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UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 4

SITE: Goodloe Elem School
BREAK: 10.11
OTHER: _____

IN THE MATTER OF:
Goodloe Elementary School Site
Owensboro, Daviess County, Kentucky

ADMINISTRATIVE SETTLEMENT
AGREEMENT AND ORDER ON
CONSENT FOR REMOVAL ACTION

Atmos Energy Corporation,

Respondent.

U.S. EPA Region 4
Docket No. CERCLA-04-2008-3757

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



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APPENDIX A IS THE ACTION MEMORANDUM.

APPENDIX B IS THE MAP OF THE SITE.

APPENDIX C IS THE WORK PLAN.

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 Atmos Energy Corporation ("Respondent"). This Settlement Agreement provides for the performance of a removal action by Respondent and the reimbursement of certain response costs incurred by the United States at or in connection with the property located at 3rd and Elm Streets in Owensboro, Daviess County, Kentucky, the "Goodloe Elementary School Site" or the "Site."

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 Commonwealth of Kentucky (the "Commonwealth") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains 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. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it 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 upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Settlement Agreement.

6. Respondent is jointly and severally liable for carrying out all activities required by this Settlement Agreement.

7. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.

III. DEFINITIONS

8. Unless otherwise expressly provided herein, 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. "Action Memorandum" shall mean the EPA Enforcement Action Memorandum relating to the Site signed by the Regional Administrator, EPA Region 4, or his/her delegate, and all attachments thereto. The "Action Memorandum" is attached as Appendix A.

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

c. "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.

d. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXX.

e. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

f. "EPPC" shall mean the Kentucky Environmental and Public Protection Cabinet and any successor departments or agencies of the State.

g. "Future Response Costs" shall mean all costs, beginning on the Effective Date, 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 Paragraph 24 (costs and attorneys' fees and any monies paid to secure access, including the amount of just compensation), and Paragraph 34 (emergency response), and Paragraph 60 (work takeover). Future Response Costs shall also include all Interim Response Costs that have accrued pursuant to 42 U.S.C. § 9607(a) during the period from December 6, 2007, to the Effective Date.

h. "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.

i. "Interim Response Costs" shall mean all costs, including direct and indirect costs, a) paid by the United States in connection with the Site between December 6, 2007, and the Effective Date, or b) incurred prior to the Effective Date, but paid after that date.

j. "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.

k. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

l. "Parties" shall mean EPA and Respondent.

m. "Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through December 6, 2007.

n. "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).

o. "Respondent" shall mean Atmos Energy Corporation.

p. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

q. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXIX). In the event of a conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

r. "Site" shall mean the Goodloe Elementary School Superfund Site, encompassing approximately three (3) acres, located at 3rd and Elm Streets in Owensboro, Daviess County, Kentucky, and depicted generally on the map attached as Appendix B.

s. "Commonwealth" shall mean the Commonwealth of Kentucky.

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); and 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

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

v. "Work Plan" shall mean the Removal Action Work Plan and schedule for implementation of the removal action, as set forth in Appendix C to this Settlement Agreement, which has been reviewed and approved by EPA and the Commonwealth, and any modifications made thereto in accordance with this Settlement Agreement.

IV. FINDINGS OF FACT

9. For purposes of this Settlement Agreement, EPA finds that:

a. The Site is located at the corner of 3rd and Elm Streets in Owensboro, Daviess County, Kentucky, and currently consists of the former Goodloe Elementary School property, including a 0.8-acre vacant lot. The surrounding land use is mixed residential and commercial. A coal gasification plant operated at the Site from approximately 1889 until the mid-1930s. A school (known by various names, including the Negro School, Colored School Western Colored School, and Western School) was located adjacent to the former gas plant as early as 1882. The school and the former gas plant became the Goodloe Elementary School in 1962. The Site is now owned by Respondent.

b. Owensboro Gas Light Company (later Owensboro Gas Company) was the original owner and operator of the coal gasification plant at the Site. It merged with Western Kentucky Gas Company in 1945. Respondent is the successor to Western Kentucky Gas Company.

c. A Site Investigation was conducted jointly by EPA and the Commonwealth in 1984, followed by a Site Investigation Prioritization in October 1993. The 1984 Site Investigation concluded that detectable levels of polynuclear aromatic hydrocarbons (PAHs) were found in the west lot. However, a health assessment conducted in May 1984 concluded that although PAH contamination existed in the west lot, there was insufficient evidence of a health hazard such that no restrictions of the west lot were required.

d. The 1993 Site Investigation Prioritization concluded that the Site did not warrant further action under CERCLA, but made the following recommendations: (1) direct contact with the soil in the west lot should be avoided; (2) a no trespassing sign should be placed at the 3rd Street entrance to the lot; and (3) persons performing grounds keeping services on the west lot should be provided with breathing filters.

e. Additional sampling was conducted at the Site in September 2006 by the EPPC, Department of Environmental Protection, Division of Waste Management. Benzo(a)pyrene was detected at the Site at levels as high as 19,000 parts per billion (ppb).

f. Benzo(a)pyrene is a probable human carcinogen. Exposed soil could become airborne, impacting nearby properties.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

10. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

a. The Goodloe Elementary School 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. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of the response action and for response costs incurred and to be incurred at the Site. Respondent is the successor to the "owners" and/or "operators" of the facility at the time of disposal of hazardous substances at the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

e. The conditions described in Paragraph 9(c)-(e) of the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

f. 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 considered consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

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 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**

11. Respondent has notified EPA that Linebach Funkhouser, Inc. shall serve as Respondent's primary contractor at the Site, and EPA has approved the use of such contractor. Respondent shall 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 Respondent. If EPA disapproves of a selected contractor, Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within 10 days of EPA's disapproval.

12. Within 30 days after the Effective Date, Respondent shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondent required by this Settlement Agreement and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. 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 Coordinator. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within 10 days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondent.

13. EPA has designated Art Smith of the Emergency Response and Removal Branch, Region 4, as its On-Scene Coordinator ("OSC"). Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to the OSC via e-mail at the following address:

Art Smith
U.S. EPA On-Scene Coordinator
Romano L. Mazzoli Federal Building, Rm. 172A
600 Dr. MLK Jr. Place
Louisville, KY 40202
Office: (502) 582-5161
Cell: (502) 905-7559
Fax: (502) 582-5268
smith.art@epa.gov

14. EPA and Respondent shall have the right, subject to Paragraph 12, to change their respective designated OSC or Project Coordinator. Respondent shall notify EPA 10 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

VIII. WORK TO BE PERFORMED

15. Respondent shall perform, at a minimum, all actions necessary to implement the Action Memorandum (set forth in Appendix A) as set forth in the EPA- and EPPC-approved Work Plan (set forth in Appendix C). The actions to be implemented as set forth in the Work Plan include the following: (1) developing and implementing an air monitoring and emergency contingency plan; (2) developing and implementing a Site Security Plan; (3) developing and implementing an extent of contamination and post-excavation sampling plan; (4) collecting and analyzing surface and subsurface soil samples for delineation, disposal, and confirmation purposes; (5) capping the area containing benzo(a)pyrene above the 6,200 ppb removal action level with paving or other suitable materials and properly disposing of any removed soils; (6) excavating any isolated contamination at levels above 6,200 ppb outside the planned cap area to a depth of two feet and, if contamination remains at or above the removal action level of 6,200 ppb, placing warning marker material at the bottom of the excavated area and backfilling with clean fill; and (7) performing public outreach as necessary.

16. Work Plan and Implementation.

a. Respondent has prepared a Quality Assurance Project Plan ("QAPP") in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001), and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998), which has been reviewed and approved by EPA.

b. Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement and the EPA-approved Work Plan. The Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.

17. Health and Safety Plan. Respondent has submitted a Health and Safety Plan, which has been reviewed by EPA, that ensures the protection of the public health and safety during performance of on-site work under this Settlement Agreement. This plan was prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan complies with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910, and includes contingency planning. Respondent shall implement the plan during the pendency of the removal action.

18. 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 as set forth in the Work Plan and QAPP. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance.

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. 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)," 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, Respondent shall have such a laboratory analyze samples submitted by EPA for QA monitoring. 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, Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples. Respondent shall notify EPA not less than 10 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 Respondent to take split or duplicate samples of any samples it takes as part of its oversight of Respondent's implementation of the Work.

19. Post-Removal Site Control. The Work Plan includes a proposal for post-removal site control consistent with Section 300.415(f) of the NCP and OSWER Directive No. 9360.2-02. Respondent shall implement such controls and shall provide EPA with documentation of all post-removal site control arrangements.

20. Reporting.

a. Respondent shall submit weekly activity summaries to EPA concerning actions undertaken pursuant to this Settlement Agreement from the Effective Date of this Settlement Agreement until termination of this Settlement Agreement, unless otherwise directed in writing by the OSC. These activity summaries 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 reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

b. Respondent shall submit three (3) copies of all plans, reports or other submissions required by this Settlement Agreement or the Work Plan. Respondent shall submit such documents in electronic form.

21. Final Report. Within 60 days after completion of all Work required by this Settlement Agreement, 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 conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports." The final report shall include a summary of the Work performed, including the ultimate size and specifications for the cap, 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."

22. Off-Site Shipments.

a. 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 On-Scene Coordinator. 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.

i. 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. 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.

ii. The identity of the receiving facility and state will be determined by Respondent following the award of the contract for the removal action. Respondent shall provide the information required by Paragraph 22(a) and 22(b) as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

b. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, 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. 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

23. If the Site, or any other property where access and/or land/water use restrictions are needed to implement this Settlement Agreement, is owned or controlled by Respondent, Respondent shall, commencing on the Effective Date:

a. Provide EPA and its representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

b. Refrain from using the Site, or such other property, in any manner that would interfere with or adversely affect the implementation, integrity, or protectiveness of the Work to be performed pursuant to this Settlement Agreement.

c. If warranted by post-removal Site conditions, secure deed notices or other restrictions to prevent future exposures.

24. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to secure from such persons:

a. all necessary access agreements within seven (7) days after the Effective Date, or as otherwise specified in writing by the OSC. Respondent shall immediately notify EPA if after using its best efforts it is unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. Respondent shall describe in writing its efforts to obtain access. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate. Respondent shall reimburse EPA for all costs and attorneys' fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XV (Payment of Response Costs).

b. an agreement to refrain from using the Site, or such other property, in any manner that would interfere with or adversely affect the implementation, integrity, or protectiveness of the Work to be performed pursuant to this Settlement Agreement.

c. if warranted by post-removal Site conditions, deed notices or other restrictions to prevent future exposures.

25. 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

26. 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. 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.

27. 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 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 Respondent.

28. 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 Respondent asserts such a privilege in lieu of providing documents, 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 contents of the document, record, or information; and 6) the privilege asserted by 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.

29. 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

30. Until 10 years after Respondent's receipt of EPA's notification pursuant to Section XXVIII (Notice of Completion of Work), Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its 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 10 years after Respondent's receipt of EPA's notification pursuant to Section XXVIII (Notice of Completion of Work),

Respondent shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

31. At the conclusion of this document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA, Respondent shall deliver any such records or documents to EPA. 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 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 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.

32. Respondent hereby certifies individually 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 State 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

33. Respondent shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable local, 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. Respondent shall identify ARARs in conjunction with the implementation of the Work.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

34. 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, Respondent shall immediately take all appropriate action. 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. Respondent shall also immediately notify the OSC or, in the event of

his/her unavailability, the Regional Duty Officer at 404-562-8700, of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).

35. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the Emergency Response and Removal Branch, Regional Duty Officer, at 404-562-8700, and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within seven (7) 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

36. The OSC shall be responsible for overseeing 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

37. Payment for Past Response Costs.

a. Within 30 days after the Effective Date, Respondent shall pay to EPA \$159,417.65 for Past Response Costs. Payment shall be made to EPA by Electronic Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondent by EPA Region 4, and shall be accompanied by a statement identifying the name and address of the party(ies) making payment, the Site name, the EPA Region and Site/Spill ID Number A4NF, and the EPA docket number for this action.

b. At the time of payment, Respondent shall send notice that such payment has been made to:

Art Smith
U.S. EPA On-Scene Coordinator
Romano L. Mazzoli Federal Building, Rm. 172A
600 Dr. MLK Jr. Place
Louisville, KY 40202
smith.art@epa.gov

with a copy to:

Paula V. Batchelor
Environmental Protection Specialist
U.S. Environmental Protection Agency, Region 4
61 Forsyth St., S.W.
Atlanta, GA 30303-8960

and

EPA Cincinnati Finance Office
26 Martin Luther King Dr.
Cincinnati, OH 45268

c. The total amount to be paid by Respondent pursuant to Paragraph 37(a) shall be deposited in the EPA Hazardous Substance Superfund.

38. Payments for Future Response Costs.

a. Respondent shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondent a bill requiring payment that includes a SCORPIOS Report, which includes direct and indirect costs incurred by EPA and its contractors. Upon request, EPA shall provide Respondent with EPA's cost documentation package and available work performed documentation. Such request must be made within 15 days of receipt of a bill. Respondent shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 40 of this Settlement Agreement, or except where Respondent requests EPA's cost documentation package, in which case payment is due within 30 days of Respondent's receipt of EPA's cost documentation package.

b. Respondent shall make all payments required by this Paragraph 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 A4NF. Respondent shall send the check(s) to:

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

c. At the time of payment, Respondent shall send notice that payment has been made to:

Art Smith
U.S. EPA On-Scene Coordinator
Romano L. Mazzoli Federal Building, Rm. 172A
600 Dr. MLK Jr. Place
Louisville, KY 40202
smith.art@epa.gov

with a copy to:

Paula V. Batchelor
Environmental Protection Specialist
U.S. Environmental Protection Agency, Region 4
61 Forsyth St., S.W.
Atlanta, GA 30303-8960

and

EPA Cincinnati Finance Office
26 Martin Luther King Dr.
Cincinnati, OH 45268

d. The total amount to be paid by Respondent pursuant to Paragraph 38(a) shall be deposited in the EPA Hazardous Substance Superfund.

39. In the event that the payment for Past Response Costs is not made within 30 days of the Effective Date, or the payments for Future Response Costs are not made within the time specified in Paragraph 38, Respondent shall pay Interest on the unpaid balance. The Interest on Past Response Costs shall begin to accrue on the Effective Date and shall continue to accrue until the date of payment. 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 Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII.

40. Respondent may dispute all or part of a bill for Future Response Costs submitted under this Settlement Agreement, if Respondent alleges that EPA has made an accounting error, or if Respondent alleges that a cost item is inconsistent with the NCP. If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondent shall pay the full amount of the uncontested costs to EPA as specified in Paragraph 38 on or before the due date. Within the same time period, Respondent shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondent shall simultaneously transmit a copy of both checks to the persons listed in Paragraph 38(c) above. Respondent shall ensure that the prevailing party or parties in the dispute

shall receive the amount upon which they prevailed from the escrow funds plus interest within 20 days after the dispute is resolved.

XVI. DISPUTE RESOLUTION

41. 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. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

42. If 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 Respondent shall have 30 days from EPA's receipt of Respondent's 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.

43. Any agreement reached by the parties pursuant to this Section shall be in writing and shall, upon signature by both parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Superfund Division Director level or higher will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. 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, 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

44. Respondent agrees to perform all requirements of this Settlement 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 Respondent, or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite 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 Action Memorandum.

45. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within 10 days of when Respondent first knew that the event might cause a delay. Within 20 days thereafter, 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; Respondent's rationale for attributing such delay to a *force majeure* event if they intend to assert such a claim; and a statement as to whether, in the opinion of 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 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.

46. 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 Respondent in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify 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

47. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 48 and 49 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (*Force Majeure*). "Compliance" by 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, 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.

48. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance with any deadlines, schedules, or obligations contained in Respondent's Work Plan:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
<u>\$1,000</u>	1st through 14th day
<u>\$5,000</u>	15th through 30th day
<u>\$10,000</u>	31st day and beyond

49. Stipulated Penalty Amounts - Reports. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports or other written documents pursuant to Paragraphs 16, 17, 20, and 21:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
<u>\$1,000</u>	1st through 14th day
<u>\$2,500</u>	15th through 30th day
<u>\$5,000</u>	31st day and beyond

50. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 60 of Section XX, Respondent shall be liable for a stipulated penalty in the amount of \$75,000.

51. 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 Respondent of any deficiency; and 2) with respect to a decision by the EPA management official at the Superfund Division Director level or higher, under Paragraph 43 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 herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

52. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the failure and describe the noncompliance. EPA may send 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 Respondent of a violation.

53. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondent's receipt from EPA of a demand for payment of the penalties, unless 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 the U.S. Environmental Protection Agency, Superfund Payments, Cincinnati Finance Center, P.O. Box 979076, St. Louis, MO 63197-9000, shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number A4NF, the EPA docket number, 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 13, and to:

Paula V. Batchelor
Environmental Protection Specialist
U.S. Environmental Protection Agency, Region 4
61 Forsyth St., S.W.
Atlanta, GA 30303-8960

and

EPA Cincinnati Finance Office
26 Martin Luther King Dr.
Cincinnati, OH 45268

54. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.

55. 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.

56. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 52. 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 Respondents' 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 herein, 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, Paragraph 60.

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

57. In consideration of the actions that will be performed and the payments that will be made by 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 Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work, Past Response Costs, and Future Response Costs. This covenant not to sue shall take effect upon receipt by EPA of the Past Response Costs due under Section XV of this Settlement Agreement and any Interest or Stipulated Penalties due for failure to pay Past Response Costs as required by Sections XV and XVIII of this Settlement

Agreement. This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondent of its 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

58. Except as specifically provided in this Settlement Agreement, nothing herein 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, nothing herein 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 Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

59. 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 Respondent with respect to all other matters, including, but not limited to:

a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;

b. liability for costs not included within the definitions of Past Response Costs or 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.

60. Work Takeover. In the event EPA determines that 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 after written notice and a 10-day opportunity to cure. 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 Respondents 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. COVENANT NOT TO SUE BY RESPONDENT

61. 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, Past Response Costs, 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 Kentucky 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 Site.

Except as expressly provided in Paragraph 63 (Non-Exempt De Micromis Waiver), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 59(b), (c), and (e) - (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

62. 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).

63. Respondent agrees not to assert any claims and to waive all claims or causes of action that it may have for all matters relating to the Site, including for contribution, against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1,

2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

64. The waiver in Paragraph 63 shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Site against Respondent. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines:

a. that such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of the Solid Waste Disposal Act (also known as the Resource Conservation and Recovery Act or "RCRA"), 42 U.S.C. § 6972, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. that the materials containing hazardous substances contributed to the Site by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Site.

XXII. OTHER CLAIMS

65. 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 Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

66. Except as expressly provided in Section XXI, Paragraph 63 (Non-exempt De Micromis Waiver) and 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 Respondent 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.

67. 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. CONTRIBUTION

68. a. 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 Respondent is 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, Past Response Costs, and Future Response Costs.

b. The Parties 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 Respondent has, as of the Effective Date, resolved its liability to the United States for the Work, Past Response Costs, and Future Response Costs.

c. Except as provided in Section XXI, Paragraph 63 of this Settlement Agreement (Non-exempt De Micromis Waiver), nothing in this Settlement Agreement precludes the United States or Respondent from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any persons not parties to this Settlement Agreement. Nothing herein diminishes the right of the United States, pursuant to Sections 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).

XXIV. INDEMNIFICATION

69. 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 Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, 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 Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on its behalf or under its 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 Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.

70. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

71. Respondent waives all claims against the United States for damages 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 any one or more of 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, 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 any one or more of 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

72. At least seven (7) days prior to commencing any on-site work under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of one (1) million dollars, combined single limit, naming EPA as an additional insured. Within the same time period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. In addition, for the duration of the Settlement Agreement, 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 Respondent in furtherance of this Settlement Agreement. If 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 Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

73. Within 30 days of the Effective Date, Respondent shall establish and maintain financial security in the amount of \$200,000 in one or more of the following forms:

- a. A surety bond guaranteeing performance of the Work;
- b. One or more irrevocable letters of credit equaling the total estimated cost of the Work;
- c. A trust fund;
- d. A policy of insurance which ensures the payment and/or performance of the Work;
- e. A guarantee to perform the Work by one or more parent corporations or subsidiaries, or by one or more unrelated corporations that have a substantial business relationship with at least one of Respondent; or

f. A demonstration that Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

74. If Respondent seeks to demonstrate the ability to complete the Work through a guarantee by a third party pursuant to Paragraph 73(a) of this Section, Respondent shall demonstrate that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f). If Respondent seeks to demonstrate its ability to complete the Work by means of the financial test or the corporate guarantee pursuant to Paragraph 73(e) or (f) of this Section, it shall resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section are inadequate, 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 in Paragraph 73 of this Section. Respondent's inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Settlement Agreement.

75. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 73 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. 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 upon approval by EPA. In the event of a dispute, Respondent may reduce the amount of the security in accordance with the written decision resolving the dispute.

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

XXVII. MODIFICATIONS

77. The OSC may make modifications to any plan or schedule or the Work Plan in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, 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.

78. If Respondent seeks permission to deviate from any approved Work Plan or schedule, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 77.

79. 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 Respondent shall relieve 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. NOTICE OF COMPLETION OF WORK

80. 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 post-removal site controls, payment of Future Response Costs, or record retention, EPA will provide written notice to Respondent. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXIX. INTEGRATION/APPENDICES

81. 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 is the Action Memorandum.

Appendix B is the Map of the Site.

Appendix C is the Work Plan.

XXX. EFFECTIVE DATE

82. This Settlement Agreement shall be effective on the date it is signed by the Regional Administrator or his delegatee.

In the matter of the Goodloe Elementary School Site, Docket No. CERCLA-04-2008-3757:

The undersigned representative(s) of Respondent certify(ies) that it (they) is (are) fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party(ies) it (they) represent(s) to this document.

Agreed this 16 day of April, 2008

For Respondent ATMOS ENERGY CORPORATION

By: John Kevin Aheys

Title: President

In the matter of the Goodloe Elementary School Site, Docket No. CERCLA-04-2008-3757:

It is so ORDERED and Agreed this 28th day of January, 2008.

BY: A. Shane Hitchcock DATE: 1/28/08

A. Shane Hitchcock, Chief
Emergency Response & Removal Branch
Superfund Division
Region 4
U.S. Environmental Protection Agency

EFFECTIVE DATE: 1/28/08



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JAN 3 1998

ENFORCEMENT ACTION MEMORANDUM

SUBJECT: Request for a Removal Action at the Goodloe Elementary School Site
Owensboro, Daviess County, Kentucky

FROM: Kenneth B. Rhame
On-Scene Coordinator

THRU: Shane Hitchcock, Chief
Emergency Response & Removal Branch

TO: Franklin E. Hill, Director
Superfund Division

I. PURPOSE

The purpose of this Enforcement Action Memorandum is to request and document approval of the proposed enforcement-lead removal action described herein for the Goodloe Elementary School Site located in Owensboro, Daviess County, Kentucky (the Site). The release of hazardous substances at the Site poses a threat to public health and the environment pursuant to Section 104(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that meets the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) section 300.415(b)(2) criteria for removal actions. This removal is anticipated to be enforcement lead pursuant to an Administrative Settlement Agreement and Order on Consent (Settlement Agreement).

There are no significant or precedent-setting issues associated with the Site, and the Site is not currently on the National Priority List (NPL).

II. SITE CONDITIONS AND BACKGROUND

The CERCLIS ID number for this Site is KYD980838395.
Site ID Number: A4NF

Beginning in 1889, Owensboro Gas Light Company (later Owensboro Gas Company) owned and operated a coal gasification plant at the Goodloe Elementary School Site. In 1945, Owensboro Gas Company merged with Western Kentucky Gas Company. In 1950 Western Kentucky Gas Company sold the Site property to the Owensboro Board of Education. The Site is now owned by the Fourth Street Baptist

Church. Atmos Energy Corporation appears to be the successor to Western Kentucky Gas Company.

A school had been on adjacent property to the coal gasification plant since at least 1882, and had been known by various names (Negro School, Colored School, Western Colored School, and Western School). The school became the Goodloe Elementary School in 1962. The Goodloe Elementary School closed in 1981 and the property is currently owned by the Fourth Street Baptist Church. The area surrounding the Goodloe Elementary School Site is primarily residential and includes single family dwellings, the Fourth Street Baptist Church, vacant lots and playgrounds. The neighborhood may include sensitive populations such as children up to seven years old or pregnant women. The removal is needed to eliminate the threat of benzo(a)pyrene contamination equal to or exceeding 6,200 parts per billion (ppb) in surface soils that have been impacted by the former coal gasification plant. The scope of the removal is limited to the property currently owned by the Fourth Street Baptist Church. The ownership of this property is to be transferred to Atmos Energy in an agreement reached between Atmos Energy and the Fourth Street Baptist Church so that the removal action can proceed and proper deed restrictions can be put in place.

A. Site Description

1. Removal Site Evaluation

In December of 2006, the Kentucky Department for Environmental Protection (KDEP) referred the Goodloe Elementary School Site to the Environmental Protection Agency's (EPA) Emergency Response and Removal Branch (ERRB). A Site Investigation was previously conducted by EPA and the Kentucky Division of Waste Management (KDWM) in 1984, followed by a Site Investigation Prioritization (SIP) in 1993. As early as 1984, polynuclear aromatic hydrocarbon (PAH) contamination was found in the west lot at the Site. At the time, the Owensboro School Board installed a fence around the west lot to restrict access. The 1984 Site Investigation concluded that no environmental or health problems existed within the Goodloe School Building or Gymnasium, but that detectable levels of PAHs were found in the west lot. A health assessment was completed in May 1984 which concluded that although PAH contamination existed within the west lot, there was insufficient evidence of a health hazard to require restriction of the west lot. As of 1993, the Green River Comprehensive Care Goodloe Center was using the western lot for employee parking. The 1993 SIP report concluded that the Site did not warrant further action under CERCLA, but made the following recommendations:

(1) employees at the facility should avoid direct contact with the soil in the west lot;

(2) a no trespassing sign should be placed at the 3rd Street entrance to the west lot; and

(3) all persons performing grounds keeping services at the west lot should use breathing filters if dirt and particulates are stirred into the air.

The main contaminant of concern at the Site is benzo(a)pyrene. Due to the lowering of PAH action levels by health professionals since the original site investigation, EPA and KDEP performed a limited site assessment in September 2006. The 2006 site assessment found benzo(a)pyrene to be a contaminant of concern at the Site. Nine surface soil samples covering approximately two acres were collected and analyzed during the 2006 site assessment. Of the nine soil samples, one soil sample contained benzo(a)pyrene at a concentration of 19,000 parts per billion (ppb), which is more than three times the recommended removal action level (RAL) of 6,200 ppb. The site assessment also found indications that the fence around the west lot was being breached by neighborhood children in order to access the area for use as a play area. Due to the limited nature of the site assessment and the property's historical use, it is suspected that there is more significant contamination that has not yet been identified. Additional sampling will be conducted by the potentially responsible party (PRP) during the removal action.

2. Physical Location

The Site is located at the corner of 3rd and Elm Streets in Owensboro, Daviess County, Kentucky. The geographic coordinates are latitude 37°46'24.54" North and longitude 87°07'09.83" West. It consists of a fenced 0.8 acre vacant lot and the adjacent property that was once the former Goodloe Elementary School. The facility is located in a mixed residential and commercial area.

3. Site Characteristics

Topographically, the Site is relatively flat, with elevations around 400 feet above mean sea level. There are residential properties bordering the site to the southwest, southeast and west (vacant lots zoned residential). A church borders the site to the south and the former Goodloe Elementary School and Gymnasium borders the site to the east. The site is a mixture of asphalt parking areas and grass covered fields. Atmos Energy Corporation has a pipeline that runs through (below ground) the Site and maintains a small fenced area next to the Fourth Street Baptist Church that has a regulator rising above ground.

The area surrounding the Site is primarily residential and includes single family dwellings, the Fourth Street Baptist Church, vacant lots and

playgrounds. The neighborhood may include sensitive populations such as children up to seven years of age or pregnant women.

There has been no congressional or media interest regarding the Goodloe Elementary School Site; however, there is significant state and local government interest in this removal action. To address community concerns, EPA will setup a field office to facilitate any future public interests, disseminate project information, and coordinate with the state and local governments.

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

The presence of benzo(a)pyrene at concentrations above the RAL (6,200 ppb) in surface soils on the Site constitutes a release of hazardous substances as defined by CERCLA 101(14). Along with the analytical results, there appeared to be some visual discoloration/contamination in geo-probe cores assumed to be from the former coal gasification plant operations. Although the Site is fenced, it is not secure. There is evidence of children accessing the vacant lot where the elevated levels of benzo(a)pyrene were documented and using the area as a playground.

5. NPL Status

The Site is not on the National Priority List (NPL), nor is it likely to be listed in the future.

6. Maps, pictures and other graphic representations

All removal file information, including maps and aerial photos of the Site, will be maintained by the OSC and released to the EPA record center for inclusion in the Site file.

B. Other Actions to Date

1. Previous Actions

A Site Investigation was conducted by U.S. EPA and KDWM in 1984, followed by a Site Investigation Prioritization (SIP) in 1993. The 1984 Site Investigation concluded that no environmental or health problems existed within the Goodloe School Building or Gymnasium, but that detectable levels of PAHs were found in the west lot. A health assessment was completed in May 1984 which concluded that although PAH contamination existed within the west lot, there was insufficient evidence of a health hazard to require restriction of the west lot. The 1993

SIP report concluded that the Site did not warrant further action under CERCLA, but made the following recommendations:

- (1) employees at the facility should avoid direct contact with the soil in the west lot;
- (2) a no trespassing sign should be placed at the 3rd Street entrance to the west lot; and
- (3) all persons performing grounds keeping services at the west lot should use breathing filters if dirt and particulates are stirred into the air. The main contaminant of concern at the Site is benzo(a)pyrene.

Due to the lowering of PAH action levels by health professionals since the original site investigation, EPA and KDEP performed a limited site assessment in September 2006.

2. Current Actions

EPA and the Potentially Responsible Party (PRP) plan on negotiating an Administrative Settlement Agreement and Order on Consent for the removal action. The PRP has met with EPA, KDEP, and the Site owner to discuss federal and state expectations and access needs. The scope of the removal action will be limited to property currently owned by the Fourth Street Baptist Church. However, the ownership of this property is to be transferred to Atmos Energy in an agreement reached between Atmos Energy and the Fourth Street Baptist Church so that the removal action can proceed and proper deed restrictions can be put in place.

C. State and Local Authorities' Role

1. State and Local Actions to Date

The Kentucky Department for Environmental Protection referred the Site to EPA in December of 2006. The State has deferred the lead role to ERRB, but EPA anticipates that they will continue monitoring the Site's progress and remain actively involved with PRP oversight.

2. Potential for Continued State and Local Response

It is not anticipated that the KDEP will perform any response activities at the Site, although KDEP will take the lead on securing any future use restrictions deemed necessary at the Site. ERRB will continue to coordinate with the state and local agencies in order to keep the community informed of future removal Site activities.

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

The conditions remaining at the Goodloe Elementary School Site present a substantial threat to the public health or welfare, and the environment, and meet the criteria for a time-critical removal action as provided for in the National Contingency Plan (NCP), Section 300.415(b)(2). These criteria include, but are not limited to, the following:

- Section 300.415(b)(2)(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants:

The presence of benzo(a)pyrene, a probable human carcinogen, in surface soils in concentrations more than three times the recommended removal action level, and the neighborhood's current use of the property as a play area for children, indicates a potential for human exposure.

- Section 300.415(b)(2)(iv) High levels of hazardous substances in soils largely at or near the surface, that may migrate:

There are concentrations of benzo(a)pyrene in surface soils in a location that is surrounded by residential properties. Contaminants could migrate as a result of performing normal landscaping activities such as lawn mowing and/or leaf blowing.

- Section 300.415(b)(2)(v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released:

Weather conditions such as wind, rainfall runoff and erosion may contribute to the dispersion of benzo(a)pyrene contaminated materials across the surrounding neighborhood.

- Section 300.415(b)(2)(vii) The (lack of) availability of other appropriate federal or state mechanisms to respond to the release:

No other local, state, or federal agency is in the position or currently has the resources to independently oversee an effective response action to address the ongoing threats presented at the Site. EPA will conduct its actions in cooperation with state and local authorities to the extent practicable. The Commonwealth of Kentucky has referred the Site to the EPA.

IV. ENDANGERMENT DETERMINATION

Polynuclear aromatic hydrocarbons (PAHs) are hydrocarbon compounds with multiple benzene rings. PAHs are typical components of asphalts, fuels, oils, and greases. They are also called Polycyclic Aromatic Hydrocarbons. PAHs are group of chemicals formed during the incomplete combustion of coal, oil, gas or other organic substances. The specific PAH associated with this Site is benzo(a)pyrene, which is a "hazardous substance" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14). Many of these organic compounds are probable human carcinogens.

Given the Site conditions, the nature of the known and suspected hazardous substances on Site, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health or welfare, or the environment.

V. PROPOSED ACTION

A. Proposed Actions

Proposed actions to complete the removal activities at the Site include sampling, capping, excavation, off-site transportation, and disposal of the hazardous substances or pollutants or contaminants located on-site.

1. Proposed Action Description

Proposed Actions required to implement this Action Memorandum include:

- a) Develop and implement a Site Health and Safety Plan, including an air monitoring and Site Emergency Contingency Plan;
- b) Develop and implement a Site Security Plan;
- c) Conduct access agreement activities in order to obtain all necessary site access agreements;
- d) Develop and implement an extent of contamination and post removal sampling plan to verify cleanup objectives have been achieved;
- e) Collect and analyze additional surface soil samples for delineation and confirmation purposes;
- f) If necessary record deed notices to prevent future exposures;

g) Cap the area containing concentrations of benzo(a)pyrene above the removal action level with paving material and properly dispose of any removed soils in accordance with U.S. EPA's Off-Site Rule (40 CFR § 300.440);

h) If isolated contamination is present at concentrations at or above the removal action level of 6,200 parts per billion (ppb) outside the planned "cap" area, then surface soils will be removed to a depth of 2 foot depth, if concentrations of benzo(a)pyrene are still at concentrations at or above the removal action level at the 2 foot depth, place warning marker material at the bottom of the excavation, backfill excavated areas with clean material and topsoil;

i) Restore areas to preexisting condition to the extent practicable; and

j) Perform public outreach if necessary.

B. Other Actions to Date

The removal action will be conducted in a manner not inconsistent with the NCP. The OSC has initiated planning for provision of post-removal Site control consistent with the provisions of Section 300.415(1) of the NCP. Elimination of surface threats is, however, expected to minimize the need for post-removal Site control in many areas.

All hazardous substances, pollutants, or contaminants removed off-site pursuant to this removal action for treatment, storage, and disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, with the EPA Off-Site Rule, 40 C.F.R. § 300.440.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the Goodloe Elementary School Site which may pose an immediate and substantial endangerment to public health welfare, or the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

2. Contribution to Remedial Performance

The proposed removal action will address the threats discussed in Section III, which meet the NCP Section 300.415(b)(2) removal criteria. Although future action under the Remedial Program is unlikely, the removal action contemplated in this Action Memorandum would be consistent with any future remedial action.

3. Description of Alternative Technologies

At this time it is difficult to anticipate what disposal and/or treatment alternatives will be applicable to the waste. Contaminated soil from the Site will be capped or may be excavated and treated and/or disposed off-site. Alternatively, contaminated soils in some areas may be capped to eliminate the direct exposure pathway. There are no alternative technologies under consideration at this time.

4. Engineering Evaluation/Cost Analysis (EE/CA)

This proposed action is a time-critical removal and does not require an EE/CA.

5. Applicable or Relevant and Appropriate Requirements (ARARs)

On-site removal actions conducted under CERCLA are required to attain ARARs to the extent practicable, considering the exigencies of the situation. Off-site removal activities need only comply with all applicable Federal and State laws, unless there is an emergency. This cleanup is being conducted as a time-critical removal action. A letter was sent to Mr. Fazi Sherkat of the Kentucky Department for Environmental Protection on March 15, 2007, asking the State to identify ARARs. All wastes transferred off-site will comply with U.S. EPA's Off-Site Rule (40 CFR 300.440).

6. Project Schedule

The EPA is negotiating with the PRP to undertake the removal action outlined in this Memorandum. It is anticipated that the PRP will sign a Settlement Agreement by the end of October 2007. The project schedule will be incorporated into the work plan submitted to EPA for approval under the Settlement Agreement.

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

Increased risk to public health and the environment will result if action is delayed or does not occur. There would be a continued risk of potential exposure to probable human carcinogens to neighborhood children and sensitive populations such as children up to seven years old or pregnant women at the Goodloe Elementary School Site.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues.

VIII. ENFORCEMENT

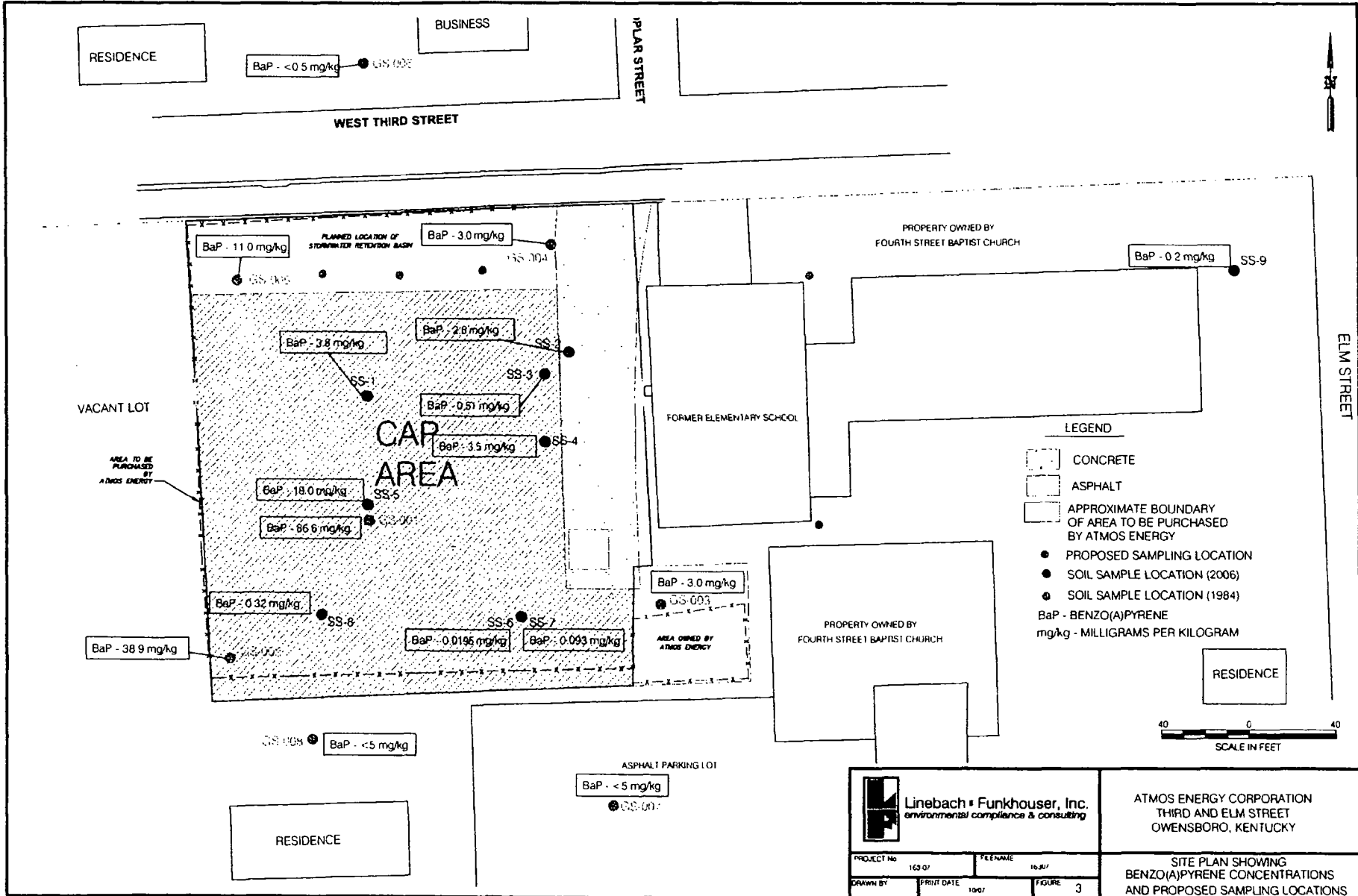
EPA issued a Notice Letter and Offer to Negotiate for Removal Action to Atmos Energy on June 7, 2007. EPA anticipates that Atmos will sign a Settlement Agreement to implement the removal action at the Site and will agree to pay EPA's oversight costs.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Goodloe Elementary School Site located in Owensboro, Daviess County, Kentucky. These response actions have been developed in accordance with CERCLA, as amended, and are not inconsistent with the NCP. This decision is based upon the Administrative Record for the Site. Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal action, and I recommend your approval of the proposed removal action. You may indicate your decision by signing below.

APPROVE: Franklin E. Hill DATE: 1/9/08
Franklin E. Hill, Director
Superfund Division

DISAPPROVE: _____ DATE: _____
Franklin E. Hill, Director
Superfund Division



APPENDIX B

10 11 0041

Linebach Funkhouser, Inc. <i>environmental compliance & consulting</i>		ATMOS ENERGY CORPORATION THIRD AND ELM STREET OWENSBORO, KENTUCKY	
PROJECT No	163-07	FEEDBACK	16.8/7
DRAWN BY	PRINT DATE	FIGURE	3
	10/07		



Linebach • Funkhouser, Inc.
environmental compliance & consulting

November 20, 2007

Mr. Kenneth Rhame
USEPA Region 4
61 Forsyth Street, S.W.
Atlanta, GA 30303-8960

**RE: *Revised Removal Action Work Plan
Former Manufactured Gas Plant
Third and Elm Streets
Owensboro, Daviess County, Kentucky
EPA ID #KYD980838395 / AI #51994
LFI Project #163-07***

Dear Mr. Rhame:

Linebach Funkhouser, Inc. (LFI), consultant for Atmos Energy Corporation (Atmos Energy), has prepared the following revised Removal Action Work Plan ("RAWP") for the construction of a site cover (i.e. asphalt cap) over benzo(a)pyrene (BaP) impacted soils at the former manufactured gas plant (MGP) at Third and Elm Streets in Owensboro, Kentucky (the "Site"). The revised RAWP has been prepared in response to:

- The United States Environmental Protection Agency's (USEPA's) October 2, 2007 comments on the RAWP originally submitted to USEPA on September 10, 2007.
- USEPA's comments on a revised version of the RAWP dated October 23, 2007.
- Atmos Energy's follow-up communication with Kentucky Department for Environmental Protection (KDEP) personnel. The revised RAWP is being submitted to meet the requirements of KDEP as well as USEPA.

The construction of a site cover, along with corresponding institutional controls, will provide an overall risk-based site management approach for the property sufficient to satisfy Atmos Energy's Removal Action obligations as provided in the Administrative Settlement Agreement and Order on Consent for Removal Action (CERCLA Docket No. _____) between Atmos Energy and USEPA. The location of the Site is indicated on the topographic map in Figure 1. A Site Plan, indicating previous soil sample locations, is included as Figure 2.

1.0 REMOVAL ACTION WORK PLAN

Previous environmental assessment reports indicate that polynuclear aromatic hydrocarbon (PAH) constituents are present in soil at the Site. The envisioned plan for the Site, as agreed to between Atmos Energy and USEPA, is to construct an engineered control (site cover of asphalt pavement) over the affected areas of the former MGP, which is currently vacant and grass-covered. Atmos Energy intends to purchase the portion of the property the company (Atmos Energy) does not currently own, and implement a remedial action (site cover with Restrictive Environmental Covenant) that will satisfy USEPA's removal action level (RAL) of 6.2 milligrams per kilogram (mg/kg) for BaP as well as KDEP's BaP standard of 0.062 mg/kg. The site cover will also be designed to address City of Owensboro requirements.

1.1 Pre-Construction Sampling and Analysis

Following the receipt of USEPA approval of this Work Plan, Atmos Energy will conduct limited sampling at the Site to further delineate the extent of BaP in surficial soils consistent with discussions with USEPA and KDEP. The sampling is also being conducted to confirm concentrations of BaP in soil along the northern corridor of the site, outside the footprint of the planned cap, where a storm water basin may need to be constructed to comply with City of Owensboro (City) requirements.

Based on Atmos' preliminary discussions with an Owensboro-based registered engineer experienced with the City's local storm water / sewer regulations, the City will require the construction of a retention basin to offset the increase in storm water runoff produced by the asphalt cap. Based on the existing projected area of the cap, initial design estimates indicate a basin size of approximately 2,000 to 3,000 cubic feet will be necessary. Basin construction can be completed without excavation by constructing bermed areas along the site perimeter. Any drainage swales constructed at the site for storm water runoff will be engineered to prevent exposure, erosion and contaminant transport.

The extent of the Removal Action area to be covered by the planned engineered control and the sampling locations are proposed on Figure 3. As requested by USEPA, with the exception of the two sampling locations on the east side of the former elementary school gymnasium, sampling will include the collection of shallow surface soils (0 to 0.5 feet, 0.5 to 1.5 feet and 1.5 to 2.0 feet below land surface) for BaP analysis by USEPA SW-846 Method 8270. The two borings on the east side of the former gymnasium will only be sampled at the 0 to 0.5 foot interval. Sampling will also be conducted on the walls and floors of any areas that are excavated for incorporation into the cap. If contamination is still present at depth in soil, at concentrations at or above the removal action level, based on sampling results, a warning marker (such as colored plastic netting) will be placed across the bottom of the excavation. The excavation will then be backfilled with clean material and topsoil. The analytical results will be compared with those of previous sampling events conducted in 1984 and 2006.

Soil sampling procedures will be in general accordance with USEPA Region IV Standard Operating Procedures. A streamlined Quality Assurance Project Plan (QAPP) is attached. Site activities will include the decontamination of sampling equipment with phosphate-free soap and water and rinsing with de-ionized water prior to initiating field activities and between boring locations, storing samples on ice in reinforced coolers for shipment to the laboratory, maintaining chain-of-custody protocol for laboratory analysis to ensure sample integrity; and the proper daily calibration of field equipment. Soils collected for analysis will be placed in jars, filled to the top, tightly sealed, labeled and placed on ice for shipment for laboratory analysis.

Information from the confirmation sampling will be utilized to confirm the final boundaries of the planned engineered control (site cap) and a cap construction/redevelopment plan will be submitted to USEPA based on those results. The plan will include input from the Church on the post-cap end use of the property. The site cap will be sufficient to encapsulate concentrations exceeding the 6.2 mg/kg USEPA RAL for BaP, as well as KDEP's BaP standard of 0.062 mg/kg. Sampling results will be summarized and the engineered control extent map will be provided in a letter report to USEPA. The cap will cover the entire footprint of the former plant, as indicated in Figure 3.

1.2 Implementation of Removal Action

Following submittal of the letter report confirming the engineered control coverage area, and receipt of USEPA, KDEP and City of Owensboro approval of the planned site cover, construction of the engineered control will begin.

As a first step, grass currently covering the Site will be eliminated through use of an herbicide and will be incorporated as backfill through tilling. Standard herbicide-use public notice signage, such as that routinely emplaced by lawn maintenance companies (e.g. ChemLawn, Inc.), will be added to the treated areas. Site security fencing will also be in place during the course of the grass treatment. A fallen tree now lying on the Site will be properly removed and disposed of. No trees are currently planned for removal; however, should the need arise for tree removal, trees will be cut at surface grade and a grinder will be used to eliminate the stump. No soil-encrusted root balls will be removed.

Soils will then be graded to achieve the sub-grade topographic conditions required for the planned resurfacing, in compliance with design specifications required by the City of Owensboro. A waiting period of 30 days between vegetation removal and the construction of the asphalt cap may be required to allow organic materials to decompose. In this instance, the Site will be covered with landscaping material and other control measures, as needed, to prevent the erosion of surficial soils by wind or water. Site security will be maintained to prevent access to the construction area during the 30 day waiting period. Site security controls will be maintained to limit access to the construction area.

1.2.1 Site Security

No soil or affected waste removal from the Site is planned, as affected soils or vegetative matter will be re-used as fill and will underlie the site cover, including historic areas of contamination outside the proposed cap area (i.e. near GS-002 and GS-005). In the case that affected soil is disposed of off-site, the material will be properly characterized to meet landfill disposal requirements, and documentation will be provided regarding the identification of the appropriate receiving landfill, in accordance with applicable legal requirements and USEPA off-site rule (40 CFR § 300.440).

Following the completion of grading activities, the Site will be capped with asphalt. A subgrade layer of dense-grade aggregate (No. 57 lime material meeting the ASTM C33 standard), up to six-inches (6") in thickness, will be placed, followed by an approximately two-inch (2") thick layer of asphalt base and one-inch (1") layer of asphalt finish. The final construction thickness may vary, particularly with regard to the subgrade material, based on the final intended use as either a parking lot or playground area. The final use of the capped area will be included in the redevelopment plan, and specific uses will be negotiated to meet the end-use needs of the Church.

Temporary free-standing chain-link fencing will be installed around affected areas of the Site during construction where no fencing is currently present. The chain-link fencing will be equipped with a lockable gate in areas where ingress/egress access is required. In the event that unauthorized personnel enter the site controlled work area, work in that area will be stopped. Work will not resume until the unauthorized personnel have been removed from the work area. A log of visitors to the site will be maintained.

1.2.2 Air Monitoring

Air monitoring will be conducted during construction activities. A fugitive dust suppression and particulate monitoring program will be established to limit exposure of on-site personnel and the public around the site to affected dust during implementation of the proposed site capping activities. The potential exposure period to affected dust will be limited to the timeframe between when the existing vegetative cover is tilled into the underlying soil, and the asphalt subgrade layer across the soil is complete. During the limited interval when affected soil may be exposed and susceptible to wind transport, the following fugitive dust suppression and particulate monitoring program will be used at the site:

- Reasonable fugitive dust suppression techniques will be employed during site activities that may generate fugitive affected dust.
- Particulate monitoring will be employed during the handling of contaminated soil or when activities on site may generate fugitive dust from exposed contaminated soil. Such activities may include tilling, grading, or placement of the asphalt cap subgrade.
- Particulate monitoring will be conducted using real-time particulate monitors and will monitor particulate matter less than ten microns (PM₁₀) with the following minimum performance standards:

Object to be monitored: Dust

Size range: <0.1 to 10 microns

Sensitivity: 0.001 mg/m³

Range: 0.001 to 10 mg/m³

Overall Accuracy: ± 10% as compared to gravimetric analysis of stearic acid or reference dust

Operating Conditions:

Temperature: 0 to 40°C

Humidity: 10 to 99% Relative Humidity

Power: Battery operated with a maximum capacity of eight hours continuous operation

- Particulate levels will be monitored immediately downwind at the work site and integrated over a period not to exceed 15 minutes. Consequently, instrumentation shall require necessary averaging hardware to accomplish this task; the MIE DataRam DR-4000 or similar is appropriate.
- In order to ensure the validity of the fugitive dust measurements performed, Quality Assurance/Quality Control (QA/QC) measures will be implemented including periodic instrument calibration, operator training, daily instrument performance (span) checks and a record-keeping system.
- The action level will be 1 mg/m³ over the integrated period not to exceed 15 minutes. The action level is based on the *Health-Based Guidelines for Air Management, Public Participation, and Risk Communication During the Excavation of Former Manufactured Gas Plants*, developed by the Wisconsin Bureau of Environmental and Occupational Health, Department of Health and Family Services (August 24, 2004). While conservative, this short-term interval will provide a real-time assessment of on-site air quality to assure both

health and safety. Two particulate monitors will be employed; one at an upwind location and one downwind. If particulate levels are detected in excess of 1 mg/m^3 at the downwind location, the upwind background level will be measured immediately. If during the timeframe that potentially affected soil is exposed, the working site particulate measurement is greater than 1 mg/m^3 above the background level, dust suppression techniques will be implemented to reduce the generation of fugitive dust and corrective action taken to protect site workers and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression.

- The following techniques have been shown to be effective for the controlling the generation and migration of dust during construction activities, and will be incorporated for site work:
 - Wetting equipment and exposed soil.
 - Spraying water on blades during scraping and grading.
 - Hauling materials in properly tarped containers.
 - Restricting vehicle speed to 10 mph across exposed areas.
 - Covering exposed soil areas after construction activity ceases.
 - Reducing the exposed area size.

Experience has shown that in utilizing the above-mentioned dust suppression techniques, within reason as not to create excess water which would result in unacceptable wet conditions, the chance of exceeding the 1 mg/m^3 action level is remote. Using atomizing sprays will prevent overly wet conditions, conserve water and provide an effective means of suppressing the fugitive dust.

If the dust suppression techniques being utilized at the site do not lower particulates to an acceptable level (that is, below 1 mg/m^3 and no visible dust off-site), work will be suspended until appropriate corrective measures are approved to remedy the situation. Also, the evaluation of weather conditions will be necessary for proper fugitive dust control, when extreme wind conditions make dust control ineffective. As a last resort, removal actions may need to be suspended.

2.0 SITE HEALTH AND SAFETY PLAN

Workers involved in grading the Site or other activities that will involve direct contact with the ground may have limited short-term exposure to impacted soil and will be required to conduct work activities in accordance with the procedures outlined in a Site Health and Safety Plan (HSP). The HSP will follow USEPA guidance and U.S. Occupational Safety and Health Administration (OSHA) requirements, as required in Code of Federal Regulations (CFR) in 29 CFR 1910 and 1926. The air monitoring portion of the HSP will describe the methods and approach to dust monitoring during construction activities to ensure that site workers and the surrounding community are not exposed to unacceptable levels of airborne particulates from the Site. A copy of the HSP, including air monitoring procedures, is attached.

3.0 REMOVAL ACTION COMPLETION REPORT

Within sixty (60) days after following completion of the site cover construction, Atmos Energy will submit a Removal Action Completion Report to USEPA and KDEP for review and approval. The report will document the work conducted, include results of sampling, and provide as-built drawings showing the extent and construction details of the asphalt cap and stormwater retention

basin. Appendices containing all relevant documentation generated during the Removal Action (e.g. daily field logs, permits, analytical data, etc.) will also be included.

4.0 POST-REMOVAL SITE CONTROL

The purpose of site cover monitoring and maintenance will be to verify the integrity of site cover materials (asphalt pavement and stormwater retention basin material) and to properly manage potentially impacted materials encountered during future maintenance or construction activities (if any). Ongoing monitoring and maintenance will provide continued protection of human health and the environment by minimizing the potential for the creation of complete exposure pathways. A restrictive environmental covenant (REC) will be completed as an institutional control over the property in compliance with KDEP requirements. Atmos Energy is aware that KDEP will be the lead agency on the implementation and enforcement of the restrictive covenant.

Annual site inspections will be made to verify the integrity of all site cover materials. Site inspections will be documented on an inspection checklist. The checklist form will document general site conditions as well as observed deficiencies and will be submitted to KDEP. In the event that deficiencies are identified, corrective measures will be implemented. These measures will include, among others, the regular sealing of any cracks in the asphalt pavement and maintenance of the surface of the asphalt. A sample checklist is attached.

In the event that future utility line repairs or installation work is needed that would extend through site cover materials into affected soil in any of the restricted-use areas of the Site, the work shall be conducted in conformance with the standards set forth below:

- The contractor performing the work shall be informed of the content of the Health and Safety Plan by Atmos Energy;
- Contractors must comply with applicable OSHA regulations;
- Any affected soil that is excavated shall be separated and segregated from non-affected soil to the extent practicable. To the extent practicable, excavated affected soil shall be placed into plastic sheeting on an impervious surface and covered, or placed into a covered roll-off box; and,
- Upon completion of work, excavated affected soil from beneath the covered areas may be placed back into the original excavation from which the soil came, and the excavation restored as long as the restoration is in a manner consistent with the original site cover condition. If off-site disposal of excess affected soils is necessary, the soils shall be characterized for proper disposal at an accredited facility in accordance with the applicable regulations and the requirements of the receiving facility.

5.0 COMMUNITY RELATIONS

The former MGP is no longer in operation and is currently a vacant field. The adjacent school is also no longer in operation. Based on the anticipated improvement of the Site as a parking lot/recreation area for the adjacent church, no adverse community relations issues are anticipated. Community outreach efforts will include the designation of a community relations contact to be assigned to work with EPA's community relations person. Atmos Energy's community relations contact for this project will be:

Mr. Kevin Dobbs
Atmos Energy Corporation
Vice-President of Operations, North Region
Kentucky/Mid-States Division
2401 New Hartford Road
Owensboro, KY 42303
270-685-8075 Office
270-929-4791 Cell
Kevin.dobbs@atmosenergy.com

The primary contact for all general questions and concerns regarding the Work Plan is:

Mr. Douglas C. Walther
Associate General Counsel
Atmos Energy Corporation
5430 LBJ Freeway, Suite 1800
Dallas, TX 75240-2601
(972) 855-3102
Douglas.walther@atmosenergy.com

Atmos Energy's contact for specific technical questions pertaining to the Work Plan is:

Mr. Ernie Napier
Vice-President of Technical Services
Kentucky/Mid-States Division
Atmos Energy Corporation
810 Crescent Center Drive, Suite 600
Franklin, TN 37067-6226
615-771-8401
Ernie.napier@atmosenergy.com

Atmos Energy has had discussions regarding the planned re-use of the Site with representatives of the adjacent church and will continue to engage in regular communication with church representatives regarding coordination of the work and final design of the cap. KDEP is aware of the general scope of planned activities and has been included in previous correspondence with Atmos Energy and USEPA. Atmos Energy has also made preliminary contact with City of Owensboro officials. Atmos Energy will notify KDEP and City of Owensboro officials of the planned site work and schedule and is prepared to participate in public meetings and meet public notice requirements, if any, as required and directed by local and State officials. Key contact names and addresses are as follows:

Mr. Ken Rhame
On-Scene Coordinator
Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, GA 30303-8960
919-475-7397

Ms. Susan Mallette
Project Manager
Kentucky Department for
Environmental Protection
14 Reilly Road
Frankfort, KY 40601
502-564-6716

Mr. Brian Howard
Senior Planner
Owensboro Metropolitan Planning Commission
200 East Third Street
Owensboro, KY 42302
270-687-8652

Mr. Joe Scheppers
City of Owensboro
Owensboro City Hall
101 East Fourth Street
Owensboro, KY 42303
270-687-4444

Owensboro Messenger Inquirer (City Newspaper)
1401 Fredrica Street
Owensboro, KY 42301
270-926-0123
Pastor Houston Hogg
Fourth Street Baptist Church
821 West Fourth Street
Owensboro, KY 42301
270-684-5788

6.0 SCHEDULE

Following submittal of the letter report confirming the engineered control coverage area, and receipt of USEPA, KDEP and City of Owensboro approval, construction of the engineered control will begin. Atmos Energy will provide notification to USEPA thirty (30) days prior to the initiation of construction field work to allow the coordination of field oversight activities. Atmos Energy expects that pre-construction sampling will be completed within 30 days of approval of this Work Plan and that the construction of the cap will be completed within 90 days after Atmos Energy receives the approval of the final cap design from USEPA. The anticipated implementation schedule for the project is indicated on the following table:

Project Deliverable	Components	Schedule
Confirmation of Engineered Control Coverage Area	Soil Sampling Results	To be initiated within 30 days of EPA approval of the Work Plan.
	Confirmation Letter Report of Engineered Control Coverage Area	Within 30 days of the receipt of analytical results of the confirmation sampling.
Implementation of Removal Action	Removal Action Start	To be initiated within 30 days of USEPA, KDEP and City of Owensboro approval of the Engineered Control Area Coverage Confirmation Letter Report

Proposed Scope of Work
Linebach Funkhouser Project Number 163-07

Second Revision November 20, 2007
September 10, 2007
Page 9 of 9

Removal Action Completion Report	Summary of work conducted, including as-built drawings.	Within 60 days of completion of the site cover construction.
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7.0 REFERENCES

Burrus, Barry. *Site Investigation Report, Owensboro Coal Casification Plants, Kentucky*
Division of Waste Management, 1984.

Hill, William M., *Site Investigation Prioritization, Goodloe School Site, Federal Superfund*
Section, 1993.

Malette, Susan, *Sampling and Analysis Plan, Goodloe Elementary School, Kentucky* Division of
Waste Management, August 2006.

United States Environmental Protection Agency. 20012. *Environmental Investigating Standard*
Operating Procedures and Quality Assurance Manual. USEPA Region IV, Science and
Ecosystem Support Division, January 2002.

United States Geological Survey, *Owensboro East, KY, 7.5 minute series topographic quadrangle*,
1992.

LFI appreciates USEPA's review, comments and technical input on this project. If you have any
questions, please contact the undersigned at (502) 895-5009.

Sincerely,



Brendan P. Merk, P.G.
Project Hydrogeologist
Kentucky Professional Geologist #2361



Roy V. Funkhouser, P.G.
Principal
Kentucky Professional Geologist #1621

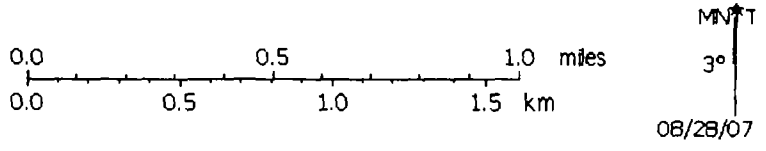
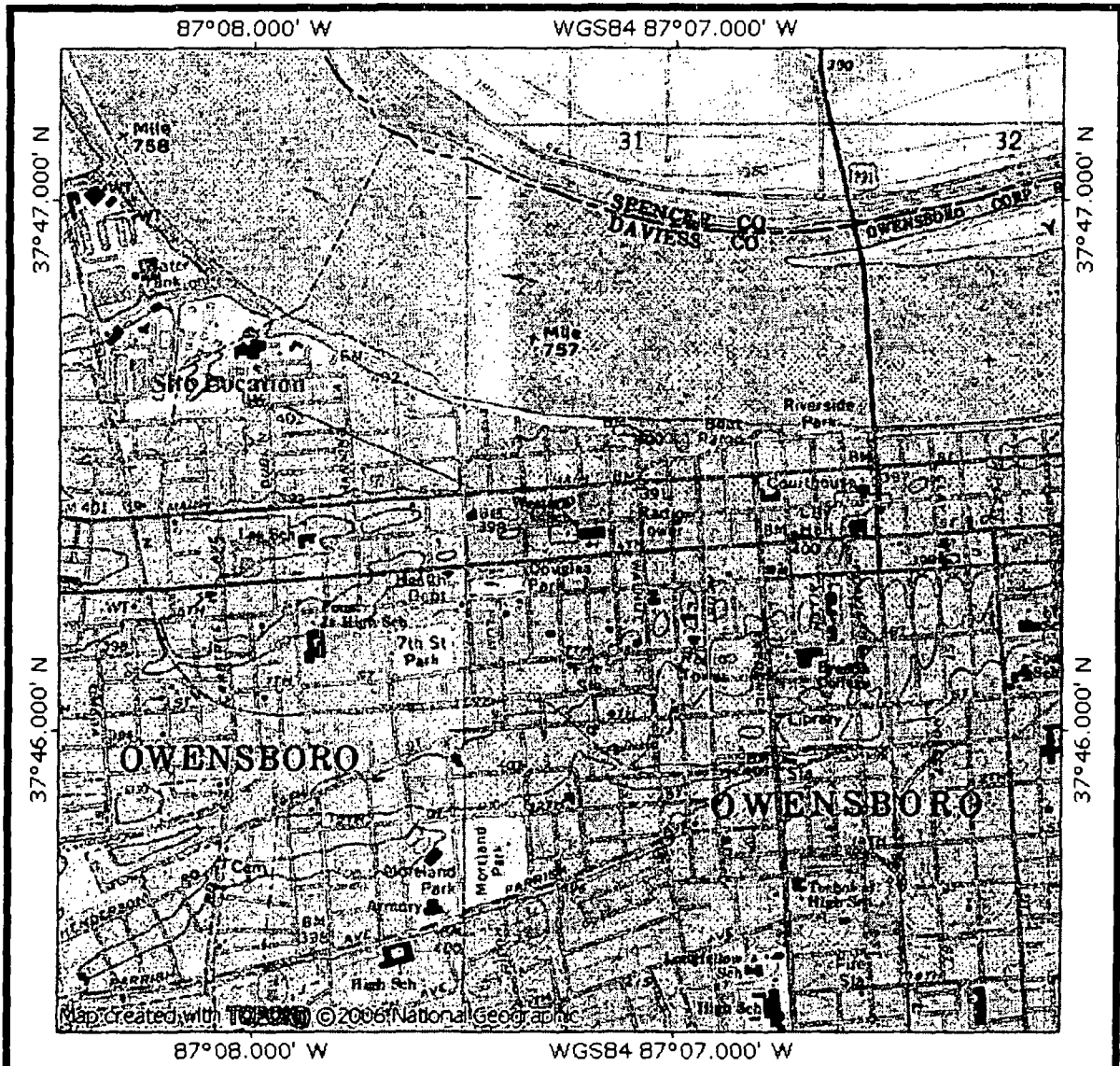
Cc: Jay Carnahan, Atmos Energy
Douglas C. Walther, Atmos Energy
Stuart Schulz, Atmos Energy

Figures

1. Topographic Map
2. Site Plan
3. Site Plan Showing Benzo(A)Pyrene Concentrations and Proposed Sampling Locations

Attachments

- A. Site Cover – Inspection Checklist
- B. Health and Safety Plan
- C. Streamlined Quality Assurance Project Plan



Atmos Energy Corporation, Inc.
 Former Manufactured Gas Plant
 Third and Elm Streets
 Owensboro, Kentucky



Linebach-Furthouser, Inc.
 Environmental Compliance & Consulting

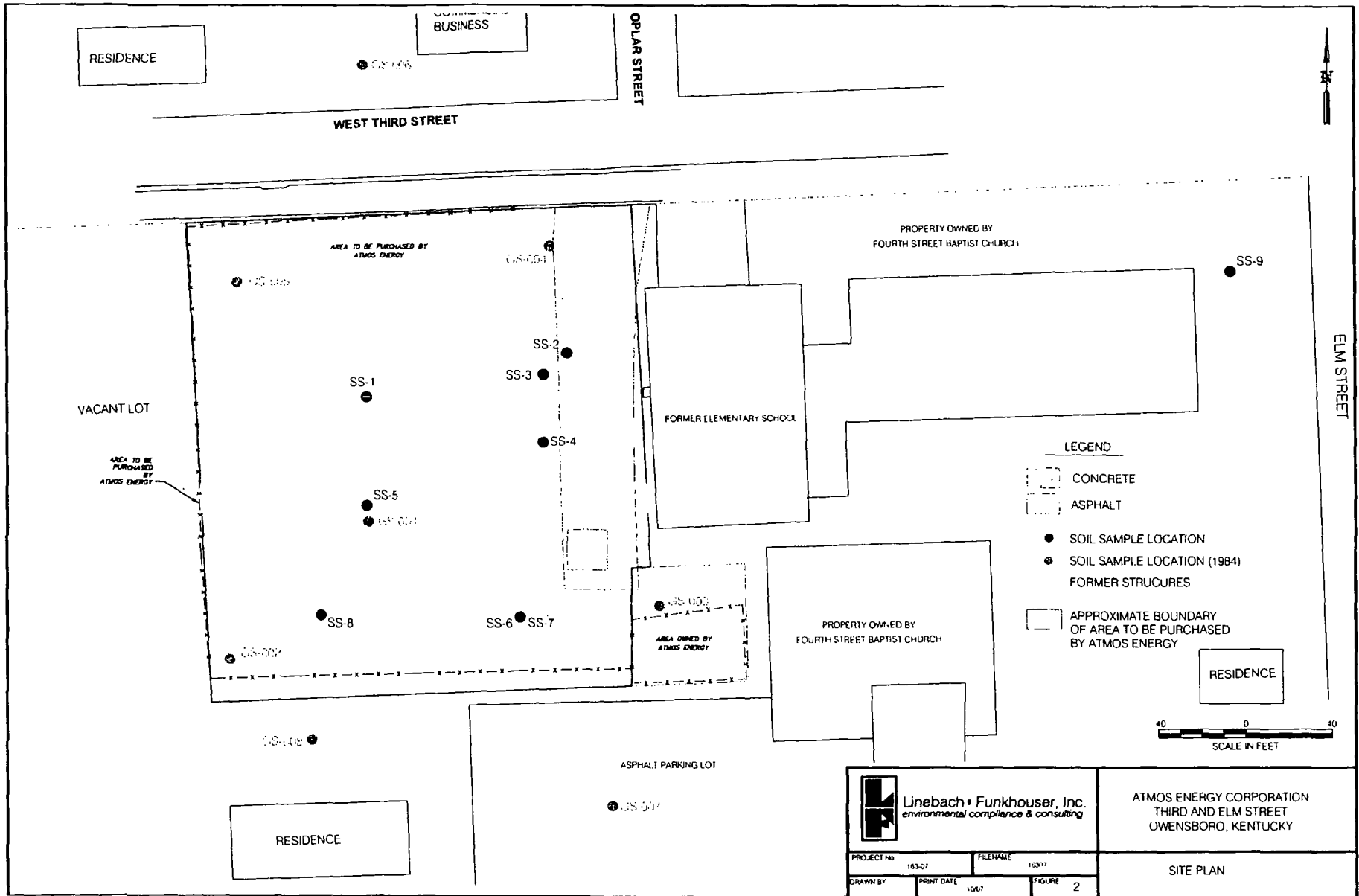
Site Location Map

USGS Topographical Map
 1992 Owensboro East, KY

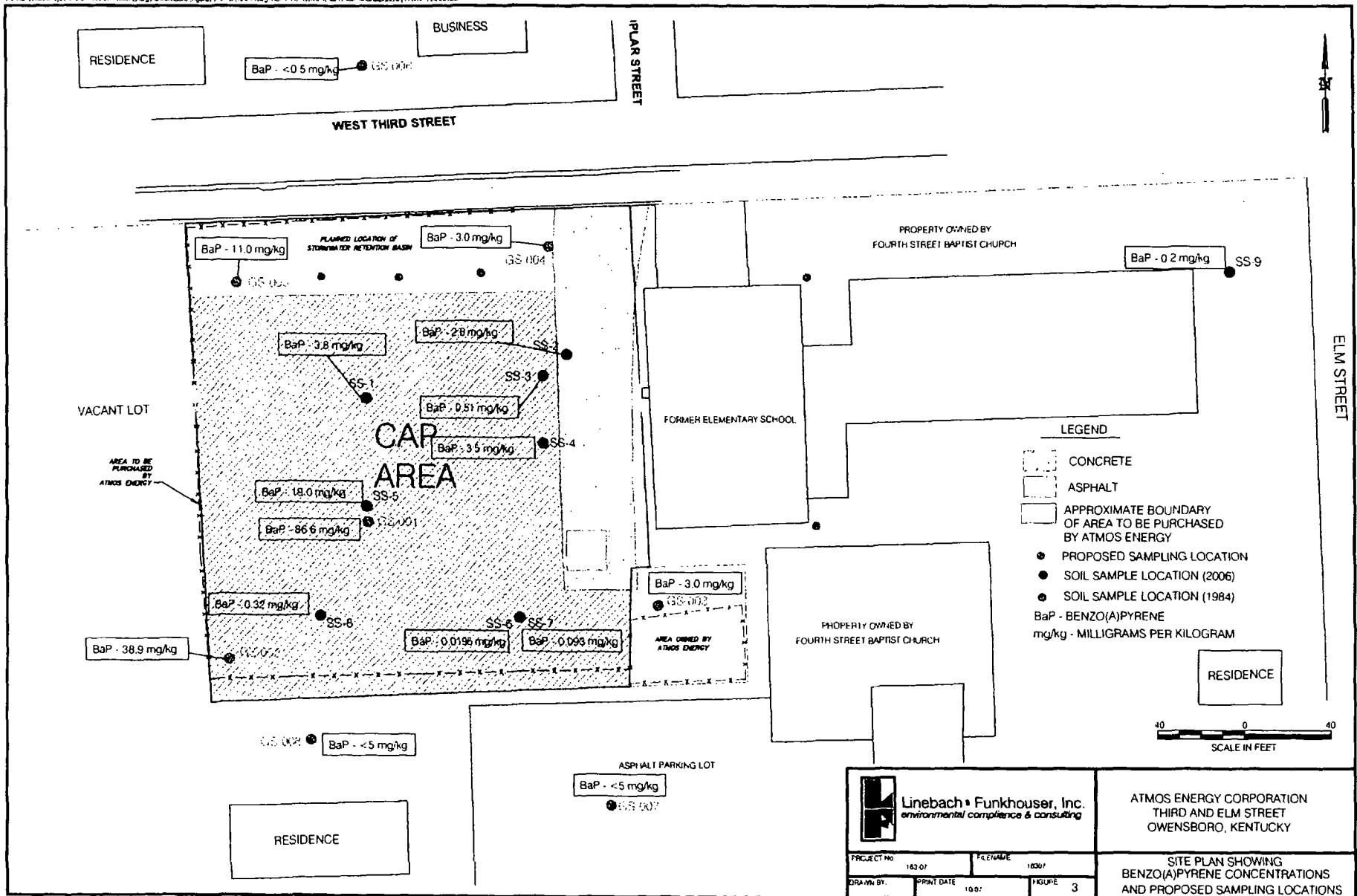
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PROJECT NO: 163-07



10 11 0052



10 11 053

Attachment A
Site Cover Inspection Checklist

**Site Cover
Annual Inspection Checklist
Atmos Energy Corporation
Former Manufactured Gas Plant
Owensboro, Kentucky**

The following is a checklist that has been developed to assist Atmos Energy Corporation with implementing the environmental Operations and Maintenance (O&M) activities associated with the construction of a site cover:

Perform a walking survey / inspection to ensure that the material serving as an environmental cover is being maintained and to detect any potential breaches in the cover such that the underlying affected soils could be exposed. Survey / inspection should include the following areas:				
Item	Description	Yes	No	N/A
1.	Asphalt / paved area of church parking lot in good condition with no major cracks, potholes or other items in need of repair.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Overall site in good condition with no evidence of construction, pavement patching or other sign of disturbance to the asphalt cap.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Asphalt cap is adequate to prevent direct contact with all subsurface soils at the Site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Site free of any unexpected environmental conditions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If "No" is checked above, indicate the planned corrective measure to address the deficiency: _____

Deficiency Corrected by: _____ Date: _____

Comments:

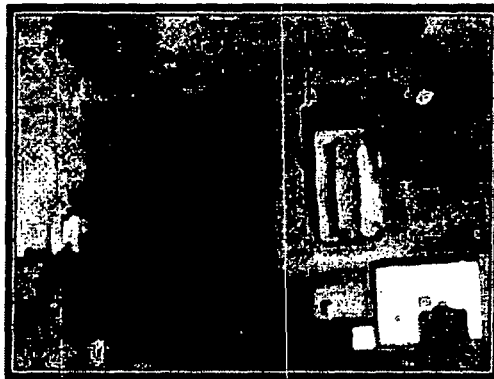
Inspected by: _____ **Date:** _____

Note: The completed checklist should be maintained in the Atmos Energy project files along with other USEPA/KDEP documents and correspondence regarding the Site.

10 11 0056

Attachment B
Health and Safety Plan

**HEALTH AND SAFETY PLAN
USEPA REMOVAL ACTION**



**Former Manufactured Gas Plant
Third and Elm Streets
Owensboro, Daviess County, Kentucky
EPA ID #KYD980838395**

Prepared by:



Linebach • Funkhouser, Inc.
environmental compliance & consulting



October 23, 2007

Mr. Jay F. Carnahan
Atmos Energy Corporation
5430 LBJ Freeway, Suite 1800
Dallas, Texas 75240-2601

**Re: *Revised Health and Safety Plan
USEPA Removal Action
Former Manufactured Gas Plant
Third and Elm Streets
Owensboro, Daviess County, Kentucky
Linebach Funkhouser Project Number 163-07***

Dear Mr. Carnahan:

Linebach Funkhouser, Inc. (LFI) has prepared the attached revised Health and Safety Plan (HSP) pertaining to the United States Environmental Protection Agency (USEPA) Removal Action work being conducted at the above-referenced facility. The HSP has been prepared to provide the protocol to be followed by site workers who will be engaged in conducting the work. The enclosed revised plan incorporates comments made by USEPA on the HSP for this project originally submitted on September 10, 2007.

LFI is pleased to continue to be part of the Atmos Energy Corporation team on this important project. Please contact us at 502-895-5009 if you have any questions about the HSP.

Sincerely,

Brendan P. Merk, P.G.
Project Hydrogeologist
Kentucky Professional Geologist #2361

Roy V. Funkhouser, P.G.
Principal
Kentucky Professional Geologist #1621

Cc: Douglas C. Walther, Atmos Energy
Stuart Schulz, Atmos Energy

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1.0 INTRODUCTION

This Health and Safety Plan has been prepared to describe work activities and specific health and safety procedures applicable to the construction of a site cover over affected soil at a former manufactured gas plant (MGP) at Third and Elm Streets in Owensboro, Kentucky (the "Site"). The affected area is currently an open grass-covered field and, following construction of an asphalt-paved site cover, will be used as a parking lot and recreation area (anticipated basketball court).

This Plan has been prepared to see that:

- Site workers engaged in construction of the site cover are aware of the work activities to be conducted, and the general procedures to be followed;
- Site workers are informed of the specific constituents of concern;
- Site workers are not adversely exposed to constituents of concern; and,
- The general public and surrounding environment are not adversely impacted by dust and soil potentially being blown or tracked from the Site during the course of completing the project.

The following key activities will be conducted:

- Vegetation will be removed, as necessary;
- Site grading will be conducted to achieve the required sub-grade conditions; and,
- The affected area of the site will be capped with asphalt pavement.

2.0 PROJECT ORGANIZATION

Atmos Energy Corporation (Atmos Energy) will have the overall responsibility for implementation of this Plan. Atmos Energy will have a designated Project Manager with the authority to assure that site personnel comply with the Plan. In addition to the Atmos Energy's

Project Manager, a Health and Safety Officer (HSO) will be designated. The HSO's responsibilities will include:

- Supervision and enforcement of safety equipment usage.
- Supervision and inspection of equipment cleaning (if applicable).
- Supervision of decontamination area set-up and procedures (if applicable).
- On-site personnel orientation in potential hazards, personal hygiene principles, safety equipment usage and emergency procedures (daily "tailgate" or "toolbox" meetings as appropriate).
- Review and modification of the health and safety portion of this Plan as more information becomes available or conditions warrant.
- Coordination of emergency procedures.

Site workers engaged in the Site activities will be informed of the HSP portion of this Work Plan and will be provided access to a copy of this HSP at the work site. Site security controls will be maintained by use of construction fencing to limit access to the construction area, as well as the existing chain link fence that surrounds the property.

Visitors/Dump Truck Drivers

During site preparation and soil capping activities, access to the Site will be controlled. No unauthorized personnel shall proceed beyond the established security barrier. Prior to entering work areas during site capping activities, visitors must report to the HSO or the HSO's designated representative. Depending on work activities and site conditions, the HSO may restrict visitors from work areas. As determined by the HSO, only site personnel with a reasonable potential of contacting affected site soil will be required to be briefed on the HSP.

3.0 ACTIVITY/EXPOSURE OVERVIEW

The effects of exposure depend on the chemical, its concentration, route of entry, and duration of exposure. Standard risk-based exposure assumptions used by USEPA in developing remediation goals are based on theoretical exposure of 250 days per year for 25 year (construction workers)

and 350 days per year for 30 years (general public). Based on the nature and concentration of the constituents present and the overall limited duration of the site cover construction project (anticipated 8-hour shifts over a 30 day period), chemical exposure to workers and the public is a low hazard.

3.1 Site Constituents

Based on previous sampling results, benzo(a)pyrene, from the PAH group of chemicals, is the predominant constituent of concern. The PAH group consists of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage or other organic substances. PAHs are usually found as a mixture containing two or more of these compounds, such as soot. Typically, exposure is not to an individual PAH, but to a mixture of chemicals. In the environment, exposure will most likely be to PAH vapors or chemicals that are attached to dust and other particles in the air.

Because PAHs are byproducts of fossil fuel combustion, they are considered ubiquitous in urban settings. A study by Bradley et al. (1994) of sixty samples from urban soils found a 95% confidence interval on the mean concentration of benzo(a)pyrene toxic equivalents and total PAHs were 3 milligrams per kilogram (mg/kg) and 25 mg/kg, respectively. This study was used to evaluate any PAHs detected at concentrations above screening levels, as the Kentucky Department for Environmental Protection (KDPEP) does not address background levels of PAHs.

The Occupation Safety and Health Administration (OSHA) have set a limit of 0.2 milligrams of PAHs per cubic meter of air (mg/m^3). The OSHA Permissible Exposure Limit (PEL) for mineral oil mist that contains PAHs is $5 \text{ mg}/\text{m}^3$ averaged over an 8-hour exposure period.

The National Institute for Occupational Safety and Health (NIOSH) recommends that the average workplace air levels for coal tar products not exceed $0.1 \text{ mg}/\text{m}^3$ for a 10-hour workday, within a 40-hour workweek. There are other limits for workplace exposure for items which contain PAHs, such as coal, coal tar and mineral oil.

3.2 Operational Hazards

Prior to commencement of field activities, Atmos Energy's Project Manager and the Health and Safety Officer will conduct a site reconnaissance to identify any visible or operational hazards.

➤ Heat Stress

Field activities in hot weather conditions create a potential for heat stress. The warning symptoms of heat stress include fatigue; loss of strength; reduced accuracy, comprehension and retention; and reduced alertness and mental capacity. To prevent heat stress, personnel shall receive adequate water supplies and electrolyte replacement fluids, and maintain scheduled work/rest periods. Pulse rate and body temperature shall also be monitored as appropriate.

➤ Cold Stress

Field activities in cold weather conditions create a potential for cold stress. The warning symptoms of cold stress include reduced coordination, drowsiness, impaired judgment, fatigue, and numbing of the toes, fingers, nose and ears. To prevent cold stress, personnel shall wear appropriate clothing and maintain scheduled work/rest periods, with rest periods taken in a sheltered and heated location.

➤ Tools and Equipment

Tools and equipment used shall be inspected prior to use, maintained in safe condition, and determined adequate for their designated use. Leather gloves shall be donned when using tools that are designed to cut or trim materials.

➤ Noise Hazard

Operation of equipment may present a noise hazard to workers. Personnel will be provided with hearing protection for use when noise levels are excessive.

3.3 Site Security

The site is currently fenced on the north, west, and south sides. During construction of the Site cap, temporary free-standing chain-link fencing will be installed around affected areas of the Site

where no fencing is currently present. The chain-link fencing will be equipped with a lockable gate in areas where ingress/egress access is required.

In the event that unauthorized personnel enter the site controlled work area, work in that area will be stopped. Work will not resume until the unauthorized personnel have been removed from the work area. A log of visitors will be maintained.

4.0 WORKER TRAINING & EDUCATION

Prior to commencing field activities, workers will be required to attend a Health and Safety/Site Indoctrination Session (i.e. "tailgate" safety meeting). The training session will be given by the HSO and will:

- Discuss the work tasks to be conducted and the manner in which the work is to be completed;
- Cover the health and safety procedures to be followed at the site with an emphasis on personal protective equipment requirements and monitoring and safety procedures.
- Discuss known levels of constituents in the soil.
- Provide the opportunity for workers to ask questions to ensure that each attendee understands the HSP.

5.0 PERSONAL PROTECTIVE EQUIPMENT

The initial level of PPE defined for the project will be level D as described below. Level D protection will be maintained unless airborne levels of particulate dust are detected at the action levels listed in Section 7.0. If action levels are reached, Level C protection will be implemented. The HSO will have the flexibility to upgrade or downgrade PPE based on changing site conditions and input from the Atmos Energy's Project Manager.

Level D

- Cotton/leather gloves
- Work boots
- Reusable (cotton) long sleeve

Level C

- Level C will include the basic Level D criteria plus the following upgrades:
- Air-purifying respirator equipped

- work clothes
- Safety glasses
- with appropriate cartridges
- Disposable tyvek coverall

6.0 AIR MONITORING

Air monitoring will be conducted during construction activities. A fugitive dust suppression and particulate monitoring program will be established to limit exposure of on-site personnel and the public around the site to affected dust during implementation of the proposed site capping activities. The potential exposure period to affected dust will be limited to the timeframe between when the existing vegetative cover is tilled into the underlying soil, and the asphalt subgrade layer across the soil is complete. During the limited interval when affected soil may be exposed and susceptible to wind transport, the following fugitive dust suppression and particulate monitoring program will be used at the site:

- Reasonable fugitive dust suppression techniques will be employed during site activities that may generate fugitive affected dust.
- Particulate monitoring will be employed during the handling of contaminated soil or when activities on site may generate fugitive dust from exposed contaminated soil. Such activities may include tilling, grading, or placement of the asphalt cap subgrade.
- Particulate monitoring will be conducted using real-time particulate monitors and will monitor particulate matter less than ten microns (PM_{10}) with the following minimum performance standards:

Object to be monitored: Dust
Size range: <0.1 to 10 microns
Sensitivity: 0.001 mg/m^3
Range: 0.001 to 10 mg/m^3
Overall Accuracy: $\pm 10\%$ as compared to gravimetric analysis of stearic acid or reference dust
Operating Conditions:
Temperature: 0 to 40°C
Humidity: 10 to 99% Relative Humidity

Power: Battery operated with a maximum capacity of eight hours continuous operation

- Particulate levels will be monitored immediately downwind at the work site and integrated over a period not to exceed 15 minutes. Consequently, instrumentation shall require necessary averaging hardware to accomplish this task; the MIE DataRam DR-4000 or similar is appropriate.
- In order to ensure the validity of the fugitive dust measurements performed, Quality Assurance/Quality Control (QA/QC) measures will be implemented including periodic instrument calibration, operator training, daily instrument performance (span) checks and a record-keeping system.
- The action level will be 1 mg/m^3 over the integrated period not to exceed 15 minutes. The action level is based on the *Health-Based Guidelines for Air Management, Public Participation, and Risk Communication During the Excavation of Former Manufactured Gas Plants*, developed by the Wisconsin Bureau of Environmental and Occupational Health, Department of Health and Family Services (August 24, 2004). While conservative, this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. Two particulate monitors will be employed; one at an upwind location and one downwind. If particulate levels are detected in excess of 1 mg/m^3 at the downwind location, the upwind background level will be measured immediately. If during the timeframe that potentially affected soil is exposed, the working site particulate measurement is greater than 1 mg/m^3 above the background level, dust suppression techniques will be implemented to reduce the generation of fugitive dust and corrective action taken to protect site workers and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression.
- The following techniques have been shown to be effective for the controlling the generation and migration of dust during construction activities:
 1. Applying water on haul roads.

2. Wetting equipment and exposed soil.
3. Spraying water on blades during scraping and grading.
4. Hauling materials in properly tarped containers.
5. Restricting vehicle speed to 10 mph.
6. Covering exposed soil areas after construction activity ceases.
7. Reducing the exposed area size.

Experience has shown that in utilizing the above-mentioned dust suppression techniques, within reason as not to create excess water which would result in unacceptable wet conditions, the chance of exceeding the 1 mg/m^3 action level is remote. Using atomizing sprays will prevent overly wet conditions, conserve water and provide an effective means of suppressing the fugitive dust.

- If the dust suppression techniques being utilized at the site do not lower particulates to an acceptable level (that is, below 1 mg/m^3 and no visible dust off-site), work will be suspended until appropriate corrective measures are approved to remedy the situation. Also, the evaluation of weather conditions will be necessary for proper fugitive dust control, when extreme wind conditions make dust control ineffective. As a last resort removal actions may need to be suspended.

7.0 DECONTAMINATION PROCEDURES

To minimize the potential spread of impacted soil from the Site, affected soil, if any, that is observed to be encrusted on vehicle/equipment tires and treads will be removed before the vehicles leave the designated soil grading/capping area. A vehicle/equipment decontamination area will be established at a designated exit point from the Site. The area will consist of a surficial cover of plastic sheeting with a sump to collect drainage sediment, as necessary. The edges of the sheeting will be wrapped around wooden boards (2 x 4's), railroad ties, or similar material to create a containment area. For those workers exposed to affected particulates, the following decontamination steps shall be conducted in a designated area to be determined by the HSO. Again, these steps will be followed only if located in a soil removal area.

- | | |
|---------------|--|
| Personnel | 1) Remove hard hat and eye protection. |
| (For Level C) | 2) Remove gloves. |
| | 3) Remove respirator. |
| | 4) Wash all exposed skin (face and hands). |

- 5) Bag all disposable PPE and dispose of in a manner approved by the HSO.
- 6) Wipe respirators after each use and clean at the end of the day with soap and water.

- Personnel (For Level D And Mod-D)
- 1) Wash and rinse boots, gloves, and protective coverall if used.
 - 2) Soap and water wash hands and face and exposed skin.
 - 3) Shower and change as soon as possible upon exiting Site.
 - 4) Wash all soiled clothing as soon as possible.
 - 5) Bag all disposable PPE and dispose of in a manner approved by the HSO.

- Equipment
- 1) Scrape off encrusted material from tires, if any.
 - 2) As necessary, soap and water wash equipment using brushes (high-pressure steam or water may be used).
 - 3) Rinse equipment with water.
 - 4) Continue washing and rinsing until clean.

Emergency decontamination procedures will include the following: Decontaminate personnel and equipment using soap and water as much as possible (if possible) prior to administering first aid procedures or transporting the victim to medical facility.

The following decontamination equipment is required:

- Soap and water solution
- Brushes

8.0 EMERGENCY RESPONSE PLAN

8.1 Guidelines for Pre-Emergency Planning and Training

Workers must be aware of the safety procedures in this Work Plan. Workers will be provided access to a copy of this Plan and a list of the emergency contacts and phone numbers immediately accessible on Site. Workers will also be informed of the route to the nearest qualified emergency medical services.

8.2 Emergency Recognition

Emergency conditions are considered to exist if:

- Any member of the field crew is involved in an accident or experiences any adverse health effects or systems of exposure while on site.
- A condition is discovered that suggests the existence of a situation more hazardous than anticipated.

In the event that any member of the work crew experiences any adverse health effects or symptoms of exposure while on the scene, the entire crew working in that area will immediately halt work and act according to the instructions provided by the HSO or Project Manager.

The discovery of any condition that would suggest the existence of a situation more hazardous than anticipated will result in the evacuation of the work crew and re-evaluation of the hazard and the level of protection required.

8.3 Emergency Contacts

In the event of any situation or unplanned occurrence requiring assistance, the appropriate contact(s) should be made from the list below. For emergency situations, telephone or radio contact should be made with the Site point of contact of Site emergency personnel who will then contact the appropriate response teams.

Table 1 – Emergency Contacts

Emergency Contacts	Phone Number
Fire Department and Ambulance	911
Poison Control 24 hour information	1-800-366-8888
Atmos Energy – Operations Manager, Owensboro, KY Bruce Tucker	270-685-8137 Cell 270-929-5071
Site Health & Safety Officer Brendan Merk, Linebach Funkhouser, Inc.	502-895-5009 Cell 502-777-6079

Medical Emergency	Hospital	Phone Number
Ambulance	Owensboro Mercy Hospital	911 270-688-2000

Directions to Hospital

Driving directions to the Owensboro Mercy Hospital are attached.

8.4 Personnel Roles, Lines of Authority, and Communication Procedures During Emergency

In the event of an emergency situation at the work site, the HSO designated by Atmos Energy will assume control and will coordinate decisions with Atmos Energy's Director of Safety. The HSO will confer with Atmos Energy's Director of Safety to resolve disputes about health and safety requirements and precautions. Atmos Energy's Director of Safety will also be responsible for coordinating all activities until emergency response teams (ambulance, fire department) arrive at the Site. The HSO will work with Atmos Energy's Director of Safety to ensure that the necessary personnel and agencies are contacted as soon as possible after the emergency occurs.

8.5 Evacuation Routes and Procedures, Safe Distances, and Places of Refuge

In the event of hazardous material emergency conditions, employees will evacuate the area, transport injured personnel, or take other measures to safely remedy the situation. Evacuation routes, safe distances, and places of refuge will be determined by the HSO and the field team prior to initiating work.

9.0 PERSONNEL AUTHORIZATION

By initialing and dating this form, the listed individual acknowledges that he/she has read and understands and will comply with the requirements of this Health and Safety Plan.

	<u>Name</u>	<u>Date</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____

Attachment C

Streamlined Quality Assurance Project Plan

**STREAMLINED QUALITY ASSURANCE PROJECT PLAN
Confirmatory Soil Sampling
Atmos Energy Corporation
Former Manufactured Gas Plant Site
Owensboro, Kentucky**

1.0 BACKGROUND

This streamlined Quality Assurance Project Plan (QAPP) has been developed to establish the quality assurance/quality control (QA/QC) procedures to be followed during the course of confirmatory soil sampling to be conducted at Atmos Energy Corporation's former manufactured gas plant site in Owensboro, Kentucky. The overall QA/QC objective is to develop and implement procedures for chain-of-custody, laboratory analysis, and reporting that will provide repeatable, scientifically valid results. The following sections describe the sampling and analysis procedures that will be implemented including laboratory analytical methods. In general, field methodologies will be consistent with USEPA Region 4's *Environmental Investigations Standard Operating Procedures and Quality Assurance Manual* (November 2001).

2.0 DATA QUALITY OBJECTIVES

The objective of the proposed sampling is to confirm that the proposed area of site capping is sufficient to cover affected areas of soil containing benzo(a)pyrene (BaP) at concentrations exceeding USEPA's Removal Action Level (RAL).

Soil sampling results will be compared to the USEPA RAL for BaP of 6.2 mg/kg. Attention will be given to assure that laboratory reporting limits are equal to or less than the RAL. Laboratory analyses will be conducted by a certified laboratory with an internal QA/QC program. Laboratory generated data deliverables for the project will include:

- A cover letter from the laboratory manager specifying the analyses conducted and any pertinent non-routine sample information;

- A detailed case narrative discussing unusual issues encountered during analysis and all quality control issues not conforming to the laboratory's quality assurance procedures; and,
- Summaries of internal QA/QC analyses relevant to the data.

3.0 PROJECT ORGANIZATION AND RESPONSIBILITIES

Linebach Funkhouser, Inc. (LFI) will provide the overall project management and technical oversight for this project. Laboratory analytical services will be subcontracted to a certified laboratory.

Mr. Roy Funkhouser, Principal with LFI, will serve as the Principal-In-Charge for the project. Mr. Funkhouser is a registered professional geologist in Kentucky and has 23 years of experience in environmental assessment and remediation work. Mr. Funkhouser will provide overall direction and will assure that LFI's technical quality standards are maintained. Mr. Brendan Merk, P.G., will manage the project, conduct the field sampling, and oversee the day-to-day activities and project scheduling.

4.0 SAMPLING PROCEDURES

Soil sampling locations have been selected to assess areas surrounding the proposed capped area to show remaining effects (if any) from past potential releases. Approximate sampling locations are shown in Figure 3 attached to this Work Plan. Soil borings will be advanced to a depth of approximately two feet below grade. Samples will be collected using pre-cleaned hand trowels, spatulas or hand augers.

4.1 General Sample Collection Protocol

Recovered materials will be described using the Unified Soil Classification System (USCS). The site professional will record lithology characteristics and any visible or olfactory impacts to recovered soils on boring logs. All re-usable sampling equipment will be decontaminated prior to advancing each boring by scrubbing with a non-phosphate detergent, rinsing with deionized

water, and allowing to air dry. Sampling personnel will don new disposable gloves between each sample location to reduce the possibility of cross-contamination.

4.2 Laboratory Analysis

The soil samples collected will be submitted to the laboratory for analysis of benzo(a)pyrene by USEPA Method 8270C. Care will be taken to assure that laboratory detection limits do not exceed Region 9 risk-based screening levels for residential use.

4.4 Containerization/Chain-of-Custody

Soil samples collected for laboratory analysis will be placed in new, laboratory-supplied containers. Each sample container will be labeled with sample identification, date, time, method of collection, sampler's initials and requested analysis. After the samples are collected, they will immediately placed in an iced cooler for storage at approximately 4°C prior for shipment to the laboratory. The sample coolers will be shipped to the analytical laboratory under chain-of-custody protocol via overnight courier.

4.5 Field Logs

A bound field logbook will be used for the maintenance of field records. The investigator's name, project name, and project number will be entered on the inside of the front cover of the logbook. Entries will be dated and time of entry recorded. All aspects of sample collection and handling, as well as visual observations, will be documented in the field logbooks.

Once completed, the field logbooks will be maintained as part of the permanent project files. Sample forms may be developed and used in lieu of a field logbook. Proper field sheets, sample labeling, chain-of-custody, and sample tracking documentation will be maintained as appropriate.

4.6 Investigation Derived Waste

Surficial soil sampling procedures to be used for this project will generate only a minimal amount of excess soil, if any. Excess soil, if any, generated by sampling activities will be placed back into the shallow borehole from which it originated.

4.7 Equipment Decontamination Procedures

LFI anticipates the use of pre-cleaned dedicated sampling trowels or spatulas at each location. A pre-cleaned hand-auger may be used if the trowels cannot penetrate the upper 6 inches of soil. The following procedures will be used for the cleaning (decontamination) of sampling equipment, should it be necessary to re-use a sampling trowel or hand-auger bucket at the site.

1. Clean with tap water and soap using a brush if necessary to remove particulate matter and surface films. The decontamination area will be secured within the site. Potential runoff of generated fluids will be controlled within a small bermed area lined with plastic. Cleaning fluids, if any are generated, are expected to be of a minimal amount, (1 to 2 gallons) and will be collected in the plastic-lined bermed area and allowed to evaporate or be decanted to the City sewer system (with approval from the City).
2. Rinse thoroughly with tap water.
3. Rinse thoroughly with analyte free (deionized) water.