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

IN THE MATTER OF:

Pools Prairie Site
Manufacturing Plant Area
Neosho, Missouri

United States Department of Defense,

Federal Respondent,

and

TDY Industries, LLC, and
The Boeing Company,

Performing Respondents

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTION

U.S. EPA Region 7
Docket No. CERCLA-07-2012-0015

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

TABLE OF CONTENTS

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"), the Missouri Department of Natural Resources ("MDNR"), the United States Department of Defense ("DOD"), TDY Industries, LLC ("TDY"), and The Boeing Company ("Boeing"), collectively "the Parties." For convenience in this Settlement Agreement, TDY Industries, LLC and The Boeing Company are referred to as the "Performing Respondents," and DOD is referred to as the "Federal Respondent."

2. This Settlement Agreement provides for the Performing Respondents to conduct, and the United States on behalf of the Federal Respondent to finance, in part, a removal action at or in connection with the Manufacturing Plant Area ("MPA") of the Pools Prairie Superfund Site. The MPA is generally located at 3551 Doniphan Drive, Neosho, Newton County, Missouri. It further provides that EPA shall be reimbursed for Future Response Costs incurred in connection with the removal action as provided in this Settlement Agreement.

3. 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").

4. The MDNR enters into this Settlement Agreement pursuant to Section 260.530, RSMo. By MDNR's entering into this Settlement Agreement the EPA shall be deemed to have notified the State of Missouri of this action, including any required notice under Section 104(b)(2) of CERCLA, 42 U.S.C. § 9604(b)(2).

5. The EPA has obtained the concurrence of the United States Attorney General to issue this Settlement Agreement to the Federal Respondent.

6. The Parties recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Performing Respondents and the payments made by the United States on behalf of the Federal Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability by Performing Respondents or the Federal Respondent. Performing Respondents and the Federal Respondent agree to comply with and be bound by the terms of this Settlement Agreement and further agree that they will not contest the basis or validity of this Settlement Agreement or its terms. However, Performing Respondents and the Federal Respondent do not admit, and retain the right to controvert in any subsequent proceedings, other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Sections V and VI of this Settlement Agreement. Nothing in the Settlement Agreement is intended to be an admission of any fact or agreement to any legal position, or a waiver of any right by either Boeing or the United States, including DOD, with respect to whether the costs or expenses incurred or paid in

connection with this Settlement Agreement are allowable, allocable, or reasonable for purposes of pricing, cost reimbursement, or any financial aspect related to costs under contracts with the United States, including DOD.

7. The Findings of Fact set forth herein are not intended to be a complete recitation of all relevant facts, and no inferences shall be drawn from the absence of any fact from the Findings of Fact.

II. STATEMENT OF PURPOSE

8. By entering into this Settlement Agreement, the mutual objective of the Parties is to conduct a removal action at the MPA to: (a) reduce potential exposures resulting from direct contact with surface soils that exceed defined risk levels; and (b) reduce the mass of VOCs in the source area soils, to the extent practicable as set forth in Appendix C.

III. PARTIES BOUND

9. This Settlement Agreement applies to and is binding upon EPA, MDNR, the Federal Respondent, and each of the Performing Respondents and their successors and assigns. Any change in ownership or corporate status of either Performing Respondent, including, but not limited to, any transfer of assets or real or personal property, shall not alter its responsibilities under this Settlement Agreement.

10. Performing Respondents are jointly and severally liable for carrying out all activities required by this Settlement Agreement. In the event of the insolvency or other failure of any one or more Performing Respondents to implement the requirements of this Settlement Agreement, the remaining Performing Respondent shall complete all such requirements.

11. Compliance or noncompliance by any Performing Respondent with any provision of this Settlement Agreement shall not excuse or justify noncompliance by the Federal Respondent.

12. Performing Respondents shall ensure that their contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Performing Respondents shall be responsible for any noncompliance with this Settlement Agreement.

IV. DEFINITIONS

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

Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "Action Memorandum" shall mean the EPA Action Memorandum relating to the MPA signed on 6/4/14 by the Director, Superfund Division, EPA Region 7, or his/her delegate, and all attachments thereto.

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 unless expressly stated to be a working day. "Working day" or "business day" shall mean a day other than a Saturday, Sunday, or a Missouri State or federal holiday. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or a Missouri State or federal holiday, the period shall run until the close of business of the next working day.

d. "Document" shall mean any object that records, stores or presents information and includes writings, drawings, graphs, charts, photographs, information in electronic form, and other data compilations from which information can be obtained, translated, if necessary, through detection devices into reasonably useable form; and (a) every copy of each document which is not an exact duplicate of a document which is produced; (b) every copy which has any writing, figure or notation, annotation or the like on it; (c) drafts that are subject to the requirements set forth in Section XIV (Record Retention); (d) attachments to or enclosures with any document; and (e) every document referred to in any other document.

e. "Effective Date" shall mean the date this Settlement Agreement is effective pursuant to Section XXXV of this Settlement Agreement.

f. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States. EPA is the lead agency for this action as that term is defined in 40 C.F.R. § 300.5.

g. "Federal Respondent" shall mean the United States Department of Defense.

h. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that EPA incurs on or after the Effective Date of this Settlement Agreement 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 to secure access as set forth in to Paragraph 56.

i. "Hazardous Substance" shall mean hazardous substance as that term is defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

j. "Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

k. "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.

l. "Manufacturing Plant Area" (also known as "Building 65" or the "MPA") shall mean the area generally located at 3551 Doniphan Drive, Neosho, Missouri, in the northern portion of Neosho's Crowder Industrial Park as depicted generally on the Manufacturing Plant and Vicinity Area Map attached hereto as Appendix A.

m. "Matters Addressed" shall mean all Work performed, all payments made pursuant to this Settlement Agreement, and all Response Costs incurred by any Party in connection with this Settlement Agreement.

n. "MDNR" shall mean the Missouri Department of Natural Resources and any successor departments or agencies of the State. MDNR is the support agency for this action as that term is defined in 40 C.F.R. § 300.5.

o. "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.

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

q. "Parties" shall mean the EPA, MDNR, the Performing Respondents, and the Federal Respondent.

r. "Pollutant or Contaminant" shall mean pollutant or contaminant as that term is defined by Section 101(33) of CERCLA, 42 U.S.C. § 9601(33).

s. "Respondents" or "Performing Respondents" shall mean The Boeing Company ("Boeing"), and TDY Industries, LLC ("TDY").

t. "Response Costs" shall mean all costs of "response" as that term is defined by Section 101(25) of CERCLA, 42 U.S.C. § 9601(25).

u. "SCORPIOS Report" shall mean an EPA cost summary prepared using EPA's Superfund Cost Recovery Package and Imaging Online System.

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

w. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto. In the event of a conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

x. "Site" shall mean the Pools Prairie Superfund Site, including *inter alia*, the Manufacturing Plant Area (also known as Building 65), Building 900 and the Test Site and all areas where Waste Materials released from these areas have come to be located. The Site is in Newton County, Missouri and its general location is depicted generally on the map attached as Appendix A.

y. "Transfer" shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

z. "United States" shall mean the United States of America, including all of its departments, agencies and instrumentalities.

aa. "Waste Material" shall mean: (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); and (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33).

bb. "Work" shall mean all activities and obligations Performing Respondents are required to perform and the United States, on behalf of the Federal Respondent, is required to finance, in part, under this Settlement Agreement, except for retention of records pursuant to Section XIV of this Settlement Agreement.

V. FINDINGS OF FACT

14. The Pools Prairie Superfund Site is located in Newton County, Missouri, just south of the City of Neosho. Investigations conducted at the Site have identified groundwater contamination over a wide area at the Site. Trichloroethylene ("TCE"); 1,2-dichloroethylene ("1,2-DCE"); 1,1-dichloroethylene; tetrachloroethylene ("PCE"); vinyl chloride and other Volatile Organic Chemicals ("VOCs") have been found in groundwater. Trichloroethylene, 1,2-dichloroethylene; 1,1-dichloroethylene; tetrachloroethylene and vinyl chloride are each listed as a hazardous substance pursuant to 40 C.F.R. § 302.4.

15. In the 1940s, the United States government acquired land in Newton County, Missouri for construction and operation of Camp Crowder, an Army installation.

16. In approximately 1956 or 1957, the Army transferred a portion of Camp Crowder to the Air Force for construction of a rocket engine manufacturing plant. This installation was known as Air Force Plant No. 65 ("Plant 65"). Construction of Plant 65 began in approximately 1956 and manufacturing operations began in approximately 1956 or 1957. This installation included, *inter alia*, the main manufacturing plant area ("Manufacturing Plant" or "MPA"). The Manufacturing Plant is located at 3551 Doniphan Drive, Neosho, Newton County, Missouri, and is included in portions of Sections 2, 3, 10, and 11, Range 32 West, Township 24 North. The location of the Manufacturing Plant is shown on the Manufacturing Plant and Vicinity Area Map, attached hereto as Appendix A.

17. Plant 65 was a government owned, contractor operated facility. From approximately 1956 or 1957 until 1968, the Rocketdyne Division of North American Aviation, Inc. ("Rocketdyne"), was the Air Force's operating contractor for the facility. During this time period, Rocketdyne manufactured rocket engines and related components at Plant 65 pursuant to Air Force and NASA contracts. Boeing is the successor to Rocketdyne.

18. In 1968, Continental Aviation and Engineering Corp. ("Continental Aviation") became the Air Force's primary operating contractor for Plant 65. At that time, Plant 65's mission changed from manufacturing and testing rocket engines and components to manufacturing and overhauling jet engines.

19. In approximately 1980, the United States sold the Manufacturing Plant to Teledyne Industries, the successor to Continental Aviation. Teledyne Industries continued using the Manufacturing Plant for similar types of activities until it sold the Manufacturing Plant to Sabreliner Corporation in 1992.

20. Sabreliner re-manufactured and tested jet airplane engines and tested and refurbished used jet airplane and helicopter engines at the Manufacturing Plant until it sold the Manufacturing Plant to Dallas Airmotive, Inc. in 2003.

21. Dallas Airmotive, Inc. currently owns the Manufacturing Plant, and has re-manufactured and tested jet airplane engines and tested and refurbished used jet airplane and helicopter engines at the Manufacturing Plant.

22. The Manufacturing Plant is located in an area of karst topography, characterized by sinkholes, losing streams, caves and springs, due to subsurface weathering of carbonate rock. Surficial drainage in the area of the Manufacturing Plant is to the west, north, and east, as it lies to the north of a drainage divide.

23. In March 1999, the EPA conducted a site investigation at the MPA and found elevated levels of TCE, vinyl chloride, 1,2-dichlorobenzene, cis-1,2-dichloroethylene, and PCE in soil in samples collected immediately adjacent to the MPA. In November 1999, the EPA installed monitoring wells as part of a removal assessment at the MPA. The EPA found elevated

levels of TCE and detectable levels of cis-1,2 dichloroethylene in the ground water in the area of the MPA.

24. Under terms of Administrative Orders on Consent, Docket Numbers CERCLA-07-2003-0017 and CERCLA-07-2003-0018, Federal Respondent and Sabreliner completed a removal site evaluation for the MPA ("MPA RSE"). The MPA RSE included sampling to define more precisely areas of VOC contamination in soil and groundwater at or in the vicinity of the MPA. Results of the MPA RSE were documented in a report entitled "Removal Site Evaluation, Manufacturing Plant Area and Vicinity, Pools Prairie Site, Neosho, Missouri," dated May 17, 2006, and approved by the EPA.

25. Four primary contaminant source areas were identified in the Removal Site Evaluation. As summarized in the engineering evaluation/cost analysis for the MPA, the primary source areas, which are depicted in the Manufacturing Plant Area Map ("MPA Map"), attached hereto as Appendix B, are:

a. The Chemical Storage Area, estimated to contain approximately 71 percent of the TCE mass in the MPA;

b. The former Surface Impoundment Area, estimated to contain approximately 4 percent of the TCE mass in the MPA;

c. The former Rail Spur Area, estimated to contain approximately 10 percent of the TCE mass in the MPA; and

d. The former TCE Storage Area, estimated to contain approximately 15 percent of the TCE mass in the MPA.

26. Under terms of an Administrative Order on Consent, Docket Number CERCLA-07-2003-0017, Performing Respondents and Federal Respondent completed an engineering evaluation/cost analysis for the MPA ("MPA EE/CA"). The MPA EE/CA included an analysis of various alternatives which could potentially achieve the desired cleanup objectives for the MPA. The recommended alternatives included the use of soil-vapor extraction, excavation and land farming. The results of the MPA EE/CA are presented in a report entitled "A Final Engineering Evaluation/Cost Analysis, Manufacturing Plant Area, Pools Prairie Site, Newton County, Missouri," dated January 2008 and approved by the EPA.

27. The VOC most consistently detected in the MPA RSE was trichloroethylene. Other VOCs detected include 1,2-dichlorobenzene, 1,4-dichlorobenzene, tetrachloroethene, and cis-1,2-dichloroethene.

28. Analytical results reveal trichloroethylene is the VOC detected most consistently at significant concentrations in soil at the MPA. Other VOCs, including 1,2-dichlorobenzene,

1,4-dichlorobenzene, tetrachloroethene, and cis-1,2-dichloroethene, were also detected at various locations in soils at the MPA.

29. Analytical results reveal trichloroethylene is the VOC detected most consistently at significant concentrations in groundwater at the MPA. Other VOCs, including tetrachloroethene and cis-1,2-dichloroethene, were also detected in groundwater at the MPA.

30. Trichloroethylene, tetrachloroethene, cis-1,2-dichloroethene, 1,2-dichlorobenzene, 1,4-dichlorobenzene are listed as hazardous substances pursuant to 40 C.F.R. § 302.4.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

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

a. The MPA is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found at the MPA, as identified in the Findings of Fact above, includes a "hazardous substance" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. The Performing Respondents and the Federal Respondent are each a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

d. The Performing Respondents each may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a) and Section 260.530, RSMo.

e. The Federal Respondent may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

f. The conditions described in 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) and Section 260.500(9), RSMo.

g. The removal action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be consistent with CERCLA and the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP .

VII. SETTLEMENT AGREEMENT AND ORDER

32. Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby Ordered and Agreed that the Performing Respondents and the United States on behalf of Federal 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.

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

33. Designation of Contractor(s). All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Performing Respondents shall retain one or more contractors to perform the Work and shall notify EPA and MDNR of the name(s) and qualifications of such contractor(s) within thirty (30) days of the Effective Date. Performing Respondents shall also notify EPA and MDNR of the name(s) and qualification(s) of any other contractor(s) retained to perform the Work at least thirty (30) days prior to commencement of such Work. Performing Respondents shall demonstrate that the proposed contactor has a quality system which 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), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B0-1/002), or equivalent documentation as required by EPA. Performing Respondents' contractor(s) may satisfy this requirement by submitting documentation showing that EPA has previously approved its current QMP and that the QMP is current and applicable to the Work to be performed. The qualifications of the contractor(s) undertaking the Work for Performing Respondents shall be subject to EPA's review, with consultation from MDNR, for verification that such contractor(s) meet minimum technical background and experience requirements. This Settlement Agreement is contingent on Performing Respondents' demonstration to EPA's satisfaction that the Performing Respondents are qualified to perform properly and promptly the actions set forth in this Settlement Agreement. EPA, after consultation with MDNR, retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Performing Respondents. If EPA, after consultation with MDNR, disapproves of a selected contractor, Performing Respondents shall retain a different contractor and shall notify EPA and MDNR of that contractor's name and qualifications within thirty (30) days of EPA's disapproval. If EPA, after consultation with MDNR, subsequently disapproves of the replacement, EPA reserves the right to terminate this Settlement Agreement and to conduct the removal, and to seek reimbursement for costs and penalties from Performing Respondents. During the course of the Work under this Settlement Agreement, Performing Respondents shall notify EPA and MDNR in writing of any changes or additions in the contractor(s) used to carry out such work, providing their names and qualifications. EPA, after consultation with MDNR,

shall have the same right to disapprove changes and additions to contracts as it has hereunder regarding the initial notification.

34. Performing Respondent's Project Coordinator. Performing Respondents have designated Edgard Bertaut as their Project Coordinator, who shall be responsible for administration of all actions by Performing Respondents required by this Settlement Agreement. All verbal notices and written communications required to be made to Performing Respondents under this Settlement Agreement shall be directed to Performing Respondents' Project Coordinator as follows:

Edgard Bertaut
TDY Industries, LLC
1000 Six PPG Place
Pittsburgh, Pennsylvania 15222
Telephone: (412) 395-3052
Facsimile: (412) 394-3010.

Copies of all written communications directed to TDY Industries, LLC shall also be sent to:

Richard W. Hosking
K&L Gates LLP
210 Sixth Avenue
Pittsburgh, Pennsylvania 15222
Telephone: (412) 355-8612
Facsimile: (412) 355-6501
E-mail: richard.hosking@klgates.com.

To the extent practicable, Performing Respondents' Project Coordinator shall be present on site or readily available during Site Work. EPA, after consultation with MDNR, retains the right to disapprove of any Project Coordinator designated by Performing Respondents. If EPA, after consultation with MDNR, disapproves of a designated Project Coordinator, Performing Respondents shall retain a different Project Coordinator and shall notify EPA and MDNR of that person's name, address, telephone number and qualifications within fifteen (15) days following EPA's disapproval. Performing Respondents shall have the right to change their Project Coordinator subject to EPA's right to disapprove, after consulting with MDNR. Performing Respondents shall notify EPA and MDNR fifteen (15) days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. Receipt by Performing Respondents' Project Coordinator of any notice or communication from EPA or the MDNR relating to this Settlement Agreement shall constitute receipt by all Performing Respondents.

35. Federal Respondent's Contact. Federal Respondent has designated Mary Lyle as its Contact for submission of reports pursuant to Paragraph 79 of this Settlement Agreement.

Federal Respondent shall have the right to change its designated Contact. Federal Respondent will notify all other Parties of a change of its designated Contact. All verbal notices and written communications required to be made to Federal Respondent with respect to Paragraph 79 of this settlement Agreement shall be direct to Federal Respondent's Contact as follows:

U.S. Army Corps of Engineers
Kansas City District
CENWK-PM-ED (Attn: Chief PM-ED, Mary Lyle, Room 460)
601 E. 12th Street
Kansas City, Missouri 64106-2896.

Copies of all written communications directed to the Federal Respondent shall also be sent to:

District Counsel
U.S. Army Corps of Engineers, Kansas City District
Office of Counsel
601 East 12th Street
Kansas City, Missouri 64106

and

U.S. Army Legal Services Agency
Environmental Law Division
ATTN: Chief, Litigation Branch
9275 Gunston Road
Fort Belvoir, Virginia 22060-5546.

36. On-Scene Coordinator. EPA has designated David Williams of the EPA, Region 7 Superfund Division as its On-Scene Coordinator ("OSC"). EPA shall have the right to change its designated OSC. EPA will notify all other Parties of a change of its designated OSC. Except as otherwise provided in this Settlement Agreement, Performing Respondents shall direct all submissions required by this Settlement Agreement to the OSC as follows:

David Williams
Superfund Division
US Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219
Telephone (913) 551-7625
Fax (913) 551-7948.

37. MDNR Project Coordinator. The MDNR has designated Evan Kifer as its Project Coordinator for work conducted pursuant to this Settlement Agreement. MDNR shall have the

right to change its designated Project Coordinator. MDNR will notify all other Parties of a change of its designated Project Coordinator. Performing Respondents shall direct all submissions required by this Settlement Agreement to the MDNR Project Coordinator as follows:

Evan Kifer
Superfund Section, HWP
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, Missouri 65102
Telephone: (573) 751-1990
Facsimile: (573) 751-7869.

Copies of all written communications directed to MDNR shall also be sent to:

Dennis Stinson
Superfund Section Chief
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, Missouri 65102.

IX. WORK TO BE PERFORMED

38. Performing Respondents shall conduct all actions necessary as selected in the Action Memorandum and in accordance with this Settlement Agreement to achieve the Performance Standards specified in Appendix C to this Settlement Agreement. The actions shall be conducted in accordance with a Removal Action Work Plan, approved by EPA as provided in Section X (EPA Approval of Plans and Other Submissions). The objectives of these actions are: (a) to reduce potential exposures resulting from direct contact with surface soils that exceed defined risk levels; and (b) to reduce the mass of VOCs in the source area soils, to the extent practicable as set forth in Appendix C. The actions to be taken generally include, but are not limited to:

a. For upper residuum soils at the Former TCE Storage Area and the Former Rail Spur Area, as shown on the MPA Map attached to this Settlement Agreement as Appendix B, enhanced soil-vapor extraction (SVE);

b. For upper residuum soils at the Former Surface Impoundment, as shown on the MPA Map attached to this Settlement Agreement as Appendix B, SVE;

c. For upper residuum soils at the Chemical Storage Area, as shown on the MPA Map attached to this Settlement Agreement as Appendix B, excavation with landfarming and limited SVE;

d. For the Former UST Area, as shown on the MPA Map attached to this Settlement Agreement as Appendix B, bio venting;

e. For both the Wastewater Treatment and the Former Degreaser Area, as shown on the MPA Map attached to this Settlement Agreement as Appendix B, limited SVE; and

f. For lower residuum soils at the Former TCE Storage Area, the Former Rail Spur Area, the Former Surface Impoundment, and the Chemical Storage Area, as shown on the MPA Map attached to this Settlement Agreement as Appendix B, SVE.

39. Removal Action Work Plan Submittal. Within ninety (90) calendar days after the Effective Date, Performing Respondents shall submit to EPA and MDNR, for review and approval by EPA a Removal Action Work Plan ("RAWP") meeting the requirements set forth in Paragraph 40. Upon approval, as provided in Section X (EPA Approval of Plans and Other Submissions), the approved RAWP shall be incorporated in its entirety into and shall be enforceable as a part of this Settlement Agreement.

40. Removal Action Work Plan Requirements. The RAWP shall include a detailed description of the tasks and submissions Performing Respondents will complete during the removal action and shall include a schedule for completing such tasks and submissions. The RAWP shall include the following:

a. A detailed description of the removal work to be performed including the following:

i. A schedule for all removal activities to be performed;

ii. A design plan for implementation of soil-vapor extraction and excavation at the MPA, and landfarming at the Component Test Area, in general agreement with the conceptual plans outlined in the EE/CA;

iii. Plans for achieving the Performance Standards for the soil-vapor extraction systems and excavation/landfarming operations which are set forth in Appendix C. The RAWP shall include a discussion of how the SVE system and the excavation/landfarming operations will be designed and monitored to achieve the VOC mass removal to the extent practicable using these technologies; and

iv. Plans for conducting air monitoring for emissions during removal activities, including contingency plans in the event that emissions exceed health-based standards.

b. Upon approval by EPA, as provided in Section X (EPA Approval of Plans and Other Submissions), following consultation with MDNR, the Document shall become the

approved RAWP and the approved RAWP shall be incorporated in its entirety herein and shall be enforceable as a part of this Settlement Agreement.

41. Removal Action Implementation. Performing Respondents shall conduct a removal action at the MPA by performing the Work in accordance with the requirements, including the schedule, set forth in the approved RAWP, Action Memorandum, and this Settlement Agreement.

42. Health and Safety Plan. Within ninety (90) days after the Effective Date, Performing Respondents shall submit for EPA review and comment (in consultation with MDNR), a plan that ensures the protection of the public health and safety during performance of on-Site work under this Settlement Agreement. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992 or subsequently issued guidance). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. Performing Respondents shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the removal action.

43. Quality Assurance and Sampling.

a. Within ninety (90) days of the Effective Date of this Settlement Agreement, and before any sampling related to Work under this Settlement Agreement commences, Performing Respondents shall submit to EPA for review and approval, as provided in Section X (EPA Approval of Plans and Other Submissions), a Quality Assurance Project Plan ("QAPP") which will describe all sampling and analysis procedures to be followed to document the type and quality of data needed to satisfy the requirements of this Settlement Agreement and to provide a blueprint for collecting and assessing those data to be collected to meet the requirements of this Settlement Agreement. The QAPP shall comply with the requirements of, and follow the same general outline presented in, the document entitled EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5, March 2001.

b. 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. Performing Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Performing Respondents 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. Performing Respondents 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, reissued May, 2006)," or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP") as meeting the Quality System requirements.

c. Upon request by EPA, Performing Respondents shall have such a laboratory analyze samples submitted by EPA for QA monitoring. Performing Respondents shall provide to EPA and MDNR the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

d. Upon request by EPA, Performing Respondents shall allow EPA its authorized representatives to take split and/or duplicate samples, provided that there is sufficient volume of sample to split without compromising the analysis of the primary sample. Performing Respondents shall notify EPA not less than fourteen (14) days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA and MDNR shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Performing Respondents to take split or duplicate samples of any samples it takes as part of its oversight of Performing Respondents' implementation of the Work.

e. If relevant to the proceeding, the Parties agree that validated sampling data generated in accordance with this Settlement Agreement shall be admissible as evidence, without objection as to the validity of the data, in any proceeding initiated by the EPA to enforce this Settlement Agreement. The Parties reserve the objections they may have as to the admissibility of such data on other bases, including relevance, and in any other proceedings.

44. Reporting

a. Monthly Progress Reports. Performing Respondents shall submit Monthly Progress Reports to EPA and the MDNR on or before the 10th day of each month, starting with the first full month following the date of receipt of EPA's approval of the RAWP and continuing until the Performing Respondents have submitted the Removal Action Report ("RAR"). Performing Respondents shall continue submitting Monthly Progress Reports until EPA approves the RAR, if requested to do so by EPA. The Monthly Progress Reports shall include, at a minimum:

i. A description of any problems encountered;

ii. A description of the actions completed during the reporting period;

iii. A description of actions scheduled for completion during the reporting period which were not completed along with a statement indicating why such actions were not completed and an anticipated completion date;

iv. Copies of all sampling and test results received during the reporting period;

v. Any proposed revisions to the project schedule for review and approval by EPA, after a reasonable opportunity for review and comment by the MDNR; and

vi. A description of the actions which are scheduled for completion during the next reporting period.

b. Performing Respondents shall submit one hard copy and 2 CD copies of all plans, reports or other submissions required by this Settlement Agreement, or any approved work plan. Upon request by EPA, Respondents shall submit such Documents in electronic form as pdf or similar format files.

45. Removal Action Report. Within one hundred twenty (120) days after EPA concurrence that all field activities required in the RAWP and this Settlement Agreement have been completed, Performing Respondents shall submit to EPA and MDNR, for review and approval by EPA, after consultation with MDNR, a RAR summarizing the field activities and the results of those activities. The RAR shall be approved as provided in Section X (EPA Approval of Plans and Other Submissions). The RAR shall meet the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports," and shall include the following:

a. A description of the site: the site location, a facility description including past and present facility operations, existing structures, surrounding land use, site physiography, including topography, geology and hydrogeology;

b. A description of the work performed: a summary of all site work performed at the MPA including all removal activities, any investigative activities, all laboratory analysis reports, a summary of all analytical data associated with the investigation including quality control data, and a sample results table covering all sampling;

c. A description of the nature and extent of contamination addressed during removal activities, including a list of the types and respective quantities of materials removed off-Site and those handled on-Site, and a description, if applicable, of specific areas at the MPA that would need additional assessment as part of the remedial investigation at the Site;

d. A good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement Agreement; and

e. Appendices containing all relevant Documentation generated during the removal action (*e.g.*, manifests, final certificates of disposal or destruction or equivalent Documentation for non-solid waste material, and permits).

The RAR 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."

46. Off-Site Shipments.

a. Performing Respondents shall, prior to any off-Site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the OSC and MDNR Project 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. Performing Respondents 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. Performing Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state. The identity of the receiving facility and state will be determined by Performing Respondents following the award of the contract for the removal action.

ii. Performing Respondents shall provide the information required by Paragraph 46(a) and 46(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, Performing Respondents 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. Performing Respondents 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.

X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

47. After review, including a reasonable opportunity for review and comment by the MDNR, of any plan, report or other item that Performing Respondents are required to submit to EPA for approval pursuant to this Settlement Agreement, EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Performing Respondents modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Performing Respondents at least one notice of deficiency and an opportunity to cure within thirty (30) days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

48. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Subparagraph 47(a), (b), (c) or (e), Performing Respondents shall proceed to take any action required by the plan, report or other deliverable, as approved or modified by EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XX (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, Performing Respondents shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Subparagraph 47(c) and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XXII (Stipulated and Statutory Penalties).

49. Resubmission.

a. Upon receipt of a notice of disapproval, Performing Respondents shall, within thirty (30) days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XXII, shall accrue during the thirty (30) day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 50 and 51.

b. Notwithstanding the receipt of a notice of disapproval, Performing Respondents shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve Performing Respondents of any liability for stipulated penalties under Section XXII (Stipulated and Statutory Penalties).

c. Performing Respondents shall not proceed further with any subsequent activities or tasks until receiving EPA approval, approval on condition or modification of the RAWP. While awaiting EPA approval, approval on condition or modification of these deliverables, Performing Respondents shall proceed with all other tasks and activities which may

be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement Agreement.

d. For all remaining deliverables not listed above in subparagraph 49(c), above, Performing Respondents shall proceed with all subsequent tasks, activities and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Performing Respondents from proceeding further, either temporarily or permanently, on any task, activity, or deliverable at any point during the removal action.

50. If EPA disapproves, after a reasonable opportunity for review and comment by MDNR, a resubmitted plan, report or other deliverable, or portion thereof, EPA may again direct Performing Respondents to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report or other deliverable. Performing Respondents shall implement any such plan, report, or deliverable as corrected, modified or developed by EPA, subject only to Performing Respondents' right to invoke the procedures set forth in Section XX (Dispute Resolution).

51. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Performing Respondents shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless Performing Respondents invoke the dispute resolution procedures in accordance with Section XX (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XX (Dispute Resolution) and Section XXII (Stipulated and Statutory Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified, or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XX, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XXII.

52. In the event that EPA takes over some of the tasks, but not the completion of the removal action, Performing Respondents shall incorporate and integrate information supplied by EPA into the final reports.

53. All plans, reports, and other deliverables submitted to EPA and MDNR under this Settlement Agreement shall, upon approval or modification by EPA, after a reasonable opportunity for review and comment by MDNR, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA and MDNR under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.

54. Neither failure of EPA to expressly approve or disapprove of Performing Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Performing Respondents' deliverables, Performing Respondents are responsible for preparing deliverables acceptable to EPA in accordance with this Settlement Agreement.

XI. SITE ACCESS

55. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than the Federal Respondent or Performing Respondents, Performing Respondents shall use their best efforts to obtain all necessary access agreements within thirty (30) days of the Effective Date, or as otherwise specified in writing by the OSC. Performing Respondents shall promptly notify EPA and MDNR if after using their best efforts they are unable to obtain such agreements, and shall describe in writing their efforts to obtain access. For purposes of this paragraph, "best efforts" includes the following:

a. Agreeing, upon request, to provide splits or duplicates of all samples collected on the property; and

b. Agreeing, upon request, to provide results of all analyses of samples collected on the property.

EPA may then assist Performing Respondents in gaining access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, using such means as EPA deems appropriate. Performing Respondents shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XIX (Payment of Response Costs).

56. Any such access agreements shall be incorporated by reference into this Settlement Agreement.

57. Notwithstanding any provision of this Settlement Agreement, EPA and MDNR retain all of their access authorities and rights, including enforcement authorities related thereto, under CERCLA, the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, et seq. (RCRA) , and any other applicable state or federal statutes or regulations.

XII. ACCESS TO INFORMATION

58. Performing Respondents shall provide to EPA and MDNR, upon request, copies of all Documents and information for which a privilege is not asserted pursuant to Paragraph 59, which are within their possession or control or that of their contractors or agents relating to activities at the MPA 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.

59. Performing Respondents may assert business confidentiality or privilege claims covering part or all of the Documents or information submitted to the other Parties under this Settlement Agreement as set forth in Section XIII (Confidential Business Information and Privileged Documents). Analytical and other data specified in Section 104(e)(7)(F) of CERCLA shall not be claimed as confidential by Performing Respondents.

XIII. CONFIDENTIAL BUSINESS INFORMATION AND PRIVILEGED DOCUMENTS

60. Performing Respondents may assert a business confidentiality claim pursuant to 40 C.F.R. § 2.203(b) with respect to part or all of any information submitted to EPA pursuant to this Settlement Agreement, provided such claim is allowed by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Analytical and other data specified in Section 104(e)(7)(F) of CERCLA shall not be claimed as confidential by the Performing Respondents. EPA shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by means of the procedures set forth at, 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, EPA may make it available to the public without further notice to the Performing Respondents.

61. Performing Respondents may assert a business confidentiality claim pursuant to Section 260.430, RSMo, with respect to part or all of any information submitted to the MDNR pursuant to the Settlement Agreement, provided such claim is allowed by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Analytical and other data specified in Section 104(e)(7)(F) of CERCLA shall not be claimed as confidential by the Performing Respondents. The MDNR shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by means of the procedures set forth at Section 260.430, RSMo. If no such claim accompanies the information when it is received by the MDNR, the MDNR may make it available to the public without further notice to Performing Respondents.

62. Performing Respondents may assert a claim of privilege for any Documents at the time they are to be provided to EPA or MDNR under this Settlement Agreement. For each Document claimed as privileged, Performing Respondents shall provide the date, author(s), addressee(s), subject, the privilege or grounds claimed (e.g., attorney work product, attorney-client), and the factual basis for assertion of the privilege.

XIV. RECORD RETENTION

63. Performing Respondents shall preserve all Documents relating to Work performed under this Settlement Agreement for ten (10) years following completion of the removal action required by this Settlement Agreement. Only one copy of identical Documents

needs to be retained. Drafts or other Documents that are subsequently prepared in final form need not be retained in addition to the final Document. At the end of this ten-year period and at least ninety (90) calendar days before any Document is destroyed, Performing Respondents shall notify EPA and the MDNR that such Documents are available to them for inspection, and upon the request of either EPA or the MDNR, shall provide the originals or copies of non-privileged Documents to the party requesting the Documents. In addition, Performing Respondents shall provide such non-privileged Documents retained under this section at any time before expiration of the ten-year period at the written request of EPA or the MDNR.

64. Performing Respondents hereby certify individually that to the best of their knowledge and belief they have not altered, mutilated, discarded, destroyed or otherwise disposed of any records, Documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e) regarding the Site.

65. The Federal Respondent acknowledges that it: (a) is subject to all applicable Federal record retention laws, regulations, and policies; and (b) has certified that it has fully complied with any and all EPA requests for information pursuant to Section 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e).

XV. COMPLIANCE WITH OTHER LAWS

66. Performing Respondents 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. Performing Respondents shall identify ARARs in the RAWP subject to EPA approval as provided in Section X (EPA Approval of Plans and Other Submissions).

67. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-site and requires a federal or state permit or approval, Performing Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XVI. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

68. In the event of any action or occurrence as a result of or in connection with performance of the Work which causes or threatens a release of additional Waste Material from the MPA that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Performing Respondents shall immediately upon having the knowledge of such release or threatened release, take all appropriate action. Performing Respondents 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. Performing Respondents shall also immediately upon having the knowledge of such release notify the EPA OSC and the MDNR Project Coordinator. In the event the EPA OSC is not available, Performing Respondents shall notify the Region 7 24-hour emergency spill line at 913-281-0991 of the incident or Site conditions. In the event the MDNR Project Manager is not available, Performing Respondents shall notify the Duty Officer, Environmental Emergency Response Section, at 573-634-2436 (24-hour number). In the event that Performing Respondents fail to take appropriate response action as required by this Paragraph, EPA or MDNR may respond to the release or endangerment and reserve the right to pursue cost recovery.

69. In addition, in the event of any new, unanticipated release of a reportable quantity of a hazardous substance as a result of or in connection with performance of the Work, Performing Respondents shall immediately upon having knowledge of such release notify the Region 7 24-hour emergency spill line at 913-281-0991, and the National Response Center at (800) 424-8802. Performing Respondents shall submit a written report to EPA and MDNR 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*.

XVII. AUTHORITY OF ON-SCENE COORDINATOR

70. The OSC shall be responsible for overseeing Performing Respondents' 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.

XVIII. PAYMENT ON BEHALF OF THE FEDERAL RESPONDENT

71. As soon as reasonably practical after the Effective Date, the United States, on behalf of the Federal Respondent, shall cause to be paid to the Performing Respondents $1,222,047 by electronic funds transfer pursuant to instructions to be provided by Performing Respondents. This payment and any payment pursuant to Paragraphs 73 and 76 of this Settlement Agreement constitute Federal Respondent's interim allocable share of the Response Costs incurred in performing the Work, including Future Response Costs. Unless otherwise specified by Performing Respondents, all payments under Section XVIII shall be made by electronic funds transfer to the account identified above. All written communications with respect to payments by the United States on behalf of the Federal Respondent under this Settlement Agreement shall be directed to the Federal Respondent's Contact pursuant to Paragraph 35 and to:

Chief, Environmental Defense Section
United States Department of Justice
Environment & Natural Resources Division
P.O. Box 23986
Washington, DC 20026-3986
Telephone (202) 514-2219
Fax (202) 514-8865.

72. If the payment required to be made by the United States on behalf of Federal Respondent pursuant to Paragraph 71 has not been made within one hundred twenty (120) days of the Effective Date, Interest on the unpaid balance shall be paid at the rate established pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), commencing on the 121st day after the Effective Date.

73. The estimated total Response Costs for Work to be performed by Performing Respondents pursuant to this Settlement Agreement is $3,055,118. If the total Response Costs for Work to be performed by Performing Respondents pursuant to this Settlement Agreement exceeds $2,444,094 ("Additional Response Costs"), the United States, on behalf of the Federal Respondent, shall pay 50% of all Additional Response Costs that are consistent with the National Contingency Plan. The United States on behalf of the Federal Respondent shall not be responsible for the payment of any Additional Response Costs that are incurred as a result of Performing Respondents' failure to comply with any provision of this Settlement Agreement and the Performing Respondents shall not be responsible for the payment of any Additional Response Costs that are incurred as a result of any failure by the United States on behalf of the Federal Respondent to comply with any provisions of this Settlement Agreement.

74. If the Performing Respondents seek payment for 50% of the Additional Response Costs from the United States on behalf of the Federal Respondent, the Performing Respondents shall make a written demand for payment by the United States on behalf of the Federal

Respondent ("Federal Payment Demand"). The Federal Payment Demand shall include: (a) the amount of payment requested; (b) an explanation of why both the Response Costs and Additional Response Costs are performed in accordance with the RAWP and are therefore deemed necessary and consistent with the NCP; and (c) supporting Documentation and information sufficient to show for each contractor, vendor, or other person to whom money was paid by Performing Respondents, the amount paid and the services or goods provided.

75. If the Performing Respondents comply with their obligations in Paragraph 74, above, the United States, on behalf of the Federal Respondent, shall then pay 50% of the Additional Response Costs incurred that are consistent with the NCP as soon as reasonably practical, less any disputed amounts.

76. If the United States on behalf of the Federal Respondent in good faith questions or contests any invoiced fees or expense, in whole or in part, it shall have the right to withhold payment of such disputed amount; provided, however, that the United States shall notify the Performing Respondents in writing of any disputed amount within thirty (30) days of the date of such Federal Payment Demand and shall promptly make a good faith effort to resolve such dispute. In the event that the United States on behalf of the Federal Respondent and the Performing Respondents cannot informally resolve the dispute, either Party may seek formal Dispute Resolution, in accordance with 5 U.S.C. § 571 et seq., not less than ninety (90) days after the date of the Federal Payment Demand.

77. In the event that payment of Additional Response Costs required by Paragraph 73 is not made within one hundred twenty (120) days of receipt of the Federal Payment Demand, Interest on the unpaid amount shall be paid at the rate established pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), commencing on the 121st day after the Federal Respondent's receipt of the Federal Payment Demand and accruing through the date of payment. No interest shall accrue while the United States on behalf of the Federal Respondent disputes an amount pursuant to Paragraph 76. However, if Performing Respondents prevail in the dispute, interest shall be paid on the disputed amount withheld as set forth in Paragraph 72, except to the extent that Performing Respondents caused a significant delay in the dispute resolution process by failing to respond to reasonable requests for information from the United States within a reasonable timeframe.

78. The Parties to this Settlement Agreement recognize and acknowledge that the payment obligation of the United States on behalf of the Federal Respondent under this Settlement Agreement can only be paid from appropriated funds legally available for such purpose. Nothing in this Settlement Agreement shall be interpreted or construed as a commitment or requirement that the United States or the Federal Respondent obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341, or any other applicable provision of law.

79. Performing Respondents shall provide copies of all plans and reports submitted to EPA and MDNR pursuant to this Settlement Agreement to the Federal Respondent. Two copies of all such reports shall be transmitted to the Federal Respondent at the same time they are transmitted to EPA and MDNR and shall be directed to Federal Respondent as provided below. Performing Respondents shall also, upon reasonable request, provide electronic copies (to the extent available) or otherwise make available for inspection and copying, copies of all non-privileged Documents and information which are within their possession or control or are within the possession or control of their contractors or agents relating to implementation of this Settlement Agreement, including sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence or other Documents and information that are subject to cost sharing by the Federal Respondent under this Agreement. Submissions shall be directed as designated in Paragraph 35. The obligation in this Paragraph 79 shall not be subject to statutory or stipulated penalties.

XIX. REIMBURSEMENT OF COSTS

80. On a periodic basis, EPA will submit to Performing Respondents a bill for Future Response Costs that includes a SCORPIOS Report. EPA will send the original bill to the Performing Respondents' Project Coordinator.

81. Performing Respondents shall, within forty-five (45) days of receipt of each EPA bill for Future Response Costs, remit a cashier's or certified check for the total amount of the bill for Future Response Costs, made payable to the "EPA Hazardous Substance Superfund," to the following address:

US Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
PO Box 979076
St. Louis, Missouri 63197-9000.

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

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268.

83. Performing Respondents shall simultaneously transmit a copy of each check paying a bill for Future Response Costs to the OSC. The check shall indicate that the payment is for "Response Costs- Pools Prairie Site" and shall reference the EPA Region and Site/Spill ID Number 07WT, the EPA Docket Number of this Settlement Agreement, and the name and address of the party(ies) making payment.

84. The total amount to be paid by Performing Respondents pursuant to Paragraph 80 shall be deposited in the Pools Prairie Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

85. In the event that any payment for Future Response Costs is not made within forty-five (45) days of the Performing Respondents' receipt of EPA's bill for Future Response Costs, Performing Respondents shall pay Interest on the unpaid balance. Interest is established at the rate specified in Section 107(a) of CERCLA. The Interest on Future Response Costs shall begin to accrue on the 46th day after the Performing Respondents' receipt of the bill and shall continue to accrue through the date of the payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available under this Settlement Agreement by virtue of Performing Respondents' failure to make timely payments under this Section.

86. Performing Respondents may contest payment of any Future Response Costs under Paragraph 80 if they determine that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made in writing within forty-five (45) days of receipt of the bill and must be sent to the OSC. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Performing Respondents shall within the forty-five (45) day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 80. If EPA prevails in the dispute, within five (5) days of the resolution of the dispute, Performing Respondents shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 81. If Performing Respondents prevail concerning any aspect of the contested costs, Performing Respondents shall pay that portion of the costs for which they did not prevail to EPA in the manner described in Paragraph 80.

XX. DISPUTE RESOLUTION

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

88. If the Performing Respondents object to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, they shall notify EPA and MDNR in writing of their objections within thirty (30) calendar days of such action, unless the objection has been informally resolved. This notice shall set forth the specific points of the dispute, the position Performing Respondents maintain should be adopted as consistent with the requirements of this Settlement Agreement, the factual and legal basis for their position, and all matters they consider necessary for EPA's determination.

89. The Parties shall have twenty-one (21) calendar days from EPA's receipt of the Performing Respondents' written objections to attempt to resolve the dispute through formal

negotiations ("Negotiation Period"). The Negotiation Period may be extended by agreement of the Parties.

90. Any agreement reached by the Parties pursuant to this section shall be in writing, signed by the parties to the dispute, and shall, upon the signature by all parties to the dispute, be incorporated into and become an enforceable element of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, the Director, Superfund Division, EPA, Region 7, after reasonable opportunity for review and comment by the MDNR, will issue a written decision on the dispute to the Performing Respondents. The decision of EPA shall be incorporated into and become an enforceable element of this Settlement Agreement upon Performing Respondents' receipt of the EPA decision regarding the dispute. Performing Respondents' obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this section, unless otherwise agreed to by the Parties, taking into account Performing Respondents' good faith in invoking the Dispute Resolution procedure.

91. Following resolution of the dispute, as provided by this section, Performing Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs. No EPA decision made pursuant to this section shall constitute a final agency action giving rise to judicial review.

92. If, pursuant to Paragraph 90, EPA, after consultation with MDNR, agrees to toll any of Performing Respondent's obligations during the pendency of a Dispute Resolution process, Performing Respondents shall not submit any response costs arising from the tolled obligations for payment by the United States on behalf of the Federal Respondent under Paragraph 74 until the dispute has been resolved pursuant to Paragraph 90. If EPA refuses to toll any obligation during the pendency of a Dispute Resolution process, Performing Respondents may submit any response costs arising from the obligations for payment by the United States on behalf of the Federal Respondent under Paragraph 74.

XXI. FORCE MAJEURE

93. Performing Respondents agree to perform all requirements under this Settlement Agreement within the time limits established under this Settlement Agreement, unless otherwise agreed to by the Parties in accordance with Section XXX (Modifications), or 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 reasonable control of Performing Respondents, or of any entity controlled by Performing Respondents, including, but not limited to, their contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Performing Respondents' 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 as set forth in Appendix C.

94. Performing Respondents shall notify EPA and the MDNR orally within forty-eight (48) hours and in writing within seven (7) calendar days after Performing Respondents become or should have become aware of events which constitute a force majeure. Such notice shall: identify the event causing the delay or anticipated delay; estimate the anticipated length of delay, including necessary demobilization and re-mobilization; state the measures taken or to be taken to minimize the delay; and estimate the timetable for implementation of these measures. Performing Respondents shall take all reasonable measures to avoid and minimize the delay. Failure to comply with the notice provision of this section shall waive any claim of force majeure by the Performing Respondents.

95. If EPA determines, after consultation with MDNR, a delay in performance of a requirement under this Settlement Agreement is or was attributable to a force majeure, the time period for performance of that requirement shall be extended as deemed necessary by EPA, after consultation with MDNR, taking into consideration the length of the delay and necessary remobilization requirements. Such an extension shall not alter Performing Respondents' obligation to perform or complete other tasks required by the Settlement Agreement which are not directly affected by the force majeure.

XXII. STIPULATED AND STATUTORY PENALTIES

96. In the event Performing Respondents fail to meet any requirement of this Settlement Agreement, Performing Respondents shall pay stipulated penalties as set forth below, unless excused under Section XXI (Force Majeure). Compliance by Performing Respondents shall include completion of an activity or any Work under this Settlement Agreement or a plan approved under this Settlement Agreement or any matter under this Settlement Agreement in accordance with the requirements of this Settlement Agreement and within the specified time schedules in and approved under this Settlement Agreement.

a. For failure to submit a Monthly Progress Report as prescribed in this Settlement Agreement: $150.00 per day for the first through fourteenth days of noncompliance and $300.00 per day for the fifteenth day and each succeeding day of noncompliance thereafter;

b. For failure to submit any of the following Documents, $300.00 per day for the first through fourteenth days of noncompliance; $650.00 per day for the fifteenth through the thirtieth days of noncompliance; and $1,250.00 per day for each succeeding day of noncompliance thereafter:

i. Health & Safety Plan;

ii. Quality Assurance Project Plan;

iii. Removal Action Work Plan; and

iv. Removal Action Report.

c. For failure to complete the removal action in accordance with the requirements of the approved RAWP, including the project schedule, $750.00 per day for the first through seventh days of noncompliance; $1,250 per day for the eighth through thirtieth days of noncompliance; and $1,750 per day for each succeeding day of noncompliance thereafter.

97. All penalties shall begin to accrue on the date that complete performance is due or a violation occurs and shall continue to accrue through the final day of correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue for a Work Takeover subject to Dispute Resolution pursuant to Section XX during the period from the date the Work Takeover Notice is issued until the date the Director, Superfund Division, EPA Region 7 issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

98. Upon receipt of written demand by EPA, Performing Respondents shall make payment to EPA within forty-five (45) calendar days. Interest shall accrue on late payments as of the 46th day after receiving notice the payment is due. If Performing Respondents fail to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Performing Respondents shall pay Interest on the unpaid balance.

99. Even if violations are simultaneous, separate penalties may accrue for separate violations of this Settlement Agreement. Penalties accrue and are assessed per violation per day. Penalties shall accrue regardless of whether EPA has notified Performing Respondents of a violation or act of noncompliance, except that stipulated penalties shall not run with respect to any Document submitted for review and approval prior to receipt of a notice of disapproval by Performing Respondents. The payment of penalties shall not alter in any way Performing Respondents obligation to complete the performance of the Work.

100. 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:

US Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
PO Box 979076
St. Louis, MO 63197-9000.

The check shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number 07WT, the EPA Docket Number of this Settlement Agreement, 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 the OSC as provided in Paragraph 36.

101. 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 Performing 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 in this Section, except in the case of a willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XXIV, Paragraph 108. Performing Respondents reserve all rights and defenses they may have with respect to such remedies or sanctions. 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.

XXIII. COVENANTS NOT TO SUE BY EPA AND MDNR

102. In consideration of the Work that will be performed and the payments that will be made by the Performing Respondents and the payment or payments that will be made by the United States on behalf of the Federal Respondent under the terms of this Settlement Agreement, and except as specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against the Performing Respondents or the Federal Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a) for the Work and Future Response Costs. The EPA's covenants shall take effect with respect to Performing Respondents upon EPA's issuance of a Notice of Completion pursuant to Section XXXII (Notice of Completion) of this Settlement Agreement. EPA's covenants not to take administrative action against the Federal Respondent shall take effect upon receipt of the payment or payments by the United States on behalf of the Federal Respondent as required by Section XVIII (Payment on Behalf of Federal Respondent) of this Settlement Agreement. EPA's covenants in this paragraph extend only to the Performing Respondents and the Federal Respondent and do not extend to any other persons.

103. In consideration of the Work that will be performed and the payments that will be made by the Performing Respondents and the payment or payments that will be made by the United States on behalf of the Federal Respondent under the terms of this Settlement Agreement, and except as specifically provided in this Settlement Agreement, the MDNR covenants not to sue or to take administrative action against the Performing Respondents or the Federal Respondent pursuant to Sections 107 of CERCLA, 42 U.S.C. § 9607, or Section 260.530, et seq., RSMo for the Work and Future Response Costs. The MDNR's covenants shall take effect with respect to the Performing Respondents upon EPA's issuance of a Notice of Completion as

required by Section XXXII of this Settlement Agreement. MDNR's covenants with respect to the Federal Respondent shall take effect upon receipt of the payment or payments by the United States on behalf of Federal Respondent as required by Section XVIII (Payment on Behalf of Federal Respondent) of this Settlement Agreement. MDNR's covenants in this paragraph extend only to the Performing Respondents and the Federal Respondent and do not extend to any other persons.

XXIV. RESERVATIONS OF RIGHTS

104. EPA Reservations.

a. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of EPA 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 in this Settlement Agreement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Performing Respondents or the Federal Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

b. The covenant not to sue set forth in Paragraph 102, 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 the Performing Respondents and the Federal Respondent with respect to all other matters, including, but not limited to:

i. claims based on a failure by the Performing Respondents or the Federal Respondent to meet a requirement of this Settlement Agreement;

ii. liability for costs not included within the definition of Future Response Costs;

iii. liability for performance of response action other than the Work;

iv. criminal liability;

v. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments; and

vi. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site.

105. MDNR Reservations.

a. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of the MDNR 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. Provided, however, MDNR shall not implement these actions so long as Performing Respondents are in material compliance with the requirements of this Settlement Agreement. Further, except as specifically provided in this Settlement Agreement, nothing herein shall prevent the MDNR 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 seeking to require the Performing Respondents and/or the Federal Respondent in the future to perform additional activities pursuant to CERCLA, Section 260.500, et seq., RSMo, or any other applicable law, including the common law of public nuisance. The MDNR reserves the right to bring an action against the Performing Respondents and/or the Federal Respondent under Section 107 of CERCLA, 42 U.S.C. § 9607 and/or Section 260.530, RSMo, for recovery of any Response Costs incurred by the MDNR related to this Settlement Agreement or the Site and not reimbursed by the Performing Respondents and/or the United States on behalf of the Federal Respondent.

b. The covenant not to sue set forth in Paragraph 103, above, does not pertain to any matters other than those expressly identified therein. MDNR reserves, and this Settlement Agreement is without prejudice to, all rights against the Performing Respondents and the Federal Respondent with respect to all other matters, including, but not limited to:

i. claims based on a failure by the Performing Respondents or the Federal Respondent to meet a requirement of this Settlement Agreement;

ii. liability for costs not included within the definition of Future Response Costs;

iii. liability for performance of response action other than the Work;

iv. criminal liability;

v. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments; and

vi. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site.

106. Performing Respondents' Reservations. Except as expressly set forth herein, Performing Respondents reserve all rights, defenses and claims they may have with respect to

this Settlement Agreement and/or the Site, including but not limited to all contract claims and all claims pertaining to response actions undertaken or to be undertaken by Performing Respondents and response costs incurred or to be incurred by Performing Respondents at the Site, including inter alia, the Manufacturing Plant, Building 900, the ETA, the CTA, and all areas where Waste Materials released from these areas have come to be located.

107. Federal Respondent's Reservations. Except as expressly set forth herein, the Federal Respondent reserves all rights, defenses, and claims it may have with respect to this Settlement Agreement and/or the Site, including but not limited to all contract claims and all claims pertaining to response actions undertaken or to be undertaken by Federal Respondent and response costs incurred or to be incurred by or on behalf of the Federal Respondent at the Site, including inter alia, the Manufacturing Plant, Building 900, the ETA, the CTA, and all areas where Waste Materials released from these areas have come to be located.

108. Work Takeover. In the event EPA determines that Performing Respondents have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA, after consultation with MDNR, may notify the Performing Respondents that EPA anticipates taking over the Work. In this notice EPA will specify the grounds upon which such notice was issued and will provide Performing Respondents a period of ten (10) days within which to remedy the circumstances giving rise to EPA's issuance of such notice.

109. If, after expiration of the ten (10) day notice period specified in Paragraph 108, Performing Respondents have not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the notice of anticipated takeover of the Work, EPA, after consultation with MDNR, may at any time thereafter assume the performance of all or any portions of the Work as EPA deems necessary ("Work Takeover"). EPA shall notify Respondents in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 109.

110. Performing Respondents may invoke the procedures set forth in Section XX (Dispute Resolution) to dispute EPA's decision to take over the Work. Performing Respondents shall initiate any dispute within ten (10) days of receipt of EPA's notice pursuant to Paragraph 109. However, notwithstanding Performing Respondent's invocation of such dispute resolution procedures, and during pendency of any such dispute, EPA may in its sole discretion commence and continue a Work Takeover under Paragraph 109 until the earlier of (a) the date that Performing Respondents remedy, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, or (b) the date that a final decision is rendered in accordance with Section XX (Dispute Resolution) requiring EPA to terminate such Work Takeover.

111. After commencement and for the duration of any Work Takeover as set forth herein, EPA shall have immediate access to and benefit of any performance guarantee(s) provided pursuant to Section XXIX (Financial Assurance) of this Settlement Agreement. If and to the extent that EPA is unable to secure the resources guaranteed under any such performance guarantee(s) and the Performing Respondents fail to remit a cash amount up to but not exceeding the estimated cost of the remaining Work to be performed, any unreimbursed costs incurred by EPA in performing Work under the Work Takeover shall be considered Future Response Costs that Performing Respondents shall pay pursuant to Section XIX (Reimbursement of Costs).

XXV. OTHER CLAIMS

112. By issuance of this Settlement Agreement, the United States and the MDNR assume no liability for injuries or damages to persons or property resulting from any acts or omissions of the Performing Respondents. Neither the United States nor the MDNR shall be deemed a party to any contract entered into by the Performing Respondents, or any of their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

113. Except as expressly provided herein, nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against the Performing Respondents, the Federal Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or the common law.

114. This Settlement Agreement does not constitute a preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). The Performing Respondents waive any claim to payment under Sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612, against the United States or the Hazardous Substance Superfund arising out of any action performed under this Settlement Agreement.

115. Nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. The Parties reserve any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 107 and 113(f)(2) and (3) of CERCLA, 42 U.S.C. §§ 9607 and 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).

116. 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).

117. In any subsequent administrative or judicial proceeding initiated by the United States or MDNR for injunctive relief, recovery of Response Costs, damages (as defined in Section 101(6) of CERCLA, 42 U.S.C. § 9601(6)), or other relief relating to the Site, the Performing Respondents shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant action.

118. In any subsequent administrative or judicial proceeding initiated by the Performing Respondents for injunctive relief, recovery of Response Costs, damages (as defined in Section 101(6) of CERCLA, 42 U.S.C. § 9601(6)), or other relief relating to the Site, the United States and the State of Missouri shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant action. Nothing in this paragraph shall affect the Performing Respondents' waiver of claims to payment under Sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612 made in Paragraph 114, above.

XXVI. CONTRIBUTION

119. The Parties agree that, except as provided in Paragraph 121, 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 Performing Respondents and the Federal Respondent are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise provided by law, for "Matters Addressed" in this Settlement Agreement. The "Matters Addressed" in this Settlement Agreement are the Work and Future Response Costs.

120. 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 Performing Respondents and the Federal Respondent have, as of the Effective Date, resolved their liability to the United States for the Work and Future Response Costs.

121. Nothing in this Settlement Agreement precludes the United States, MDNR, or the Performing Respondents 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 Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

122. Performing Respondents shall, with respect to any suit or claim brought against them for matters related to this Settlement Agreement, notify in writing the United States and the State within thirty (30) days of service of the complaint on Performing Respondents. In addition, Performing Respondents shall notify the United States and MDNR within thirty (30) days of service or receipt of any Motion for Summary Judgment and within thirty (30) days of receipt of any order from a court setting a case for trial.

123. Payments made and Work performed under this Settlement Agreement are not intended to establish a final allocation of liability or Response Costs between or among the Performing Respondents and the Federal Respondent. Notwithstanding anything in this Settlement Agreement to the contrary, including the contribution protection provided in this Section, the Federal Respondent and the Performing Respondents each expressly reserve their right to seek (under Sections 107 and 113(f) of CERCLA, 42 U.S.C. §§ 9607 and 9613(f)) to recover from each other (and/or any other person who is liable for Response Costs incurred in connection with the Site) any and all Response Costs incurred in connection with this Settlement Agreement that exceed that Party's final allocated share of all Response Costs (no matter when or by whom) incurred in connection with the Site. Furthermore, notwithstanding anything in this Settlement Agreement to the contrary, except for Paragraph 114, (with respect to preauthorization of funds and claims against the Fund), each of the Performing Respondents and the Federal Respondent reserve its rights, if any, to assert any claims, causes of action or demands, whether under federal, state or common law, against each other for, inter alia, indemnification, contribution, or cost recovery for any costs or damages incurred in connection with this Settlement Agreement or the Site including inter alia, all rights, defenses, and claims it may have with respect to this Settlement Agreement and/or the Site, including but not limited to all contract claims and all claims pertaining to response actions undertaken or to be undertaken and response costs incurred or to be incurred by or on behalf of Performing Respondents and the Federal Respondent at the Site, including inter alia, the Manufacturing Plant, Building 900, the ETA, the CTA, and all areas where Waste Materials released from these areas have come to be located.

124. The participation of the Performing Respondents and the Federal Respondent in this Settlement Agreement shall not be considered an admission of liability and is not admissible in any judicial or administrative proceeding other than a proceeding by the Parties, including EPA, to enforce this Settlement Agreement or a judgment relating to it.

XXVII. INDEMNIFICATION

125. Performing Respondents agree to indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives, and the MDNR and its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action: (a) arising from, or on account of, negligent or otherwise wrongful acts or omissions of one or more of the Performing Respondents, their officers, directors, employees, agents, contractors, subcontractors, receivers, trustees, successors or

assigns, in carrying out actions pursuant to this Settlement Agreement; and (b) for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between the Performing Respondents and any persons for performance of work on or relating to the MPA, including claims on account of delays in completing the Work. In addition, Performing Respondents agree to pay the United States and the MDNR all costs incurred by the United States and the MDNR, respectively, including litigation costs arising from or on account of claims made against the United States or the MDNR based on any of the acts or omissions referred to in this paragraph.

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

XXVIII. INSURANCE

127. At least seven (7) days prior to commencing any on-site work under this Settlement Agreement, the Performing Respondents shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of $2,000,000, combined single limit. Within the same time period, the Performing Respondents shall provide EPA and the MDNR with certificates of such insurance. If the Performing Respondents demonstrate 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 the Performing Respondents need to provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXIX. FINANCIAL ASSURANCE

128. Within thirty (30) days of the Effective Date, Performing Respondents shall establish and maintain financial security for the benefit of EPA in the amount of $2,500,000 in one or more of the following forms, in order to secure the full and final completion of Work by Performing Respondents:

a. a surety bond unconditionally guaranteeing payment and/or performance of the Work and issued by a surety company listed among the acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of Treasury;

b. one or more irrevocable letters of credit equaling the total estimated cost of the Work, payable to or at the direction of EPA, issued by financial institution(s) which have the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency;

c. a trust fund administered by a trustee which must have the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency;

d. a policy of insurance which ensures the payment and/or performance of the Work issued by an insurance carrier licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States;

e. a corporate guarantee to perform the Work provided by one or more parent corporations or subsidiaries of Performing Respondents, or by one or more unrelated corporations that have a substantial business relationship with at least one of Performing Respondents; including a demonstration that any such company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); and/or

f. a corporate guarantee to perform the Work by one or more of Performing Respondents, including a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

129. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Performing Respondents shall, within thirty (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 128, above. In addition, if at any time EPA notifies Performing Respondents that the anticipated cost of completing the Work has increased, then, within thirty (30) days of such notification, Performing Respondents shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Performing Respondents' inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

130. If Performing Respondents seek to ensure completion of the Work through a guarantee pursuant to subparagraph 128.e) or 128.f) of this Settlement Agreement, Performing Respondents shall: (a) demonstrate to EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (b) resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date, to EPA. For the purposes of this Settlement Agreement, wherever 40 C.F.R. Part 264.143(f) references "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates," the current cost estimate of $2,500,000 for the Work at the Site shall be used in relevant financial test calculations.

131. If, after the Effective Date, Performing Respondents can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph

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

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

XXX. MODIFICATIONS

133. Any requirements of the Settlement Agreement may only be modified in writing by the mutual agreement of the Parties.

134. If the Performing Respondents seek permission to deviate from any approved Work Plan or schedule, Performing Respondents' Project Coordinator shall submit a written request to EPA and MDNR for approval outlining the proposed Work Plan modification and its basis.

135. No informal advice, guidance, suggestion, or comment by EPA or MDNR regarding reports, plans, specifications, schedules, or any other writing submitted by the Performing Respondents shall relieve the Performing Respondents of their obligation to obtain such formal approval as may be required by this Settlement Agreement, and to comply with all requirements of this Settlement Agreement unless it is formally modified.

XXXI. ADDITIONAL REMOVAL ACTION

136. If EPA, after consultation with MDNR, determines that additional removal actions related to the Statement of Purpose as set forth in Paragraph 8 of this Settlement Agreement, and not included in an approved plan are necessary to protect public health, welfare, or the environment, EPA will notify Performing Respondents of that determination. Unless otherwise stated by EPA, within thirty (30) days of receipt of notice from EPA that additional removal actions are necessary to protect public health, welfare, or the environment, Performing Respondents shall submit for approval by EPA a Work Plan for the additional removal actions. The plan shall conform to the applicable requirements of Section IX (Work to Be Performed) of this Settlement Agreement. Upon EPA's approval of the plan, as provided in Section X (EPA

Approval of Plans and Other Submissions), Performing Respondents shall implement the plan for additional removal actions in accordance with the provisions and schedule contained therein.

XXXII. NOTICE OF COMPLETION

137. When Performing Respondents believe that all actions required by this Settlement Agreement, with the exception of continuing obligations, have been fully performed in accordance with this Settlement Agreement, including any stipulated penalties due, and EPA has approved the RAR, they shall notify EPA and MDNR and request that EPA issue a Notice of Completion. Continuing obligations include and this notice shall not terminate Performing Respondents' obligation to comply with Section I (Jurisdiction and General Provisions); Section XI (Site Access); Section XIV (Record Retention); Section XIX (Reimbursement of Costs); Section XXIV (Reservation of Rights); and Section XXVII (Indemnification) of this Settlement Agreement. If EPA agrees, after consultation with MDNR, that all actions required by this Settlement Agreement, with the exception of continuing obligations, have been fully performed in accordance with this Settlement Agreement, EPA will provide written Notice of Completion to the Respondents and the Federal Respondent. If EPA determines, after consultation with MDNR, that any actions have not been completed in accordance with this Settlement Agreement, EPA will notify the Performing Respondents and the Federal Respondent and provide a list of the deficiencies.

XXXIII. SEVERABILITY

138. If a court issues an order that invalidates any provision of this Settlement Agreement or finds that Performing Respondents or the Federal Respondent have sufficient cause not to comply with one or more provisions of this Settlement Agreement, Performing Respondents and the Federal Respondent shall remain bound to comply with all provisions of this Settlement Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.

XXXIV. INTEGRATION/APPENDICES

139. 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:

a. Appendix A-- Manufacturing Plant and Vicinity Area Map;

b. Appendix B-- Manufacturing Plant Area Map; and

c. Appendix C-- Performance Standards.

XXXV. EFFECTIVE DATE

140. This Settlement Agreement may be executed in any number of counterparts, each of which, when executed and delivered to EPA shall be deemed to be an original, but such counterparts shall together constitute one and the same Document.

141. This Settlement Agreement shall be effective five (5) business days after a copy of the fully executed Settlement Agreement, is placed in the United States mail, sent by express delivery service or hand-delivered to the Performing Respondents and the Federal Respondent.

The undersigned representative(s) of Performing Respondents certify that they are fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party they represent to this Document.

IN WITNESS WHEREOF, the Parties have affixed their signatures below:

For the Missouri Department of Natural Resources:

FOR LTN

Director
Division of Environmental Quality
Missouri Department of Natural Resources

9/27/13
Date

Mary H. Mulhearn
Assistant Attorney General

9/19/2013
Date

Pools Prairie Site Manufacturing Plant Area
Administrative Settlement Agreement and Order on Consent

For the United States Environmental Protection Agency, Region 7

Cecilia Tapia
Director
Superfund Division
U.S. Environmental Protection Agency
Region 7

6/4/14
Date

Kelley Catlin
Assistant Regional Counsel
U. S. Environmental Protection Agency
Region 7

6/4/14
Date

The undersigned representative of The Boeing Company certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party he or she represents to this document.

FOR PERFORMING RESPONDENT: The Boeing Company

By: SL Shestag Date: May 15, 2014

Title: Director, Enterprise Remediation

The undersigned representative of TDY Industries, LLC certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party he or she represents to this document.

FOR PERFORMING RESPONDENT: TDY Industries, LLC

By: Elliot S. D. Date: April 23, 2014

Title: Senior Vice President

Pools Prairie Site Manufacturing Plant Area
Administrative Settlement Agreement and Order on Consent

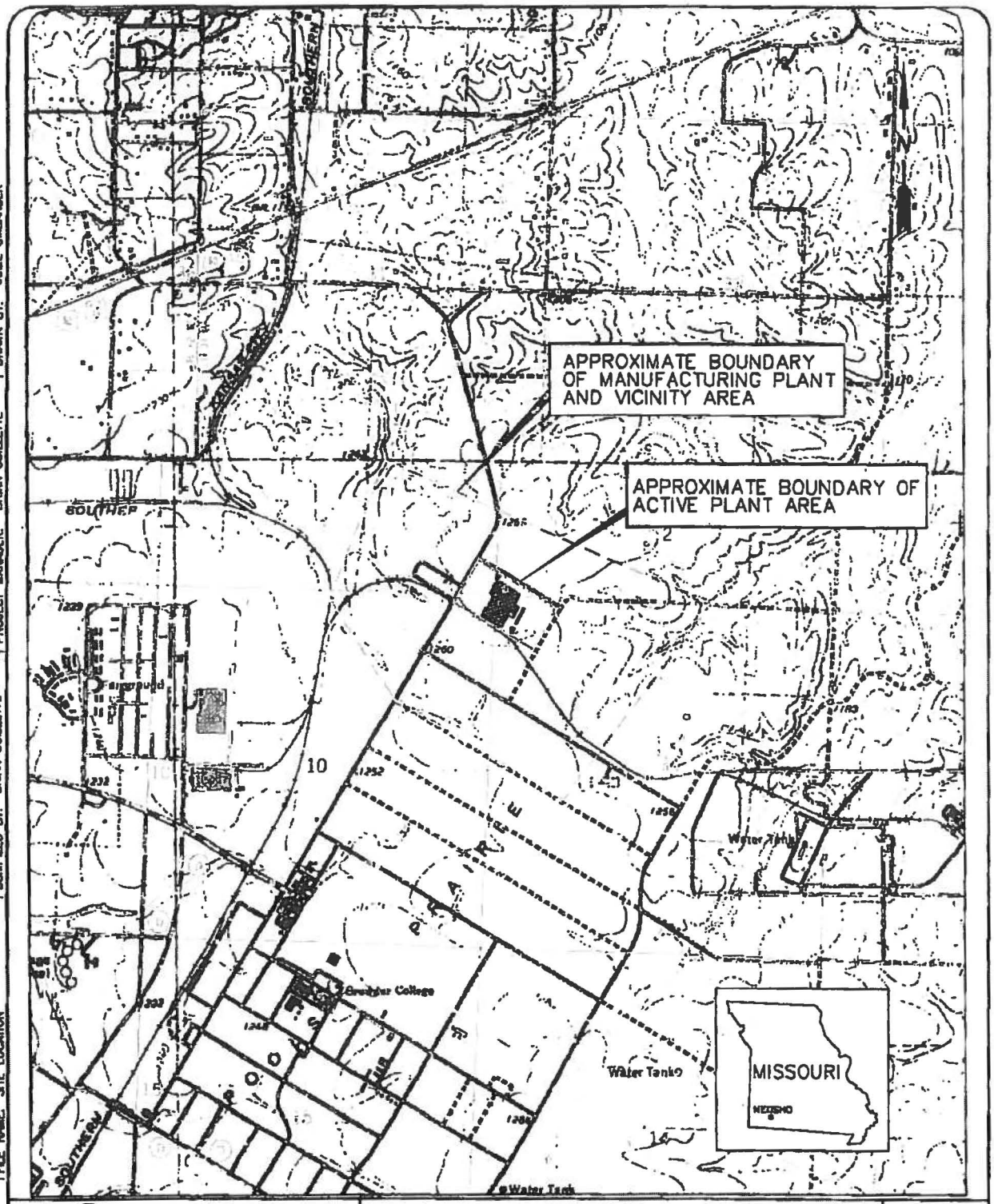
The undersigned representative of the Federal Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party he or she represents to this document.

FOR THE FEDERAL RESPONDENT: United States Department of Defense:

By: _____ Date: 19 May 2014

Title: COL, JA
Chief, US Army Environmental Law Division

Appendix A



DATE: 14JUL06 | FILE NAME: SITE LOCATION | COMPILED BY: BRIAN GUILLETTE | PROJECT MANAGER: BRIAN GUILLETTE | DRAWN BY: JULIE UMBARGER

ARCADIS G&M

MANUFACTURING PLANT AND VICINITY AREA

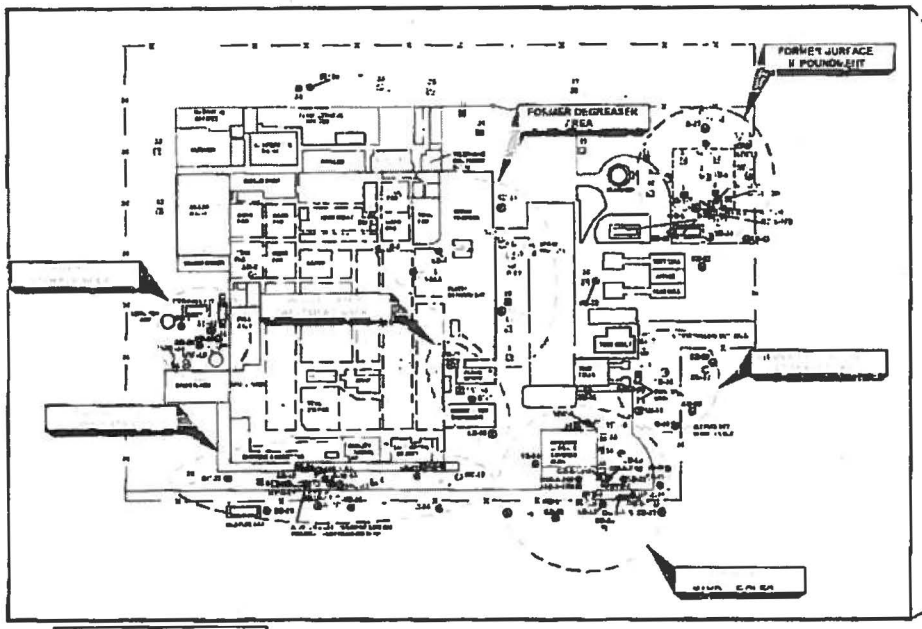
POOLS PRAIRIE SITE
MANUFACTURING PLANT AND VICINITY AREA
NEOSHO, MISSOURI

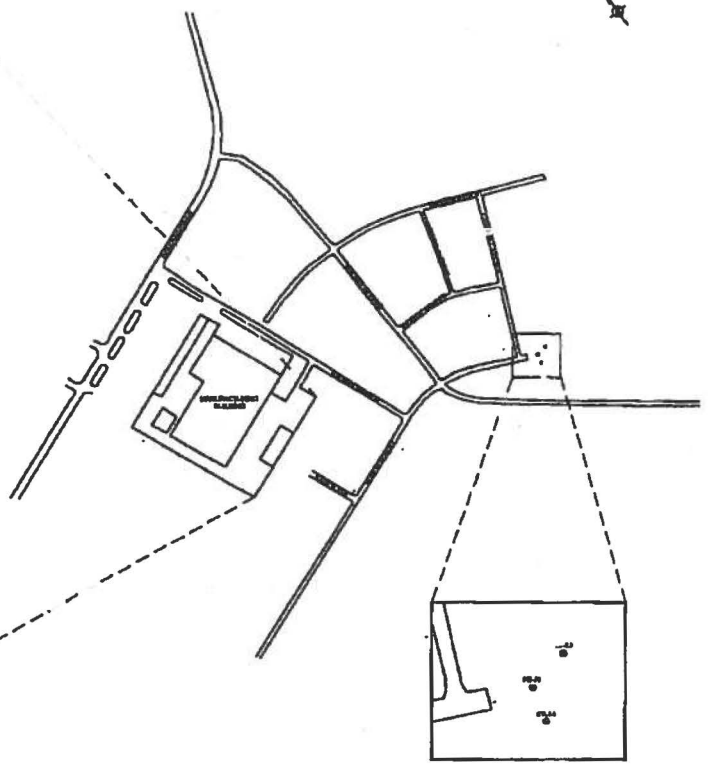
PROJECT NUMBER
OKD01377.0001

FIGURE NUMBER
1-1

Appendix B

DWG. DATE: 14/8/08 | FILE NAME: MANUFACTURING PLANT | COMPILED BY: BRIAN CUILLETTE | PROJECT MANAGER: BRIAN CUILLETTE | DRAWN BY: JULIE UNBARGER





EXPLANATION

- AREAS OF REMEDIATION

CURRENT MANUFACTURING PLANT CONFIGURATION

HORIZONTAL VIEW
NOT TO SCALE

ARCADIS G&M

MANUFACTURING PLANT AND AREAS OF CONCERN

FORMER FRONTIC SITE
MANUFACTURING PLANT AND VICINITY AREA
MEXICO, MISSOURI

PROJECT NUMBER
OR001377.0001

FIGURE NUMBER
1-2

Appendix C

Pools Prairie Site
Manufacturing Plant Area Non-Time Critical Removal Action
Soil Cleanup Performance Criteria

1. Upper Residuum Soils SVE System Performance Criteria

The proposed upper residuum SVE systems would be designed to reduce the mass of VOCs in soil to the extent practicable. These standards represent minimum standards, and Respondents are also required to demonstrate, with EPA's concurrence, after consultation with MDNR, that this cleanup technology has achieved the VOC mass removal practicable in these areas.

1.1 Radius of Influence – Measurable vacuum at 80 percent or more of the vapor monitoring points will be considered the criteria for determining the radius of influence criteria has been met. Conceptual vapor monitoring point locations are shown in the EE/CA for this site.

1.2 Asymptotic VOC concentrations/ Monthly Mass Removal Rates – Typically, and as demonstrated in the pilot test for this site, VOC concentrations in extracted soil vapors are highest during startup, then decline as soil gas is removed from the soil pore spaces and the transfer of VOC vapors into the soil pores slows. As the concentrations of VOCs in the subsurface declines, VOC vapors will continue to decline, at some point reaching asymptotic conditions. A monthly mass removal rate of 1.5 percent of the total mass removed for two consecutive months with the system operating at least 90 percent of the period will be used as a completion criterion.

1.3 Rebound – A rebound in VOC concentration in the extracted soil vapors indicates the continued presence of VOCs in the subsurface. After shut down of 30 days or longer (sufficient time for the relatively volatile compounds present at the site to volatilize into the soil pores) rebound samples will be collected 24 hours and 72 hours after restarting the SVE system. The SVE system performance criteria will be met if concentrations of VOCs in the 24 hour sample are less than 150 percent of the average asymptotic concentrations, and if the rebound in concentrations above the average asymptotic concentrations lasts less than 72 hours.

2. Lower Residuum Soils SVE System Performance Criteria

The proposed lower residuum SVE systems would be designed to: 1) reduce the mass of VOCs in soil to the extent practicable, and 2) provide a barrier to vertical migration of VOCs during removal action activities in the upper residuum. Thus, each of the lower residuum SVE systems will at a minimum operate until the SVE performance criteria have been met and the removal action activities in the upper residuum in that area are completed. These standards represent minimum standards, and Respondents are also required to demonstrate, with EPA's concurrence, after consultation with MDNR, that this cleanup technology has achieved the VOC mass removal practicable in these areas.

2.1 Radius of Influence – A vacuum of 1 percent of the applied vacuum, or a minimum of 0.2 inches of water, will be considered the criteria for determining the radius of influence criteria has been met.

2.2 Asymptotic VOC concentrations/ Monthly Mass Removal Rates – Typically, VOC concentrations in extracted soil vapors are highest during startup, then decline as soil gas is

removed from the soil pore spaces and the transfer of VOC vapors into the soil pores slows. As the concentrations of VOCs in the subsurface declines, VOC vapors will continue to decline, at some point reaching asymptotic conditions. When asymptotic conditions are achieved at a relatively low concentration, it can be assumed that most VOCs available for removal by SVE have been vented. The mass removal rates are a function of the extraction rate of soil vapors (assumed to be roughly constant during SVE system operation), and the VOC concentration in the extracted soil vapor. Thus, the mass removal rates typically decline to asymptotic conditions along with the VOC concentrations. A low enough mass removal rate would indicate that little available VOC mass was available for removal by SVE. However, relative to the upper residuum, little residual mass is present in the lower residuum. Thus, monthly mass removal rates may be relatively low at the startup of the lower residuum SVE systems, and the reduction in mass removal rates may not be significant. Thus, the mass removal rates will be monitored and evaluated, but no specific mass removal rate criteria are specified.

2.3 Rebound – A rebound in VOC concentration in the extracted soil vapors indicates the continued presence of VOCs in the subsurface. After shut down of 30 days or longer (sufficient time for the relatively volatile compounds present at the site to volatilize into the soil pores) rebound samples will be collected 24 hours and 72 hours after restarting the SVE system. The SVE system performance criteria will be met if concentrations of VOCs in the 24 hour sample are less than 150 percent of the average asymptotic concentrations, and if the rebound in concentrations above the average asymptotic concentrations lasts less than 72 hours.

2.4 Period of Operation – Site wide, the large majority of the VOC mass is tied up in the upper residuum and will be addressed through other removal action activities. The conceptual site model states that the VOCs in the upper residuum are relatively immobile, but should they reach the lower residuum, they could become mobile and migrate vertically downward. Thus, one of the principal purposes of the lower residuum SVE is to provide a barrier to potential vertical migration during the removal action activities in the upper residuum. Therefore, operation of the lower residuum SVE will at a minimum, continue for the duration of the removal action of the corresponding upper residuum area.

3. Limited SVE System Performance Criteria

The proposed limited SVE systems to be employed in areas of minor VOC impacts would be designed to reduce the mass of VOCs in soil to the extent practicable. These standards represent minimum standards, and Respondents are also required to demonstrate, with EPA's concurrence, after consultation with MDNR, that this cleanup technology has achieved the VOC mass removal practicable in these areas.

3.1 Asymptotic VOC concentrations/ Monthly Mass Removal Rates – A monthly mass removal rate of 5 percent of the total mass removed for two consecutive months with the system operating at least 90 percent of the period will be used as this completion criterion. At this low mass removal rate, further operation of the SVE system is expected to result in a minimal increase in total mass of VOCs removed.

4. Excavation and Treatment Performance Criteria

Upper residuum soils previously determined to be impacted with TCE in excess of 1,000 µg/kg will be excavated as part of the excavation alternative and the combined SVE and

excavation with landfarming alternative. Additional upper residuum soils will be excavated during the construction of the SVE trenches. These standards represent minimum standards, and Respondents are also required to demonstrate, with EPA's concurrence, after consultation with MDNR, that this cleanup technology has achieved the VOC mass removal practicable in these areas.

4.1 Excavation Volume – Excavation contours for the Chemical Storage Area are shown in the EE/CA for this site. Removal of the soils within the excavation contours constitutes the excavation volume performance criteria.

4.2 Landfarming – Any soil excavated during the removal actions and transported to the existing landfarm at the CTA will be treated to a 1,000 µg/kg performance criteria, i.e., land farming will be continued at least until an average soil concentration of less than 1,000 µg/kg total VOCs is achieved. These standards represent minimum standards, and Respondents are also required to demonstrate, with EPA's concurrence, after consultation with MDNR, that this cleanup technology has achieved the VOC mass removal practicable in these areas.

5. Bio-Venting Performance Criteria – The proposed bioventing system in the former UST area will be designed to promote aerobic biodegradation of residual petroleum hydrocarbons and ketones in the unsaturated soils. Bio-venting removal action will include the following monitoring activities:

5.1 After initial operation of the system (a minimum of 1 week), an oxygen utilization rate will be evaluated by stopping the injection of air and measuring (in a minimum of 3 injection wells) the change in oxygen concentration over time, which will reflect the rate at which oxygen is consumed in the biodegradation of the petroleum hydrocarbons and ketones. Periodically (at 6 month intervals), the oxygen utilization measurement will be repeated.

5.2 Oxygen utilization rates will decline as the petroleum hydrocarbons and ketones are consumed and biological activity slows. The bioventing system will be shut down when a review of oxygen utilization rates indicate the system has reached the limit of practicable removal, as agreed upon by EPA, MDNR and the Parties.