.

This Environmental Covenant in no way amends, modifies, limits, or releases Grantor from his/her duties and obligations, if any, under the above-referenced Administrative Settlement Agreement and Order on Consent.

- 4. <u>Activity and Use Limitations.</u> The Property is subject to the following activity and use limitations:
 - a. Existing remedial systems to control and/or abate vapor intrusion of Site Contaminants into any existing enclosed buildings at the Property must be operated and maintained in accordance with standards for protectiveness of human health and the environment.
 - b. Any new construction of enclosed buildings at the Property must prevent, or include remedial systems to control and/or abate, vapor intrusion of Site Contaminants into any such new construction at the Property, and must be operated and maintained in accordance with standards for protectiveness of human health and the environment.
 - c. Extraction and use of the ground water underlying the Property, except for investigation or remediation approved by EPA is prohibited.
 - d. Except where such excavation is necessary to prevent or address a substantial previously unknown threat to human health or the environment, including, without limitation, a natural gas pipeline leak, any digging, drilling, excavating, constructing, earth moving, or other land disturbing activities that extend beyond the depth of ten feet below ground surface, including any repair, renovation or demolition of existing structures on the Property that extend beyond such depth, are prohibited without five days' prior written notice to EPA.
- 5. Reserved Rights of Grantor. Grantor hereby reserves unto [himself/herself] and [his/her] successors all rights and privileges in and to the use of the Property which are not incompatible with the activity and limitations set forth above.
- 6. <u>Compliance Reporting.</u> One year from the effective date of this Environmental Covenant, and on an annual basis thereafter until such time as this Environmental Covenant is terminated, the then-current fee simple owner of the Property shall submit to the Agency written documentation verifying that the activity and use limitations remain in place and are being complied with. Any signatory to this Environmental Covenant shall notify the Agency as soon as possible of conditions that would constitute a breach of the activity and use limitations.
- 7. Enforcement. This Environmental Covenant may be enforced in a civil action for injunctive or other equitable relief by Holder/Grantee and by each of the Agency in accordance with Neb. Rev. Stat. § 76-2611. Failure to exercise such rights of enforcement will in no event bar subsequent enforcement and shall not be deemed a waiver of any right to take action to enforce any non-compliance. Nothing in this Environmental Covenant shall limit the Agency from exercising any authority under applicable law. The prevailing party in any action to enforce this Environmental Covenant is entitled to recover all costs of such action, including reasonable attorney fees

and damages for violations of this Environmental Covenant or for any injury to the remedial action required by the Agency, to the public or to the environmental protected by this Environmental Covenant.

- 8. <u>Rights of Access.</u> Grantor and any then-current owner hereby grants to the Holder/Grantee and/or the Agency, their agents, contractors, and employees, the right of access to the Property to monitor compliance with the terms, conditions, obligations, and limitations of this Environmental Covenant. Nothing in this Environmental Covenant shall limit or otherwise affect the Agency's right of entry and access or the Agency's authority to take response actions under applicable law.
- 9. Notice Upon Conveyance. Each instrument hereafter conveying any interest in the Property or any portion of the Property, including but not limited to, deeds, leases, and mortgages, shall contain a notice of the activity and use limitations set forth in this Environmental Covenant, and provide the recording information for this Environmental Covenant. The notice shall be in substantially the form set forth below. Within thirty (30) days of the date any such instrument of conveyance is executed, the Grantor or thenowner must provide the Agency with a certified copy of said instrument and its recording reference in the Madison County Register of Deeds.

NOTICE: THE INTEREST	CONVEYED HEREBY	IS SUBJECT TO AN
ENVIRONMENTAL COV	ENANT DATED	, RECORDED IN
THE OFFICE OF THE RE	GISTER OF DEEDS OF P	LATTE COUNTY,
NEBRASKA ON	, IN [DOCUMENT	, BOOK,
PAGE]. THE ENVIR	ONMENTAL COVENAN	IT CONTAINS THE
FOLLOWING ACTIVITY	AND USE LIMITATIONS	S:

- a. Existing remedial systems to control and/or abate vapor intrusion of Site Contaminants into any existing enclosed buildings at the Property must be operated and maintained in accordance with standards for protectiveness of human health and the environment.
- b. Any new construction of enclosed buildings at the Property must prevent, or include remedial systems to control and/or abate, vapor intrusion of Site Contaminants into any such new construction at the Property, and must be operated and maintained in accordance with standards for protectiveness of human health and the environment.
- c. Extraction and use of ground water underlying the Property, except for investigation or remediation approved by EPA or NDEQ, is prohibited.
- d. Except where such excavation is necessary to prevent or address a substantial previously unknown threat to human health or the environment, including, without limitation, a natural gas pipeline leak, any digging, drilling, excavating, constructing, earth moving, or other land disturbing activities that extend beyond the depth of ten feet below ground surface, including any repair, renovation or demolition

of existing structures on the Property that extend beyond such depth, are prohibited without five days' prior written notice to EPA.

- 10. <u>Waiver of Certain Defenses</u>. The parties bound by this Environmental Covenant hereby waive any defense to the enforcement of this Environmental Covenant based on laches, estoppel, statute of limitations, or prescription.
- 11. <u>Amendment and Termination.</u> Amendment or termination of this Environmental Covenant shall comply with Neb. Rev. Stat. § 76-2610. The terms of this Environmental Covenant may be modified or terminated by written consent of the Director of the NDEQ, the then current fee simple title owner, and all original signatories unless exempted by Neb. Rev. Stat. § 76-2610. The amendment or termination is not effective until the document evidencing consent of all necessary persons is properly recorded. If not by consent, any amendment or termination of this Environmental Covenant shall be as provided by Neb. Rev. Stat. § 76-2609 and such additional terms as specified in this Environmental Covenant. As provided in Neb. Rev. Stat. § 76-2610(c), except for an assignment undertaken pursuant to a governmental reorganization, assignment of an environmental covenant to a new holder is an amendment.
- 12. <u>Severability</u>. If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.
- 13. <u>Captions</u>. The captions in this Environmental Covenant are for convenience and reference only and are not a part of this instrument and shall have no effect upon construction or interpretation.
- 14. <u>Governing Law.</u> This Environmental Covenant shall be governed by and interpreted in accordance with the laws of the State of Nebraska.
- 15. <u>Recordation</u>. Within thirty (30) days after the date of the Agency's approval of this Environmental Covenant, the Grantor shall record the Environmental Covenant, in the same manner as a deed to the Property, with the Madison County Register of Deeds.
- 16. <u>Effective Date.</u> The effective date of this Environmental Covenant is the date upon which the fully executed Environmental Covenant has been recorded as a deed record for the Property with the Madison County Register of Deeds.
- 17. <u>Distribution of Environmental Covenant.</u> Within sixty (60) days of the effective date, the Holder/Grantee shall distribute a file- and date-stamped copy of the recorded Environmental Covenant to each person identified in Neb. Rev. Stat. §§ 76-2607(a) and 76-2608(c), including but not limited to the City of Norfolk, Nebraska.
- 18. <u>Notice</u>. Unless otherwise notified in writing by the Agency, any document or communication required by this Environmental Covenant shall be submitted to:

If to the Agency:		
Director Superfund Division U.S. Environmental I 11201 Renner Bouler Lenexa, KS 66219	_	ncy
If to Grantor:		
Resident or Occupan [Property address]	t of:	
If to Holder/Grantee:		
[Name] [address]		
	ACKNOW	VLEDGEMENTS
GRANTOR:		
	t, has caused th	ne owner of the Property [and the Holder] of his Environmental Covenant to be executed on 01
	Ву:	[Name of Grantor]
		[Title]
STATE OF NEBRASKA COUNTY OF MADISON))	
		owledged before me this day of ame], having acknowledged that he/she signed
		for the purpose therein stated.

	93545
Notary Public	

FOR HOLDER/GRANTEE [If different from the Grantor]:

IN WITNESS WHEREOF, Holder/Grante this Environmental Covenant to be executed	te of this Environmental Covenant, has caused on this day of, 20
Ву:	[Name of Holder/Grantee]
	[Title]
STATE OF	
COUNTY OF	
The foregoing instrument was acknowledge, 201_, by	wledged before me this day of, who acknowledged said Environmental
covenant on bonair of Holder/Grantee.	
	Notary Public

AGENCY:

IN WITNESS WHEREOF, the United States Environmental Protection Agency (EPA), as an Agency defined in Neb. Rev. Stat. § 76-2602(2), is not a party to this Environmental Covenant and does not acquire or assume any liability, obligation, or responsibility under state or federal law by virtue of signing this Environmental Covenant, nor is EPA a Holder under Neb. Rev. Stat. §§ 76-2602(6) and 76-2603(a).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

	By:
STATE OF KANSAS)
COUNTY OF JOHNSON)
, 201_, by Protection Agency, Region 7, holds the position set forth abo United States Environmental F	ent was acknowledged before me this day of, the Director of the United States Environmental Superfund Division, having acknowledged that he/she ove and that he/she signed the instrument on behalf of the Protection Agency by proper authority and that the entity for the purpose therein stated.
	Notary Public

IN THE MATTER OF Iowa-Nebraska Light & Power; Centel Corporation and Black Hills/Nebraska Utility Company, LLC and Nebraska Public Power District, Respondents Docket No. CERCLA-07-2013-0004

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing Order was sent this day in the following manner to the addressees:

Copy by email to Attorney for Complainant:

peterson.barbara@epa.gov

Copy by First Class Mail to Respondent:

Scott A Young Polsinelli Shughart 6201 College Blvd., Suite 500 Overland Park, Kansas 55211

Sarah Sullivan Stinson Morrison Hecker LLP 1201 Walnut, Suite 2900 Kansas City, Missouri 64106

Brian Brislen Lamson, Dugan & Murray LLP 10306 Regency Pkwy Dr. Omaha, Nebraska 68114

Dated: 8 3013

Kathy Robinson

Hearing Clerk, Region 7