UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 7

IN THE MATTER OF:

FORMER IMPERIAL, INC. 1102 WEST 6TH STREET SHENANDOAH, IOWA EPA ID NO. IAD007492085

AGRILIANCE LLC,
RESPONDENT.

Proceeding under Section 3008(h) of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. § 6928(h).

EPA Docket No.

RCRA-07-2025-0016

ADMINISTRATIVE ORDER ON CONSENT

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I. JURISDICTION

1. This Administrative Order on Consent ("Order") is entered into voluntarily by the United States Environmental Protection Agency (EPA) and Agriliance, LLC ("Respondent") regarding the Former Imperial, Inc. Site ("the Facility"). This Order provides for the performance of corrective action activities at or in connection with the Facility. A map that generally depicts the Facility is attached hereto as Appendix A.

2. This Order is issued under Section 3008(h) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. § 6928(h). The Administrator of EPA has delegated the authority to issue orders under Section 3008(h) to the Regional Administrator of Region 7 by EPA Delegation Nos. 8-31, effective January 17, 2017, and 8-32, effective May 11, 1994, and this authority has been further delegated by the Regional Administrator for Region 7 to the Director of the Land, Chemical & Redevelopment Division. by Regional Delegation Nos. R7-8-31 and R7-8-32, effective April 29, 2019.

3. The State has been given notice of the issuance of this Order.

4. EPA and Respondent recognize that this Order has been negotiated in good faith. Respondent consents to, and agrees not to contest, EPA's jurisdiction to issue this Order or to enforce its terms. Further, Respondent will not contest EPA's jurisdiction to: compel compliance with this Order in any subsequent enforcement proceedings, either administrative or judicial; require Respondent's full or interim compliance with the terms of this Order; or impose sanctions for violations of this Order. Respondent waives any right to request a hearing on this matter pursuant to Section 3008(b) of RCRA, 42 U.S.C. § 6928(b), and 40 C.F.R. Part 24, and consents to the issuance of this Order without a hearing under Section 3008(b) of RCRA, 42 U.S.C. § 6928(b), as an Administrative Order on Consent issued pursuant to Section 3008(h) of RCRA, 42 U.S.C. § 6928(h).

5. Respondent waives any and all remedies, claims for relief, and otherwise available rights to judicial or administrative review that Respondent may have with respect to any issue of fact or law set forth in this Order, including any right of judicial review under Chapter 7 of the Administrative Procedures Act, 5 U.S.C. §§ 701-706, and 40 C.F.R. Part 24 providing for review of final agency action.

II. PARTIES BOUND

6. This Order is binding upon EPA and upon Respondent and its agents, successors, and assigns. Any change in ownership or corporate status of a Respondent including, but not limited to, any transfer of assets or real or personal property, shall not alter Respondent's responsibilities under this Order. Any conveyance of title, easement, or other interest in the Facility shall not affect Respondent's obligations under this Order.

7. The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind Respondent to this Settlement.

8. Respondent shall provide a copy of this Order to each contractor hired to perform the Work and to each person representing Respondent with respect to the Facility or the Work, and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Order. Respondent or its contractors shall provide written notice of this Order to all subcontractors hired to perform any portion of the Work required by this Order. Respondent shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work in accordance with the terms of this Order.

III. STATEMENT OF PURPOSE

9. In entering into this Order, the mutual objectives of EPA and Respondent are:

a. to update and finalize the Corrective Action Framework (CAF) document dated July 13, 2013, presently under revision, to reflect the guidance in the sample CAF attached and EPA comments sent June 4, 2024 to include soil and groundwater impacts, off-site soil and groundwater impacts, residential exposure, and potential for vapor intrusion resulting from soil and groundwater impacts. The RCRA Facilities Investigation Remedy Selection Track Toolbox (RCRA FIRST Toolbox) Tool 7 for "Developing Corrective Action Objectives" is located at https://www.epa.gov/sites/default/files/2016-06/documents/tool_7_-developing_corrective_action_objectives.pdf;

b. to update a project life cycle Conceptual Site Model (CSM) to include soil and groundwater impacts including off-site soil and groundwater impacts, residential exposure, potential for vapor intrusion resulting from soil and groundwater impacts, the findings of the RCRA Facility Investigation (RFI) report dated April 1, 2016, the RFI Addendum report once finalized, draft dated March 22, 2024, and the EPA comments sent June 4, 2024. Tool 5, "Conceptual Site Model Iterative Evaluation/Update" of the RCRA FIRST Toolbox for Corrective Action (RCRA FIRST Toolbox) is located at https://www.epa.gov/sites/default/files/2016-06/documents/tool_5_-conceptual_site_model_iterative_evaluation_update_tool.pdf;

c. to update and complete the RCRA Facility Investigation (RFI) to determine fully the nature and extent of any release of Hazardous Waste at or from the Facility and address the EPA comments sent June 4, 2024. An example CAF meeting agenda for restarting a stalled RFI can be located at https://www.epa.gov/hw/toolbox- corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy;

d. to update and finalize a Remedy Selection Process Meeting Document (RSPD) to address soil and groundwater impacts including off-site soil and groundwater impacts, residential exposure, and potential for vapor intrusion resulting from soil and groundwater impacts. The RSPD template, Tool 9, "Remedy Selection Process Document Template" is located at https://www.epa.gov/sites/default/files/2016-06/documents/tool_9_-_remedy_selection_process_document.pdf.

e. to perform a Corrective Measures Study (CMS), if required in the RSPD, to identify and evaluate alternatives for the corrective measures necessary to prevent, mitigate, and remediate any releases of Hazardous Wastes at or from the Facility;

f. to implement the corrective measures selected by EPA at the Facility; and

g. to perform any other activities necessary to correct or evaluate actual or potential threats to human health or the environment resulting from the release or potential release of Hazardous Waste at or from the Facility.

IV. DEFINITIONS

10. Unless otherwise expressly provided in this Order, terms used in this Order that are defined in RCRA, 42 U.S.C. §§ 6901-6992k, shall have the meaning assigned to them in RCRA. Whenever terms listed below are used in this Order or its Appendices, the following definitions shall apply solely for purposes of this Order:

"Areas of Concern" shall mean any area of the Facility under the control or ownership of the owner or operator where a release to the environment of Hazardous Waste has occurred, is suspected to have occurred, or may occur, regardless of the frequency or duration of the release.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

"Conceptual Site Model" or "CSM" shall mean the iterative tool or tools used to represent and make inferences related to contaminant sources/releases, mechanisms of release, contaminant fate and transport, potential receptors, exposure pathways, and site risks within the context of the Facility physical setting and known/suspected environmental media impacts.

"Day or day" shall mean a calendar day. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall mean the date EPA signs this Order.

"EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

"FIRST" or "FIRST Toolbox" or "RCRA FIRST Toolbox" shall mean the Resource Conservation and Recovery Act (RCRA) Facilities Investigation Remedy Selection Track (FIRST) Toolbox for Corrective Action tools at https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

"Hazardous Constituents" shall mean those constituents listed in Appendix VIII to 40 C.F.R. Part 261 or any constituent identified in Appendix IX to 40 C.F.R. Part 264.

"Hazardous Waste(s)" shall mean any hazardous waste as defined in 1004(5) and 3001 of RCRA. This term includes Hazardous Constituents as defined above.

"Institutional Controls" or "ICs" shall mean Proprietary Controls and state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices of contamination, notices of administrative action, or other notices that: limit land, water, or other resource use to minimize the potential for human exposure to contaminants at or in connection with the Facility; limit land, water, or other resource use to implement, ensure non-interference with, or ensure the protectiveness of the Work; or provide information intended to modify or guide human behavior at or in connection with the Facility.

"Off-site" or "Off-site Property" shall mean all real property beyond the Facility boundary.

"Off-site Property Owner" shall mean any person, other than Respondent, who owns or controls any Off-site Property.

"Order" shall mean this Administrative Order on Consent and any appendices attached hereto (listed in Section XXIV (Integration/Appendices)). In the event of any conflict between this Order and any appendix, this Order shall control. Deliverables approved, conditionally-approved, or modified by EPA also will be incorporated into and become enforceable parts of this Order.

"Paragraph" shall mean a portion of this Order identified by an Arabic numeral or an upper- or lower-case letter.

"Parties" shall mean EPA and Respondent.

"Proprietary Controls" or "PCs" shall mean easements or covenants running with the land that: (i) limit land, water or other resource use and/or provide access rights; and (ii) are created pursuant to common law or statutory law by an instrument that is recorded by the owner in the appropriate land records office.

"RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992, as amended by the Hazardous and Solid Waste Amendments of 1984 (also known as the Resource Conservation and Recovery Act).

"Tools" shall mean the RCRA FIRST Tools accessible at https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act- that are referenced in this order and are to be used as guidance in the development of deliverables.

"Respondent" shall mean Agriliance, LLC, a Delaware corporation and its predecessors Omnium, LLC and Imperial, Inc.

"Section" shall mean a portion of this Order identified by a Roman numeral.

"Solid Waste Management Unit(s)" or "SWMU(s)" shall mean any discernable unit(s) at which solid wastes have been placed at any time irrespective of whether the unit

was intended for the management of solid waste or Hazardous Waste. Such units include any area at a Facility where solid wastes have been routinely or systematically released.

"State" shall mean the State of Iowa.

"Statement of Work" or "SOW" shall mean a document, or documents prepared by EPA describing the activities Respondent must perform to implement the Work required by this Order.

"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.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

"Work" shall mean all activities and obligations Respondent is required to perform under this Order, except those required by Section XII (Record Retention).

V. FINDINGS OF FACT

11. EPA has made the following findings of fact:

a. Respondent is a person doing business in the State of Iowa.

b. Respondent is an owner of a Hazardous Waste management facility located at 1102 West Sixth Street, Shenandoah, Iowa.

c. Imperial, Inc. operated as a custom formulation, repackaging, and wholesale distributer of chemical herbicides, pesticides, and fertilizers beginning in 1966 and continuing through 2000 at the Facility. Effective August 1, 2000, Imperial, Inc. and Omnium LLC merged, and Omnium LLC was the surviving entity. In 2001, Omnium LLC merged with Respondent, and Respondent was the surviving entity. After 2000, operations at the Facility consisted of storage and distribution of products until 2005 when all operations ceased at the Facility.

d. Respondent engaged in storage of Hazardous Waste at the Facility subject to interim status requirements 40 C.F.R. Part 265. Respondent stored Hazardous Waste in drums, tanks, and containers.

e. Respondent owned and/or operated the Facility as a Hazardous Waste management facility on or after November 19, 1980 or the effective date a regulatory change rendered certain facilities subject to interim status requirements or the requirement to have a permit under §§ 3004 or 3005 of RCRA, 42 U.S.C. §§ 6924 or 6925.

f. Pursuant to Section 3010 of RCRA, 42 U.S.C. § 6930, Respondent notified EPA of its Hazardous Waste activity. In its notification dated August 11, 1980, Respondent identified itself as a large quantity generator of the following Hazardous and Acutely Hazardous Wastes at the Facility: Aldrin; 2,4-dichlorophenoxy acid (2,4-D) salts and esters;

Dieldrin; Thiram; Chlordane; Cresylic acid; Phenol; Toxaphene; 2,4,5-trichlorophenoxyacetic acid (2,4,5-T, Acetic Acid); and Xylene.

g. In its initial Hazardous Waste Permit Application dated January 3, 1983, Respondent identified itself as an owner/operator of a treatment, storage and/or disposal facility for Hazardous Waste, and as storing the following Hazardous and Acutely Hazardous Wastes at the Facility: 2,4-D salts and esters; 2,4,5-T (Acetic Acid); Methoxychlor; Lindane; Xylene; Toxaphene; Phenol; Cresylic acid; Thiram; and Chlordane. Respondent voluntarily withdrew the initial Hazardous Waste Permit Application, and in accordance with Section 3005 of RCRA, the EPA denied the RCRA permit, and terminated Interim Status on February 3, 1984.

h. Subsequently on July 11, 1985, Respondent again identified itself as an owner/operator of a treatment, storage and/or disposal facility for Hazardous Waste due to its storage of certain recalled pesticides. In its subsequent Hazardous Waste Permit Application dated July 30, 1985, and supplemented September 4, 1985, Respondent identified itself as storing the following Hazardous and Acutely Hazardous Wastes at the Facility: 2,4-D salts and esters; 2,4,5-T (Acetic Acid); 2,4,5-TP (Silvex); Methoxychlor; Lindane; Toxaphene; and Chlordane.

i. A RCRA compliance inspection was performed by EPA on May 17, 1988. This inspection cited seven violations and found Respondent to be accepting waste from their sister plant in Albert Lea, Minnesota, without a waste determination of the accepted waste, and that Respondent's Hazardous Waste manifests did not identify the associated hazardous waste codes or chemical numbers.

j. A RCRA compliance inspection was performed by EPA on July 30-31, 1991. This inspection cited eleven violations, and found Respondent failed to make waste determinations on the following three waste streams: laboratory solvents, paint sandblast waste, and unknown residue in a crushed drum. Respondent was found to be storing drums that were not properly labeled, dated, or closed. One drum was observed to be leaking. Additionally, Respondent was found to be operating an unlabeled accumulation area for filter bags with high levels of 2,4-D in an open container.

k. Respondent’s Facility includes the area generally depicted in Appendix A, consisting of two parcels totaling 3.67 acres separated by a city owned right of way. No current commercial activities take place at the Facility, but previous operations included primary and secondary formulation, packaging for wholesale distribution, product warehousing, and product testing of various pesticides, herbicides, and fertilizers.

l. Soil and groundwater samples from the Facility obtained by Respondent between 2012 and 2014, and additional sampling conducted in August 2023, indicated the presence of the following contaminants at levels in excess of applicable health standards: organochlorine pesticides including: benzene hexachloride, heptachlor, aldrin, heptachlor epoxide, dieldrin, 4,4-DDD, 4,4-DDT, chlordane and toxaphene; volatile organic compounds (VOCs) including ethylbenzene; metals including arsenic and chromium; and dioxins including 2,3,7,8-TCDD.

m. The production and storage areas where a release into the environment of

Hazardous Waste occurred, or is suspected to have occurred, are listed as Areas of Concern in the following table and depicted in Appendix A on next page.

Area of Concern	Description
Testing Laboratory	Activities such as daily quality control sampling generated hazardous wastes including Methanol, Acetone, 2,4-D, Lindane, and Methoxychlor.
Main Building	Packaged and handled "17% Crop Oil", stored Malathion (insecticide) in tanks. Main building pit housed five product chemical tanks for insecticide formulation.
Dacthal Area	Herbicide processing.
Lid Room	Laboratory samples were containerized and stored together with other supplies.
Mill Room	Granular herbicide blending.
Dust Room	Dry product packaging.
Liquid Production Area	Liquid herbicide and insecticide formulation, packaging, and storage.
Rat and Mouse Area	Rodenticide production and packaging.
Fertilizer Area	Fertilizer production and packaging.
Ronnel Area	Insecticide production and packaging.
Main Warehouse Area	Divided into three units, labeled 1-3, housed shipping and receiving, as well as product and raw material storage.
Granular Plant	Slurry and granular blending, processing, and packaging.
Amine Building	2,4-D and dimethylamine salt production and packaging.
Outdoor Tank Farm	Thirteen product storage tanks, ranging from 3,000 to 22,000-gallon capacity, that received raw materials from rail and truck delivery via hoses, and dispensed to formulation and production areas via extensive piping.

Exterior piping, hoses, and duct work	Connections from receiving raw materials to the tank farm, and from the tank farm to production areas.

n. The Facility is in a mixed-use area including residential, commercial, and light industrial (i.e., warehouse storage). Groundwater in the one-mile area surrounding the facility is utilized by the city of Shenandoah for drinking water.

o. Soil and groundwater samples from the Facility obtained by Respondent in August 2023 indicated releases from the Facility have migrated off the Facility property. Further investigations are needed to fully characterize nature and extent of contamination on and off the facility property and to determine whether those releases pose a risk to human health or the environment.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

12. Based on the Findings of Fact set forth above, EPA has determined that:

a. Respondent is a "person" within the meaning of Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).

b. Respondent is the owner of a facility that has operated under interim status under Section 3005(e) of RCRA, 42 U.S.C. § 6925(e).

c. Certain wastes and constituents found at the Facility are Hazardous Wastes pursuant to Sections 1004(5) and 3001 of RCRA, 42 U.S.C. §§ 6903(5) and 6921.

d. There is or has been a release of Hazardous Wastes into the environment from the Facility.

e. The actions required by this Order are necessary to protect human health or the environment.

VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND EPA PROJECT COORDINATOR

13. Respondent has designated, and EPA has not disapproved, the following individual as Project Coordinator, who shall be responsible for administration of all actions by Respondent required by this Order:

Rick Yabroff
EHS Manager Omnium/Nutra Blend/CN and Environmental Remediations
3317 Dixon Cove Dr.
Fort Collins, CO 80526
(612) 791-9513

RDYabroff@landolakes.com.

The Project Coordinator must have sufficient expertise to coordinate the Work and must be present at the Facility or readily available during implementation of the Work. EPA has designated Annah Murray of Region 7 as EPA's Project Coordinator. EPA and Respondent shall have the right, subject to this Paragraph, to change their designated Project Coordinators. Respondent shall notify EPA 14 days before such a change is made. The initial notification by Respondent of a change in the Project Coordinator may be made orally but shall be promptly followed by a written notice.

14. Respondent shall retain one or more contractors to perform the Work and shall, within 10 days after the Effective Date, notify EPA of the name(s), title(s), and qualifications of such contractor(s). Respondent shall also notify EPA of the name(s), title(s), and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 14 days prior to commencement of such Work. EPA retains the right to disapprove any or all of the contractors and/or subcontractors retained by Respondent. If EPA disapproves a selected contractor, Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within 45 days after EPA's disapproval. With respect to any proposed contractor, Respondent shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs – Requirements with guidance for use" (American Society for Quality, February 2014), 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/B-01/002, Mar. 2001, reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA review for verification that such persons meet objective assessment criteria (*e.g.,* experience, capacity, technical expertise) and do not have a conflict of interest with respect to the project.

15. Except as otherwise provided in this Order, Respondent shall direct all submissions required by this Order to EPA's Project Coordinator in accordance with Section XIII (Reporting and Document Certification). EPA's Project Coordinator has the authority to oversee Respondent's implementation of this Order. The absence of EPA's Project Coordinator from the Facility shall not be cause for the stoppage of Work unless specifically directed by EPA's Project Coordinator.

VIII. WORK TO BE PERFORMED

16. General Work Requirements

a. Pursuant to Section 3008(h) of RCRA, Respondent agrees to and is hereby ordered to perform the Work in accordance with any appendices, workplans, or schedules developed pursuant to this Order. Respondent shall perform all Work undertaken pursuant to this Order in a manner consistent with RCRA and other applicable federal and state laws and their implementing regulations and applicable EPA guidance documents.

b. For any regulation or guidance referenced in the Order, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation

or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondent receives notification from EPA of the modification, amendment, or replacement.

c. Respondent shall update the project life cycle Conceptual Site Model (CSM) to organize and communicate technical data about Facility characteristics to include; soil and groundwater impacts including any off-site soil and groundwater impacts, residential exposure, potential for vapor intrusion resulting from soil and groundwater impacts, the findings of the RCRA Facility Investigation (RFI) report dated April 1, 2016, and the RFI Addendum report once finalized, draft dated March 22, 2024, and the EPA comments sent June 4, 2024. As necessary, the CSM shall be modified and updated to reflect new data.

d. Respondent shall incorporate all sampling data to satisfy the requirements of this Order as described in the Consent Order Reference column below. EPA acknowledges that Respondent has completed some of the tasks required by this Order and made available some information and data required by this Order. This previous work approved by the EPA may be used to meet the requirements of this Order upon incorporation of data obtained from more recent sampling, such as the 2024 RFI Addendum once finalized, followed by submission to and formal approval by EPA.

Document	Submittal	Approval	Summary	Consent Order Reference
Corrective Action Framework and Meeting	Meeting with EPA, Agriliance, and Terracon 7/16/2013	CAFA prepared by EPA 7/16/13	EPA prepared the CAFA document, which summarized an overview of the facility, known environmental characteristics, SWMU, AOCs and other areas on site that needed further investigation as part of the RFI, preliminary Conceptual Site Model, contamination and transport migration pathways and exposure pathways, RFI Work Plan requirements, including QAPP, SAP, sampling approach and analysis and other key issues.	Section VIII. 17.a.(1) and (2) and Appendix C and D
RCRA Facility Investigation	Submitted 4/1/2016	EPA Approval letter dated 5/18/2016	Advanced 84 soil borings between August 2012 and May 2015 for collection of soil samples from multiple depths (0.5 to 8 feet bgs) and installed 7 groundwater monitoring wells (ranging in depth from 21 to 25 ft bgs) for collection of groundwater samples. Laboratory analysis included organochlorine pesticides, neutral extractable pesticides, acid extractable pesticides, VOCs, RCRA metals and/or Dioxins-Furans. (RFI Addendum was conducted in 2023 – 2024 collecting additional Dioxin soil sampling and 3 off-site wells. RFI Addendum Report needs comments addressed and resubmitted.)	Section VIII. 17.b. (1), (2), (3) and (4) and Appendix E
Remedy Selection Process Meeting	Meeting with EPA, Agriliance, and Terracon 6/8/2016	EPA Approval of meeting summary dated 7/7/2016	Discussed and agreed on the Corrective Action Objectives and Remedy Selection Process path for the site. CAOs address soil impacts to industrial level to prevent direct exposure and dermal contact, inhalation risk from dust emissions and minimize the potential for future leaching to groundwater. Several remedial options were discussed, including soil excavation, in-situ/ex-situ treatment, installation of a cap and thermal desorption. Agreed to complete a limited Corrective Measures Study to evaluate appropriate remedial technology. (Needs 2024 data added for updated CAOs).	Section VIII. 17.c. (1), (2), (3) and Appendix F and G
Alternate Cleanup Goals and Hazardous Waste Determination Letter	Dated 9/30/2016	EPA Approval letter dated 10/27/2016	During the Remedy Selection Process meeting, the use of alternate cleanup goals was discussed and follow-up conversations with the EPA Project Manager and Hazardous Waste Specialist indicated alternate cleanup goals within the range of 10-4 to 10-6 could be an option. This letter requested using 10-5, which EPA agreed. Also confirmed non-hazardous soil classifications.	Section VIII. 17.c. (1), (2), (3) and Appendix F and G

Corrective Action Objectives	Dated 3/16/2017	EPA acceptance email 3/20/2017	Developed/evaluated Corrective Action Receptor Pathways and Corrective Action Objectives for the site as discussed in the Remedy Selection Process meeting and updated as part of the Limited Corrective Measures Study. Determined that primary environmental media of concern is soil. (Needs 2024 data added and updated CAOs).	Section VIII. 17.c. (1), (2), (3) and Appendix F and G
Limited Corrective Measures Report	Dated 2/12/18	EPA Approval letter dated 5/1/2018	Evaluated several remedial technologies including soil excavation, in-situ/ex-situ chemical injection/treatment and thermal desorption. Pilot studies conducted to evaluate chemical injection/treated and thermal desorption. Limited CMS recommended in-situ/ex-situ thermal desorption as most effective remedial technology for the site. (Contractor that designed the original pilot study has passed away and the new contractor/remedial design chain will need to be evaluated for suitability of treating soil at the new Dioxin concentrations detected in 2024 sampling, see 2024 RFI Addendum).	Section VIII 17.d. (1) (2) and Appendix H
Quality Assurance Project Plan	Revision No. 2 received 4/14/2023	EPA Approval Memo dated 7/20/2023	Quality Assurance Project Plan (QAPP) that will be used during the implementation of the Facility RCRA activities.	Section IX. 19 and 20

e. EPA, in its sole discretion, may require Respondent to establish a publicly accessible repository or website for information regarding Facility activities and conduct public outreach and involvement activities. Respondent shall comply with any such requirement from EPA within 30 days of request.

f. An initial schedule for deliverables pursuant to this Order (including the reports and workplans described in Paragraph 17 below) is included as Appendix B ("Schedule"). All deliverables and tasks required under this Order must be submitted or completed by the deadlines or within the time durations listed in the Schedule. As set forth in Paragraph 17, Respondent shall submit revised schedules for EPA approval. Upon EPA's approval, the revised Schedule(s) will supersede the attached schedule and any previously approved schedule and will be incorporated into and become an enforceable part of this Order.

g. In accordance with Section XIII (Reporting and Document Certification), commencing with the twelfth month following the Effective Date and throughout the period that this Order is effective, Respondent shall submit progress reports to EPA on an annual basis, or as otherwise requested by EPA. To the extent such reporting period coincides with a reporting requirement contained elsewhere in this Order or an Appendix hereto, Respondent may combine such information into a single submittal. The progress report must cover all activities that took place during the prior reporting period, including:

(1) The actions that have been taken toward achieving compliance with the Order.

(2) A summary of all results of sampling, tests, and all other data received or generated by Respondent. Respondent shall tabulate data chronologically by media.

(3) A description of all deliverables that Respondent submitted to EPA.

(4) A description of all activities related to the Work scheduled for the next twelve months.

(5) A description of any modifications to the workplans or Schedule that Respondent has proposed or that have been approved by EPA.

h. Respondent shall submit to EPA a Health and Safety Plan (HASP) that describes all activities to be performed to protect onsite personnel and area residents from physical, chemical, and all other hazards posed by the Work. Respondent shall develop the HASP in accordance with EPA's Emergency Responder Health and Safety and Occupational Safety and Health Administration (OSHA) requirements under 29 C.F.R. §§ 1910 and 1926. The HASP should cover all Work and should be updated, as appropriate, to cover activities after Work completion. EPA does not approve the HASP but will review it to ensure that all necessary elements are included and that the plan provides for the protection of human health or the environment.

i. All written documents prepared by Respondent pursuant to this Order shall be submitted according to the procedures set forth in Section XIII (Reporting and Document Certification). With the exception of the HASP, all such submittals will be reviewed and approved by EPA in accordance with Section XIV (Agency Approvals/Additional Work/Modifications).

j. Respondent will communicate frequently and in good faith with EPA to assure successful completion of the requirements of this Order. In addition, Respondent shall schedule a meeting with EPA at least once a quarter to discuss the Work proposed and performed under this Order.

k. If, at any time while performing Work, Respondent identifies an immediate or potential threat to human health or the environment, discovers new releases of Hazardous Waste, or discovers new SWMUs or Areas of Concern not previously identified, Respondent shall notify EPA orally within 48 hours of such discovery, and in writing within 5 days after such discovery, summarizing the immediacy and magnitude of the potential threat(s) to human health or the environment. Upon written request of EPA, Respondent shall submit to EPA any relevant document (e.g., a revised workplan) that identifies necessary actions to mitigate the newly identified circumstances. If EPA determines that immediate action is required, EPA's Project Coordinator may orally agree to the proposed necessary actions prior to EPA's receipt of the documentation. In this situation, Respondent may have additional notification or other obligations under RCRA, CERCLA, or another legal authority.

17. Phases of Corrective Action

a. **Corrective Action Framework (CAF)**

(1) Within 30 days of the Effective Date of the Order, Respondent shall conduct a Corrective Action Framework meeting. The CAF meeting shall establish measurable objectives for the RFI. A model CAF meeting agenda is provided as Appendix C, and can also be located at the following online address https://www.epa.gov/sites/production/files/2017-08/documents/tool_1_-_model_corrective_action_framework_meeting_agenda.pdf.

(2) Within 30 days of the Corrective Action Framework meeting, the final CAF document and initial phase of the project life cycle CSM shall be submitted for EPA review and approval. Once approved in accordance with Section XIV of this Order, Agency Approvals, Respondent shall implement the CAF and CSM as a condition of this Order to facilitate the RCRA Facility Investigation. A template for the CAF document is provided as Appendix D, and can also be located at the following online address https://www.epa.gov/sites/production/files/2016-06/documents/tool_2-_corrective_action_framework_template.pdf.

b. **RCRA Facility Investigation (RFI)**

(1) Within 120 days after the Effective Date, Respondent shall submit to EPA for review and approval a RFI Workplan and project schedule in accordance with the RFI SOW attached as Appendix E. Once approved by EPA, Respondent shall implement the RFI Workplan according to the approved project schedule.

(2) The RFI Workplan shall be designed to determine the presence, magnitude, extent, direction, and rate of movement of any Hazardous Wastes within and beyond the Facility boundary that have not been previously identified. For example, sampling of soils below nine (9) feet below ground surface, and characterizing groundwater impacts. The RFI Workplan shall document the procedures Respondent shall use to conduct activities necessary to: (i) identify data gaps that exist relating to Hazardous Wastes within and beyond the Facility boundary; (ii) collect data needed to make decisions on corrective measures; (iii) characterize all sources of contamination; (iv) characterize the potential pathways of contaminant migration; (v) define the degree and extent of contamination; (vi) identify actual or potential human and ecological receptors; and (vii) support the development of alternatives from which corrective measures will be selected by EPA.

(3) In accordance with the RFI Workplan, Respondent shall submit an RFI Report to EPA for review and approval.

(4) Within 30 days of submitting the RFI Report, the Remedy Selection Process (RSP) shall be initiated by Respondent.

c. **Remedy Selection Process (RSP)**

(1) In accordance with the RFI results and approved project schedules or workplans as appropriate, Respondent shall conduct a Remedy Selection Process meeting to establish the Corrective Action Objectives (CAOs) for remedy selection. CAOs for remedy selection shall include medium-specific or unit-specific goals that a cleanup alternative must achieve to protect human health and the environment. A template for the RSP meeting agenda, is being provided as Appendix F, and can also be located at the following online address https://www.epa.gov/sites/production/files/2016-06/documents/tool_6_-_template_agenda_for_remedy_selection_process_meeting.pdf.

(2) Within 30 days of the RSP meeting, the RSP Document (RSPD) shall be submitted for EPA review and approval. Once approved in accordance with Section XIV of this Order, Agency Approvals, Respondent shall implement the RSPD as a condition of this Order to complete Corrective Measures Study (CMS).

(3) The RSPD shall specifically identify which of the following Corrective Measures Study (CMS) paths is selected: no CMS, limited CMS, or full CMS. The selection shall be supported by the RFI phase results and agreed upon during the RSP meeting. A template for the RSPD is provided as Appendix G, and can also be located at the following online address https://www.epa.gov/sites/production/files/2016-06/documents/tool_9_-_remedy_selection_process_document.pdf.

d. **Corrective Measures Study (CMS) and EPA Final Decision**

(1) Upon EPA's approval of the RSPD, Respondent shall submit a project schedule for revising the CMS Report as needed, and update the life cycle Conceptual Site Model to the Design phase in accordance with the CMS SOW attached as Appendix H. Once approved by EPA, Respondent shall implement, revise, and update the CMS Report as required in the RSPD to facilitate corrective measures selection.

(2) In the identification, screening, and development of corrective measure alternatives, the Facility is encouraged to consider, to the extent practicable, practices and technologies that will create ecological enhancements, reduce water consumption, recycle and/or reuse treated ground water, use energy efficient technologies, use renewable sources of energy (e.g., solar or wind), reuse existing infrastructure and consider the beneficial reuse of the site following cleanup.

(3) The CMS Report shall contain an estimate of the cost, including capital and annual operation and maintenance costs, and a recommendation as to which corrective measures, in Respondent's opinion, are the most appropriate, and the rationale for such recommendation.

(4) The EPA will then solicit public input as stated in Paragraph 18 below, and upon review of all pertinent data and stakeholder input issue the Final Decision and Response to Comments Document selecting the corrective measures required for Corrective Measures Implementation.

e. **Corrective Measures Implementation (CMI)**

(1) Within 60 days after EPA's selection of the corrective measures, Respondent shall submit to EPA for review and approval a CMI Workplan and project schedule in accordance with the CMI SOW attached as Appendix I. Once approved by EPA, Respondent shall implement the CMI Workplan according to the approved project schedule.

(2) The CMI Workplan shall be designed to facilitate the design, construction, operation, maintenance, and monitoring of corrective measures for the Facility. The project schedule will provide for Respondent to complete as much of the initial construction Work as practicable within one year after EPA selects the final corrective measures and for Respondent to complete all final

corrective measures within a reasonable period of time to protect human health or the environment.

(3) Consistent with the CMI SOW and selected corrective measures, the CMI Workplan and project schedule may need to address the following information: (i) conceptual, intermediate, and final designs for construction and implementation of the selected corrective measures; (ii) criteria for construction completion; (iii) anticipated operation and maintenance; and (iv) outlines of anticipated reports, including a Construction Completion Report and a Corrective Measures Completion Report.

(4) The Corrective Measures Completion Report shall, at a minimum, include the following information: (i) purpose of the corrective measures; (ii) synopsis of the corrective measures; (iii) summary of corrective measures completion criteria (i.e., process and criteria for determining when corrective measures, maintenance and monitoring may cease); (iv) demonstration that the completion criteria have been met; (v) summary of work accomplishments; (vi) summary of significant activities that occurred during operations; (vii) summary of inspection findings; (vii) summary of ICs; and (viii) summary of total estimated operation and maintenance costs.

18. Public Comment and Participation

a. Prior to issuing the Final Decision and Response to Comments Document selecting the corrective measures required, EPA will provide the public with an opportunity to review and comment on the proposed corrective measures, including EPA's justification for proposing such corrective measures (in the "Statement of Basis").

b. Following the public comment period, EPA will select the final corrective measures and will notify the public of the decision and rationale in a Final Decision and Response to Comments. If the corrective measures selected by EPA differ significantly from the corrective measures recommended in the Statement of Basis, EPA will explain in the Final Decision and Response to Comments the reason for such difference.

IX. QUALITY ASSURANCE

19. As part of the RFI workplan, Respondent shall include a Quality Assurance Project Plan (QAPP) for EPA review and approval. The QAPP addresses sample analysis and data handling regarding the Work. The QAPP must include a detailed explanation of Respondent's quality assurance, quality control, and chain of custody procedures for all sampling, monitoring, and analytical activities.

20. Respondent shall develop the QAPP in accordance with "EPA Requirements for Quality Assurance Project Plans," QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans," QA/G-5, EPA/240/R 02/009, (Dec. 2002), and "Uniform Federal Policy for Quality Assurance Project Plans," Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005), or other applicable guidance as identified by EPA. The QAPP also must include procedures:

a. To ensure that all analytical data used in decision making relevant to this Order are of known and documented quality;

b. To ensure that EPA and its authorized representatives have reasonable access to laboratories used by Respondent ("Respondent's Labs") in implementing the Order;

c. To ensure that Respondent's Labs analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring;

d. To ensure that Respondent's Labs perform all analyses using EPA-accepted methods according to the latest approved edition of "Test Methods for Evaluating Solid Waste (SW-846)" or other methods approved by EPA.

e. To ensure that Respondent's Labs participate in an EPA-accepted quality assurance/quality control (QA/QC) program or other QA/QC program acceptable to EPA.

f. For Respondent to provide EPA with notice at least 28 days prior to any sample collection activity.

g. For Respondent to provide split samples or duplicate samples to EPA upon request; any analysis of such samples shall be in accordance with the approved QAPP.

h. For EPA to take any additional samples that it deems necessary.

i. For EPA to provide to Respondent, upon request, split samples or duplicate samples in connection with EPA's oversight sampling.

j. For Respondent to submit to EPA all sampling and test results and other data in connection with the implementation of this Order.

X. PROPERTY REQUIREMENTS

21. **Agreements Regarding Access and Non-Interference**. Respondent shall, with respect to the Facility: (i) provide EPA and its representatives, contractors, and subcontractors with access at all reasonable times to the Facility to conduct any activity regarding the Order, including those activities listed in Paragraph 21.a (Access Requirements); and (ii) refrain from using the Facility in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Hazardous Waste, or interfere with or adversely affect the implementation, integrity, or protectiveness of the corrective action, including the restrictions listed in Paragraph 21.b (Land, Water, or Other Resource Use Restrictions). In addition, upon determining that Off-site Property has been impacted by Hazardous Waste, Respondent shall, with respect to Off-site Property, use best efforts to secure from Off-site Property Owner, an agreement, enforceable by Respondent and by EPA, providing that such Off-site Property Owner: (i) provide EPA and its representatives, contractors, and subcontractors with access at all reasonable times to such Off-site Property to conduct any activity regarding the Order, including those activities listed in Paragraph 21.a (Access Requirements); and (ii) refrain from using such Off- site Property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Hazardous Waste, or interfere with or adversely affect the implementation, integrity, or protectiveness of the corrective action, including the restrictions listed in Paragraph 21.b (Land, Water, or Other Resource Use Restrictions). Respondent shall provide a copy of such access and use restriction agreement(s) to EPA.

a. **Access Requirements**. The following is a list of activities for which access is required regarding the Facility and, as provided in Paragraph 21, Off-site Property:

(1) Monitoring the Work;

(2) Verifying any data or information submitted to EPA;

(3) Conducting investigations regarding contamination at or near the Facility;

(4) Obtaining samples;

(5) Assessing the need for, planning, or implementing additional corrective action activities at or near the Facility;

(6) Assessing implementation of quality assurance and quality control practices as defined in the approved QAPP;

(7) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondent or its agents, consistent with Section XI (Access to Information);

(8) Assessing Respondent's compliance with the Order;

(9) Determining whether the Facility and/or the Off-site Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Order; and

(10) Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions and Institutional Controls.

b. **Land, Water, or Other Resource Use Restrictions**. The following is a list of land, water, or other resource use restrictions that may be applicable to the Facility and the Off-site Property if Hazardous Wastes will remain following implementation of corrective measures such that the Facility and the Off-site Property cannot be released for unrestricted use:

(1) Limiting the use of the Facility and the Off-site Property to non-residential uses;

(2) Prohibiting use of contaminated groundwater; and

(3) Prohibiting the following activities which could result in exposure to contaminants in subsurface soils and groundwater: land disturbance, installation of wells.

22. **Best Efforts**. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondent would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restrictions. If Respondent is unable to accomplish what is required through "best efforts" in a timely manner, Respondent shall notify EPA, and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondent, or take independent action, in obtaining such access and/or use restrictions.

23. If EPA determines that Institutional Controls in the form of state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls, or notices of contamination, notices of administrative action, or other notices are needed, Respondent shall cooperate with EPA's efforts to record, secure, and ensure compliance with such Institutional Controls.

24. In the event of any Transfer of the Facility, unless EPA otherwise consents in writing, Respondent shall continue to comply with its obligations under the Order, including its obligation to secure access and ensure compliance with any use restrictions regarding the Facility.

25. Notwithstanding any provision of the Order, EPA retains all of its access authorities and rights, as well as all of its rights to require land, water, or other resource use restrictions and institutional controls, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statute or regulations.

XI. ACCESS TO INFORMATION

26. Respondent shall provide to EPA, upon request, copies of all records, reports, documents, and other information (including in electronic form) (hereinafter referred to as "Records") within Respondent's possession or control or that of its contractors or agents relating to activities at the Facility or to the implementation of this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also, upon request, make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

27. Privileged and Protected Claims

a. Respondent may assert all or part of a Record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the Record, provided Respondent complies with Paragraph 28.b and except as provided in Paragraph 28.c.

b. If Respondent asserts such a privilege or protection, Respondent shall provide EPA with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, each addressee, and each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondent shall provide the Record to EPA in redacted form to mask the privileged or protected portion only. Respondent shall retain all Records that Respondent claims privileged or protected until EPA has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondent's favor.

c. Respondent may make no claim of privilege or protection regarding:

(1) Any data regarding the Facility, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Facility; or

(2) The portion of any Record that Respondent is required to create or generate pursuant to this Order.

28. **Business Confidential Claims**. Respondent may assert that all or part of a Record provided to EPA under this Section or Section XII (Record Retention) is business confidential to the extent permitted by and in accordance with 40 C.F.R. §§ 2.203 and 270.12(a). Respondent shall segregate and clearly identify all Records or parts thereof submitted under this Order for which Respondent asserts business confidentiality claims. Records claimed as confidential business information will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA, or if EPA has notified Respondent that the Records are not confidential under the standards of 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondent.

29. Notwithstanding any provision on this Order, EPA retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under RCRA and any other applicable statutes or regulations.

XII. RECORD RETENTION

30. Record Retention

a. Until 10 years after EPA issues the Acknowledgement of Termination pursuant to Paragraph 74, Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control or that come into its possession or control, that relate in any manner to this Order or to Hazardous Waste management and/or disposal at the Facility. Respondent must also retain, and instruct its contractors and agents to preserve, for the same time period specified above, all non-identical copies of the last draft or final version of any Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to performance of the Work, provided, however, that Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

b. At the conclusion of this record retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such Records, and, upon request by EPA and except as provided in Paragraph 28 (Privileged and Protected Claims), Respondent shall deliver any such records to EPA.

c. Respondent certifies that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Facility since notification of potential liability by EPA or the State and that it has fully complied with any and all EPA and State requests for information regarding the Facility pursuant to Section 3007 of RCRA, 42 U.S.C. § 6927 and state law.

XIII. REPORTING AND DOCUMENT CERTIFICATION

31. **General Requirements for Deliverables**. Respondent shall submit all deliverables in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in Paragraph 33. All other deliverables shall be submitted to EPA in the electronic form specified by EPA's Project Coordinator. All documents submitted pursuant to this Order shall be sent to:

Annah Murray, EPA Project Coordinator
US EPA, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219
murray.annah@epa.gov

Documents to be submitted to Respondent shall be sent to:
Project Coordinator
Rick Yabroff
3317 Dixon Cove Dr.
Fort Collins, CO 80526
rdyabroff@landolakes.com

In addition, documents pursuant to Section XV (Financial Assurance) and any notice of destruction of documents pursuant to Section XII (Record Retention) shall be submitted to the EPA Project Coordinator.

32. Technical Specifications.

a. Sampling and monitoring data should be submitted in standard Electronic Data Deliverable (EDD) format. Other delivery methods may be allowed upon EPA approval if electronic direct submission presents a significant burden or as technology changes.

b. Spatial data, including spatially-referenced data and geospatial data, should be submitted:

(1) in the ESRI File Geodatabase format; and

(2) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at https://edg.epa.gov/EME/.

c. Each file must include an attribute name for each unit or sub-unit submitted. Consult https://www.epa.gov/geospatial/geospatial-policies-and-standards for any further available guidance on attribute identification and naming.

d. Spatial data submitted by Respondent does not, and is not intended to, define the boundaries of the Facility.

33. All deliverables that are submitted pursuant to Section VIII (Work to be Performed) must be signed by Respondent's Project Coordinator, or other responsible official of Respondent, and must contain the following statement:

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than 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.
>
> Signature:
>
> Name:
>
> Title: _____
>
> Date:

XIV. AGENCY APPROVALS/ADDITIONAL WORK/MODIFICATIONS

34. EPA Approvals

a. **Initial Submissions**

(1) After review of any deliverable that is required to be submitted for EPA approval under this Order, EPA will provide comments and: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.

(2) EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

b. **Resubmission**. Upon receipt of a notice of disapproval under Paragraph 35.a (Initial Submissions), or if required by a notice of approval upon specified conditions under Paragraph 35.a(1), Respondent shall, within 30 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may:

(1) Approve, in whole or in part, the resubmission;

(2) Approve the resubmission upon specified conditions;

(3) Modify the resubmission;

(4) Disapprove, in whole or in part, the resubmission, requiring Respondent to correct the deficiencies; or

(5) Any combination of the foregoing.

c. **Implementation**. Upon approval, approval upon conditions, or modification by EPA under Paragraph 35.a or 35.b, of any such deliverable, or portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and become an enforceable part of this Order; and (2) Respondent shall take any action required by the deliverable, or portion thereof. The implementation of any non-deficient portion of a deliverable submitted or resubmitted under Paragraph 35.a or resubmitted under Paragraph 35.b does not relieve Respondent of any liability for stipulated penalties under Section XVI (Delay in Performance/Stipulated Penalties).

35. Additional Work

a. EPA may determine that certain tasks, including investigatory work, engineering evaluation, procedure/methodology modifications, or land, water, or other resource use restrictions or Institutional Controls, are necessary in addition to or in lieu of the tasks included in any EPA-approved workplan to meet the purposes set forth in Section III (Statement of Purpose). If EPA makes such a determination, EPA will notify Respondent in writing. Unless otherwise stated by EPA, within 30 days after the receipt of such determination, Respondent shall submit for EPA approval a workplan for the Additional Work. The plan shall conform to the applicable requirements of Section VIII (Work to Be Performed). Upon approval of the workplan by EPA, Respondent shall implement it in accordance with the schedule and provisions contained therein. This Section does not alter or diminish EPA's Project Coordinator's authority to make oral modifications to any plan or schedule pursuant to Paragraph 37.a.

36. Modifications

a. EPA's Project Coordinator may modify any workplan, schedule, or SOW, in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of EPA's Project Coordinator's oral direction. Any other requirements of this Order may be modified in writing by mutual agreement of the parties.

b. If Respondent seeks permission to deviate from any approved workplan, schedule, or SOW, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from EPA's Project Coordinator pursuant to Paragraph 37.a.

c. No informal advice, guidance, suggestion, or comment by EPA's Project Coordinator or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Order, or to comply with all requirement of this Order, unless it is modified in writing pursuant to Paragraph 37.a.

XV. FINANCIAL ASSURANCE

37. Estimated Cost of the Remaining Work

a. As required by this Section, Respondent shall submit to EPA detailed written estimates, in current dollars, of the cost of hiring a third party to perform the Remaining Work to be Performed under this Order ("Remaining Work") that requires financial assurance (hereafter "Estimated Cost of the Remaining Work"). The Estimated Cost of the Remaining Work shall account for the total costs of the remaining work activities that they cover, as described in Section VIII and the SOW(s), and any EPA- approved work plan(s), including any necessary long-term costs, such as operation and maintenance costs and monitoring costs. A third party is a party who (i) is neither a parent nor a subsidiary of Respondent and (ii) does not share a common parent or subsidiary with Respondent. The cost estimates shall not incorporate any salvage value that may be realized from the sale of wastes, facility structures or equipment, land or other assets associated with the facility.

b. Within 30 days after EPA has selected the Corrective Measures and issued a Final Decision and Response to Comments Document, Respondent shall submit to EPA for review and approval an Estimated Cost of the Remaining Work which covers the Remaining work proposed by the CMI Workplan and described in more detail in a SOW.

c. Concurrent with the submission of additional EPA-approved work plan(s) required under Section VIII (Work To Be Performed), Respondent shall submit a revised Estimated Cost of the Remaining Work.

Respondent shall annually adjust the Estimated Cost of the Remaining Work for inflation within 30 days after the close of Respondent's fiscal year until the Remaining Work required by this Order is completed. In addition, Respondent shall adjust the Estimated Cost of the Remaining Work if EPA determines that any Additional Work is required, pursuant to Paragraph 36, or if any other condition increases the cost of the Remaining Work to be performed under this Order.

d. Respondent shall submit each Estimated Cost of the Remaining Work to EPA for review. EPA will review each cost estimate and notify Respondent in writing of EPA's approval, disapproval, or modification of the cost estimate.

38. Assurances of Financial Responsibility for Completing the Remaining Work

a. In order to secure the full and final completion of the Remaining Work in accordance with this Order, Respondent shall establish and maintain financial assurance for the benefit of the EPA in the amount of the most recent Estimated Cost of the Remaining Work. Respondent may use one or more of the financial assurance forms generally described in Paragraphs 39.a(1) through 39.a(6) below. Any and all financial assurance instruments provided pursuant to this Order shall be satisfactory in form and substance as determined by EPA.

(1) A trust fund established for the benefit of EPA, administered by a trustee who has the authority to act as a trustee under Federal and State law and whose trust operations are regulated and examined by a Federal or State agency

and that is acceptable in all respects to the EPA. The trust agreement shall provide that the trustee shall make payments from the fund as the Director of the Land, Chemical & Redevelopment Division of Region 7 shall direct in writing (1) to reimburse Respondent from the fund for expenditures made by Respondent for Work performed in accordance with this Order, or (2) to pay any other person whom the Regional Administrator of Region 7 determines has performed or will perform the Work in accordance with this Order. The trust agreement shall further provide that the trustee shall not refund to the grantor any amounts from the fund unless and until EPA has advised the trustee that the Work under this Order has been successfully completed;

(2) A surety bond unconditionally guaranteeing performance of the Remaining Work in accordance with this Order, or guaranteeing payment at the direction of EPA into a standby trust fund that meets the requirements of the trust fund in Paragraph 39.a(1) above. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal Bonds as set forth in Circular 570 of the U.S. Department of the Treasury;

(3) An irrevocable letter of credit, payable at the direction of the Region 7 Director of the Land, Chemical & Redevelopment Division, into a standby trust fund that meets the requirements of the trust fund in Paragraph 39.a(1) above. The letter of credit shall be issued by a financial institution (i) that has the authority to issue letters of credit and (ii) whose letter-of-credit operations are regulated and examined by a Federal or State agency;

(4) A policy of insurance that (i) provides EPA with rights as a beneficiary which are acceptable to EPA; and (ii) is issued by an insurance carrier that (a) has the authority to issue insurance policies in the applicable jurisdiction(s), and (b) whose insurance operations are regulated and examined by a Federal or State agency. The insurance policy shall be issued for a face amount at least equal to the current Estimated Cost of the Remaining Work to be performed under this Order, except where costs not covered by the insurance policy are covered by another financial assurance instrument, as permitted in Paragraph 39.f. The policy shall provide that the insurer shall make payments as the Region 7 Director of the Land, Chemical & Redevelopment Division shall direct in writing (i) to reimburse Respondent for expenditures made by Respondent for Remaining Work performed in accordance with this Order, or (ii) to pay any other person whom the Region 7 Director of the Land, Chemical & Redevelopment Division determines has performed or will perform the Remaining Work in accordance with this Order, up to an amount equal to the face amount of the policy. The policy shall also provide that it may not be canceled, terminated, or non-renewed and the policy shall remain in full force and effect in the event that (i) the Respondent is named as a debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or (ii) EPA notifies the insurer of Respondent's failure to perform, under Paragraph 40 of this Order;

(5) A corporate guarantee, executed in favor of the EPA by one or more of the following: (i) a direct or indirect parent company; or (ii) a company that has a "substantial business relationship" with Respondent (as defined in 40 C.F.R. § 264.141(h)), to perform the Remaining Work in accordance with this Order or to establish a trust fund as permitted by Paragraph 39.a(1); provided, however, that any company providing such a guarantee shall demonstrate to the satisfaction of the EPA that it satisfies the financial test requirements of 40 C.F.R. § 264.143(f) with respect to the Estimated Cost of the Remaining Work that it proposes to guarantee; or

(6) A demonstration by Respondent that Respondent meets the financial test criteria of 40 C.F.R. § 264.143(f) with respect to the Estimated Cost of the Remaining Work, provided that all other requirements of 40 C.F.R. § 264.143(f) are satisfied.

b. For initial financial assurance under Paragraph 39.a(1) – (5), within 30 days after EPA has selected the Corrective Measures to be Implemented or identified the Additional Work to be completed, Respondent shall submit draft financial assurance instruments and related documents to EPA, concurrently with Respondent's submission of the initial Estimated Cost of the Remaining Work, for EPA's review and approval. Within 10 days after EPA's approval of both the initial Estimated Cost of the Remaining Work, and the draft financial assurance instruments, whichever date is later, Respondent shall execute or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding in a form substantially identical to the financial assurance documents reviewed and approved by EPA. Respondent shall submit all executed and/or otherwise finalized instruments or other documents to EPA within 30 days after EPA's approval of the initial Estimated Cost of the Remaining Work and the draft financial assurance instruments, whichever date is later.

c. For initial financial assurance under Paragraph 39.a(6), within 30 days after EPA has selected the Corrective Measures to be Implemented or identified the Additional Work to be completed, Respondent shall submit to EPA all documentation necessary to demonstrate that Respondent satisfies the financial test criteria pursuant to Paragraph 39.a(6), concurrently with Respondent's submission of the initial Estimated Cost of the Remaining Work. Respondent's financial assurance shall be effective immediately upon EPA's approval of the initial Estimated Cost of the Remaining Work and Respondent's demonstration that Respondent satisfies the financial test criteria pursuant to Paragraph 39.a(6), whichever date is later.

d. If Respondent seeks to establish financial assurance by using a letter of credit, surety bond, or a corporate guarantee, Respondent shall at the same time establish, and thereafter maintain, a standby trust fund, which meets the requirements of Paragraph 39.a(1) above, into which funds from other financial assurance instrument can be deposited, if the financial assurance provider is directed to do so by EPA pursuant to Paragraph 40.b.

e. Respondent shall submit all financial assurance instruments and related required documents by certified mail to the EPA Project Coordinator at the address listed below.

Annah Murray, EPA Project Coordinator
US EPA, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219
murray.annah@epa.gov

f. If at any time during the effective period of this Order the Respondent provides financial assurance for completion of the Remaining Work by means of a corporate guarantee or financial test pursuant to Paragraph 39.a(5) or 39.a(6), Respondent shall also comply with the other relevant requirements of 40 C.F.R. § 264.143(f), 40 C.F.R. § 264.147, 40 C.F.R. § 264.151(f), and 40 C.F.R. § 264.151(h)(1) relating to these methods, unless otherwise provided in this Order, including but not limited to, (i) initial submission of required financial reports and statements from the guarantors' chief financial officer and independent certified public accountant; (ii) annual re- submission of such reports and statements within 90 days after the close of each of the guarantors' fiscal years; and (iii) notification of EPA within 90 days after the close of any of the guarantors' fiscal years in which any such guarantor no longer satisfies the financial test requirements set forth at 40 C.F.R. § 264.143(f)(1). Noncompliance shall begin 120 days after the close of each of the guarantors' fiscal years. Respondent further agrees that if Respondent provides financial assurance by means of a corporate guarantee or financial test, EPA may request additional information (including financial statements and accountant's reports) from the Respondent or corporate guarantor at any time.

g. For purposes of the corporate guarantee or the financial test described in Paragraphs 39.a(5) and 39.a(6), references to 40 C.F.R. § 264.143(f) to "the sum of current closure and post-closure costs and the current plugging and abandonment cost estimates" shall mean "the sum of all environmental remediation obligations" (including obligations under CERCLA, RCRA, UIC, TSCA, and any other state or tribal environmental obligations) guaranteed by such company or for which such company is otherwise financially obligated in addition to the cost of the Remaining Work to be performed in accordance with this Order.

h. Respondent may combine more than one mechanism to demonstrate financial assurance for the Remaining Work to be performed in accordance with this Order, except that mechanisms guaranteeing performance rather than payment may not be combined with other instruments.

i. If at any time EPA determines that a financial assurance instrument provided pursuant to this Section is inadequate or no longer satisfies the requirements set forth or incorporated by reference in the Section, whether due to an increase in the estimated cost of completing the Remaining Work or for any other reason, EPA shall so notify Respondent in writing. If at any time Respondent becomes aware of information indicating that any financial assurance instrument provided pursuant to this Section is inadequate or no longer satisfies the requirements set forth or incorporated by reference in the Section, whether due to an increase in the estimated cost of completing the Remaining Work, or for any other reason, then Respondent shall notify EPA in writing of such information within 10 days. Within 30 days of receipt of notice of EPA's determination or within 30 days of Respondent's becoming aware of such information, as the case may be, Respondent shall obtain and present to EPA for approval a proposal for a revised or alternative form of financial assurance that satisfies all requirements set forth or incorporated by reference in this Section. In seeking approval for a revised or

alternative form of financial assurance, Respondent shall follow the procedures set forth in Paragraph 41.b below.

j. Respondent's inability or failure to establish or maintain financial assurance for completion of the Remaining Work shall in no way excuse performance of any other requirements of this Order, including, without limitation, the obligation of Respondent to complete the Remaining Work in strict accordance with the terms of this Order.

k. Any and all financial assurance instruments provided pursuant to Paragraphs 39.a(2), 39.a(3),or 39.a(4) shall be automatically renewed at the time of their expiration unless the financial assurance provider has notified both the Respondent and the EPA Project Coordinator at least 120 days prior to expiration, cancellation, or termination of the instrument of a decision to cancel, terminate or not renew a financial assurance instrument. Under the terms of the financial assurance instrument, the 120 days will begin to run with the date of receipt of the notice by both the EPA Project Coordinator and the Respondent. Furthermore, if Respondent has failed to provide alternate financial assurance and obtain written approval for such alternate financial assurance within 90 days following receipt of such notice by both Respondent and the EPA Project Coordinator, then the EPA Project Coordinator will so notify the financial assurance provider in writing prior to the expiration of the instrument, and the financial assurance provider shall immediately deposit into the standby trust fund, or a newly created trust fund approved by EPA, the remaining funds obligated under the financial assurance instrument for the performance of the Remaining Work in accordance with this Order.

39. Access to Financial Assurance

a. In the event that EPA determines that Respondent (i) has ceased implementation of any portion of the Work, (ii) is significantly or repeatedly deficient or late in its performance of the Work, or (iii) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Performance Failure Notice") to both the Respondent and the financial assurance provider of Respondent's failure to perform. The notice issued by EPA will specify the grounds upon which such a notice was issued and will provide the Respondent with a period of 10 days within which to remedy the circumstances giving rise to the issuance of such notice.

b. Failure by the Respondent to remedy the relevant Performance Failure to EPA's satisfaction before the expiration of the 10-day notice period specified in Paragraph 40.a, shall trigger EPA's right to have immediate access to and benefit of the financial assurance provided pursuant to Paragraphs 39.a(1) – (5). EPA may at any time thereafter direct the financial assurance provider to immediately (i) deposit into the standby trust fund, or a newly created trust fund approved by EPA, the remaining funds obligated under the financial assurance instrument (ii) or arrange for performance of the Work in accordance with this Order.

c. If EPA has determined that any of the circumstances described in clauses (i), (ii), or (iii) of Paragraph 40.a have occurred, and if EPA is nevertheless unable after reasonable efforts to secure the payment of funds or performance of the Work in accordance with this Order from the financial assurance provider pursuant to this Order, then, upon receiving written notice from EPA, Respondent shall within 10 days thereafter deposit into the

standby trust fund, or a newly created trust fund approved by EPA, in immediately available funds and without setoff, counterclaim, or condition of any kind, a cash amount equal to the Estimated Cost of the Remaining Work to be performed in accordance with this Order as of such date, as determined by EPA.

d. If EPA is notified by the issuer of a financial assurance mechanism that it intends to cancel such mechanism, and Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least 30 days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation into the relevant standby trust fund or a newly created trust fund approved by EPA to facilitate performance of the Remaining Work in accordance with this Order**.**

e. Respondent may invoke the procedures set forth in Section XVII (Dispute Resolution) to dispute EPA's determination that any of the circumstances described in clauses (i), (ii), or (iii) of Paragraph 40.a. has occurred. Invoking the dispute resolution provisions shall not excuse, toll, or suspend the obligation of the financial assurance provider under Paragraph 40.b of this Section to fund the trust fund or perform the Remaining Work. Furthermore, notwithstanding Respondent's invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion direct the trustee of such trust fund to make payments from the trust fund to any person that has performed the Work in accordance with this Order until the earlier of (i) the date that Respondent remedies, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Performance Failure Notice; or (ii) the date that a final decision is rendered in accordance with Section XVII (Dispute Resolution), that Respondent has not failed to perform the Work in accordance with this Order.

40. Modification of Amount, Form, or Terms of Financial Assurance

Reduction of Amount of Financial Assurance. If Respondent believes that the estimated cost to complete the remaining Work has diminished below the amount covered by the existing financial assurance provided under this Order, Respondent may, at the same time that Respondent submits the annual cost adjustment, pursuant to Paragraph 38.d of this Section, or at any other time agreed to by EPA, submit a written proposal to EPA to reduce the amount of the financial assurance provided under this Section so that the amount of the financial assurance is equal to the estimated cost of the remaining Work to be performed. The written proposal shall specify, at a minimum, the cost of the remaining Work to be performed and the basis upon which such cost was calculated. In seeking approval of a revised financial assurance amount, Respondent shall follow the procedures set forth in Paragraph 41.b(2) of this Section. If EPA decides to accept such a proposal, EPA shall notify Respondent of its decision in writing. After receiving EPA's written decision, Respondent may reduce the amount of the financial assurance only in accordance with and to the extent permitted by such written decision. In the event of a dispute, Respondent may reduce the amount of the financial assurance required hereunder only in accordance with the final EPA Dispute Decision resolving such dispute. No change to the form or terms of any financial assurance provided under this Section, other than a reduction in amount, is authorized except as provided in Paragraph 41.b below.

a. **Change of Form of Financial Assurance**

(1) If Respondent desires to change the form or terms of financial assurance, Respondent may, at the same time that Respondent submits the annual cost adjustment, pursuant to Paragraph 38.d of this Section, or at any other time agreed to by EPA, submit a written proposal to EPA to change the form of financial assurance. The submission of such proposed revised or alternative form of financial assurance shall be as provided in Paragraph (2) below. The decision whether to approve a proposal submitted under this Paragraph 41 shall be made in EPA's sole and unreviewable discretion and such decision shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Order or in any other forum.

(2) A written proposal for a revised or alternative form of financial assurance shall specify, at a minimum, the cost of the remaining Work to be performed, the basis upon which such cost was calculated, and the proposed revised form of financial assurance, including all proposed instruments or other documents required in order to make the proposed financial assurance legally binding. The proposed revised or alternative form of financial assurance shall satisfy all requirements set forth or incorporated by reference in this Section. EPA shall notify Respondent in writing of its decision to accept or reject a revised or alternative form of financial assurance submitted pursuant to this Paragraph. Within 10 days after receiving a written decision approving the proposed revised or alternative financial assurance, Respondent shall execute and/or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding in a form substantially identical to the documents submitted to EPA as part of the proposal and such financial assurance shall be fully effective. Respondent shall submit all executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding to the EPA Project Coordinator within 30 days of receiving a written decision approving the proposed revised or alternative financial assurance. EPA shall release, cancel, or terminate the prior existing financial assurance instruments only after Respondent has submitted all executed and/or otherwise finalized new financial assurance instruments or other required documents to EPA.

b. **Release of Financial Assurance.** Respondent may submit a written request to the EPA Project Coordinator that EPA release the Respondent from the requirement to maintain financial assurance under this Section at such time as EPA and Respondent have both executed an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Right" pursuant to Paragraph 74 of this Order. The EPA Project Coordinator shall notify both the Respondent and the provider(s) of the financial assurance that Respondent is released from all financial assurance obligations under this Order. Respondent shall not release, cancel, or terminate any financial assurance provided pursuant to this Section except as provided in this Paragraph or Paragraph 41.b(2). In the event of a dispute, Respondent may release, cancel, or terminate the financial assurance required hereunder only in accordance with a final administrative or judicial decision resolving such dispute.

XVI. DELAY IN PERFORMANCE/STIPULATED PENALTIES

41. Without limiting EPA's discretion under Paragraph 50, Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 43 and 44 for failure to comply with the requirements of this Order specified below, unless excused under Section XVIII (Force Majeure and Excusable Delay). "Comply" as used in the previous sentence, includes compliance by Respondent with all applicable requirements of this Order, within the deadlines established under this Order. If (i) an initially submitted or resubmitted deliverable contains a material defect and the conditions are met for modifying the deliverable under Section XIV (Agency Approvals/Additional Work/Modifications); or (ii) a resubmitted deliverable contains a material defect; then the material defect constitutes a lack of compliance for purposes of this Paragraph.

42. Stipulated Penalty Amounts – Work to be Performed (Excluding Deliverables)

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 42.b:

Period of Noncompliance	**Penalty Per Violation Per Day**
1st through 14th day	$1,000
15th through 30th day	$2,000
31st day and beyond	$5,000

b. **Obligations**

(1) Failure to commence, perform, and/or complete Work or major deliverables in a manner acceptable to EPA or at the time required pursuant to this Order.

(2) Establishment and maintenance of financial assurance in compliance with the timelines and other substantive and procedural requirements of Section XV (Financial Assurance).

43. **Stipulated Penalty Amounts – Deliverables**. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate deliverables pursuant to this Order:

Period of Noncompliance	**Penalty Per Violation Per Day**
1st through 14th day	$500
15th through 30th day	$1,000
31st day and beyond	$2,000

All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Penalties shall continue to accrue during any dispute resolution period, and shall be paid within 15 days after the agreement or the receipt of EPA's decision or order. Stipulated penalties shall not accrue: (i) with respect to a deficient submission under Section XIV (Agency Approvals/Additional Work/Modifications), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency, or (ii) with respect to a decision under Section XVII (Dispute Resolution), during the period, if any, beginning the 21st day after the Negotiation Period begins until the date that EPA issues a final decision regarding such dispute. Nothing in this Order shall prevent the simultaneous accrual of separate penalties for separate violations of this Order.

44. Following EPA's determination that Respondent has failed to comply with a requirement of this Order, EPA may give Respondent written notification of such noncompliance. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in this Paragraph 45 regardless of whether EPA has notified Respondent of a violation.

45. All penalties accruing under this Section shall be due and payable to EPA within 30 days after Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XVII (Dispute Resolution) within the thirty-day period.

46. If Respondent fails to pay stipulated penalties when due, Respondent shall pay Interest on the unpaid stipulated penalties as follows: Interest shall begin to accrue on any unpaid stipulated penalty balance beginning on the 31st day after Respondent's receipt of EPA's demand. Interest shall accrue at the Current Value of Funds Rate established by the Secretary of the Treasury. Pursuant to 31 U.S.C. § 3717, an additional penalty of 6% per annum on any unpaid principal shall be assessed for any stipulated penalty payment which is overdue for 90 or more days. In addition, a handling fee of $15 per month shall be assessed beginning on the thirty-first day after Respondent's receipt of EPA's demand.

47. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be paid to "Treasurer, United States" by Automated Clearinghouse (ACH) to:

US Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
PO Box 979077
St. Louis, MO 63197-9000

Payments shall include a reference to the name of the Facility, Respondent's name and address, and the EPA docket number of this action. A copy of the transmittal request shall be sent simultaneously to EPA's Project Coordinator and to the EPA Cincinnati Finance Office by email at cinwd_acctsreceivable@epa.gov, or by mail to:

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

48. The payment of penalties and interest, if any, shall not alter in any way Respondent's obligation to complete the performance of Work required under this Order.

49. Nothing in this Order 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 Respondent's violation of this Order or of the statutes and regulations upon which it is based, including but not limited to 42 U.S.C. § 6928(h)(2); however, EPA shall not seek civil penalties pursuant to 42 U.S.C. § 6928(h)(2) for any violation for which a stipulated penalty is provided in this Order, except in the case of a willful violation of this Order.

50. 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 Order.

XVII. DISPUTE RESOLUTION

51. The dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes regarding this Order. The parties shall attempt to resolve any disagreements concerning this Order expeditiously and informally.

52. **Informal Dispute Resolution**. If Respondent objects to any EPA action taken pursuant to this Order, it shall notify EPA in writing of its objection(s) within 15 days after such action. EPA and Respondent shall have 20 days from EPA's receipt of Respondent's written objection(s) to resolve the dispute through informal negotiations (the "Negotiation Period"). Upon request of Respondent, the Negotiation Period may be extended at the sole discretion of EPA. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Order.

53. **Formal Dispute Resolution**. If the Parties are unable to reach an agreement within the Negotiation Period, Respondent shall, within 20 days after the end of the Negotiation Period, submit a statement of position to EPA's Project Coordinator. EPA may, within 20 days thereafter, submit a statement of position. Thereafter, an EPA management official at Region 7 level or higher will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Order. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs. For the elimination of doubt, if EPA determines no violation of this Order occurred, Respondent shall not be liable for stipulated penalties for the violation that was the subject of the dispute, including stipulated penalties that would have otherwise accrued regarding the subject of the dispute during the dispute resolution period.

54. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone, or affect in any way any obligation of Respondent under this Order not directly in dispute, unless EPA provides otherwise in writing. Except as provided in Paragraph 45, stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of the Order. In the event that Respondent does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XVI (Delay in Performance/Stipulated Penalties).

XVIII. FORCE MAJEURE

55. "Force majeure," for purposes of this Order, is defined as any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, or of Respondent's contractors that delays or prevents the performance of any obligation under this Order despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercise "best efforts to fulfill such obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work.

56. If any event occurs or has occurred that may delay the performance of any obligation under this Order for which Respondent intends or may intend to assert a claim of force majeure, Respondent shall notify EPA's Project Coordinator orally or, in his or her absence, the Director of Land, Chemical & Redevelopment Division, EPA Region 7, within 48 hours of when Respondent first knew that the event might cause a delay. Within 7 days thereafter, Respondent shall provide in writing to EPA an explanation of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or welfare, or the environment. Respondent shall include with any notice available documentation supporting its claim that the delay was attributable to a force majeure. Respondent shall be deemed to know of any circumstance of which Respondent, any entity controlled by Respondent, or Respondent's contractors knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondent from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 57 and whether Respondent has exercised its best efforts under Paragraph 57, EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely notices under this Paragraph.

57. If EPA agrees that the delay or anticipated delay is attributable to a force majeure, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure, EPA will notify Respondent in writing of its decision.

58. If Respondent elects to invoke the dispute resolution procedures set forth in Section XVII (Dispute Resolution) regarding EPA's decision, Respondent shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Respondent shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondent complied with the requirements of Paragraphs 58 and 59. If Respondent carries this burden, the delay at issue shall be deemed not to be a violation by Respondent of the affected obligation(s) of this Order identified to EPA.

59. The failure by EPA to timely complete any obligation under the Order is not a violation of the Order, provided, however, that if such failure prevents Respondent from meeting one or more deadlines, Respondent may seek relief under this Section.

XIX. RESERVATION OF RIGHTS

60. Notwithstanding any other provisions of this Order, EPA retains all of its authority to take, direct, or order any and all actions necessary to protect public health 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 or constituents of such wastes, on, at, or from the Facility, including but not limited to the right to bring enforcement actions under RCRA, CERCLA, and any other applicable statutes or regulations.

61. EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, that may pertain to Respondent's failure to comply with any of the requirements of this Order, including without limitation the assessment of penalties under Section 3008(h)(2) of RCRA, 42 U.S.C. § 6928(h)(2).

62. This Order shall not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers, claims, and/or authorities, civil or criminal, which EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States.

63. This Order is not intended to be nor shall it be construed to be a permit. Respondent acknowledges and agrees that EPA's approval of the Work and/or workplan does not constitute a warranty or representation that the Work and/or workplans will achieve the corrective measures completion criteria. Compliance by Respondent with the terms of this Order shall not relieve Respondent of its obligations to comply with RCRA or any other applicable local, state, or federal laws and regulations.

64. Respondent agrees not to contest this Order or any action or decision by EPA pursuant to this Order, including without limitation, decisions of the Regional Administrator or any authorized representative of EPA prior to EPA's initiation of a judicial action to enforce this Order, including an action for penalties or an action to compel Respondent's compliance with the terms and conditions of this Order. In any action brought by EPA for violation of this Order, Respondent shall bear the burden of proving that EPA's actions were arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; contrary to constitutional right, power privilege, or immunity; in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; without observance of procedure required by law; unsupported by substantial evidence; or unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

XX. OTHER CLAIMS

65. By issuance of this Order, EPA assumes no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. EPA will not be deemed a party to any contract, agreement or other arrangement entered into by Respondent or its officers, directors, employees, agents, successors, assigns, heirs, trustees, receivers, contractors, or consultants in carrying out actions pursuant to this Order.

66. Respondent waives all claims against the United States relating to or arising out of this Order, including, but not limited to, contribution and counterclaims.

67. Each Party will bear its own litigation costs.

68. In any subsequent administrative or judicial proceeding initiated by EPA for injunctive or other appropriate relief relating to the Facility, Respondent 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 to the extent the preceding are based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been raised in the present matter.

XXI. INDEMNIFICATION

69. Respondent shall indemnify, save, and hold harmless the United States, its officials, agents, contractors, subcontractors, employees, and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on Respondent's behalf or under their control, in carrying out actions pursuant to this Order. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys' fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Order. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Order. Neither Respondent nor any such contractor shall be considered an agent of the United States.

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

71. Respondent agrees not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Facility, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Facility, including, but not limited to, claims on account of construction delays.

XXII. TERMINATION

72. This Order shall be deemed satisfied upon Respondent's and EPA's execution of an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Rights" ("Acknowledgment of Termination"), draft attached as Appendix J. EPA will prepare the Acknowledgment of Termination for Respondent's signature. The Acknowledgment of Termination will specify that Respondent has demonstrated to the satisfaction of EPA that the terms of this Order, including any additional tasks determined by EPA to be required pursuant to this Order, have been satisfactorily completed. Respondent's execution of the Acknowledgement of Termination will affirm Respondent's continuing obligation to preserve all records as required in Section XII (Record Retention), to maintain any necessary Property Requirements as required in Section X, and to recognize EPA's Reservation of Rights as required in Section XIX.

XXIII. SURVIVABILITY/PERMIT INTEGRATION

73. Except as otherwise expressly provided in this Section, this Order shall survive the issuance or denial of a RCRA permit for the Facility, and this Order shall continue in full force and effect after either the issuance or denial of such permit. Accordingly, Respondent shall continue to be liable for the performance of obligations under this Order notwithstanding the issuance or denial of such permit. If the Facility is issued a RCRA permit and that permit expressly incorporates all or a part of the requirements of this Order, or expressly states that its requirements are intended to replace some or all of the requirements of this Order, Respondent may request a modification or termination of this Order and shall, with EPA approval, be relieved of liability under this Order for those specific obligations.

XXIV. INTEGRATION/APPENDICES

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

Appendix A—Facility Map

Appendix B—Schedule

Appendix C—Model Corrective Action Framework Meeting Agenda

Appendix D—Corrective Action Framework Template

Appendix E—RCRA Facility Investigation Statement of Work

Appendix F—Template for Remedy Selection Process Meeting

Appendix G—Remedy Selection Process Document (RSPD) Template

Appendix H—Corrective Measures Study Statement of Work

Appendix I—Corrective Measures Implementation Statement of Work

Appendix J—Acknowledgment of Termination Template

Agreed this 24th day of February , 2025.

For Respondent:
AGRILIANCE LLC

IT IS SO AGREED AND ORDERED:

U.S. ENVIRONMENTAL PROTECTION AGENCY

DEANDRE SINGLETARY Digitally signed by DEANDRE SINGLETARY Date: 2025.02.24 16:08:39 -06'00'

Dated

DeAndré Singletary, Director
Land, Chemical & Redevelopment Division
U.S. Environmental Protection Agency
Region 7

TAYLOR TAVORMINA Digitally signed by TAYLOR TAVORMINA Date: 2025.02.24 14:06:38 -06'00'

Dated

Taylor Tavormina
Attorney-Adviser
U.S. Environmental Protection Agency
Region 7

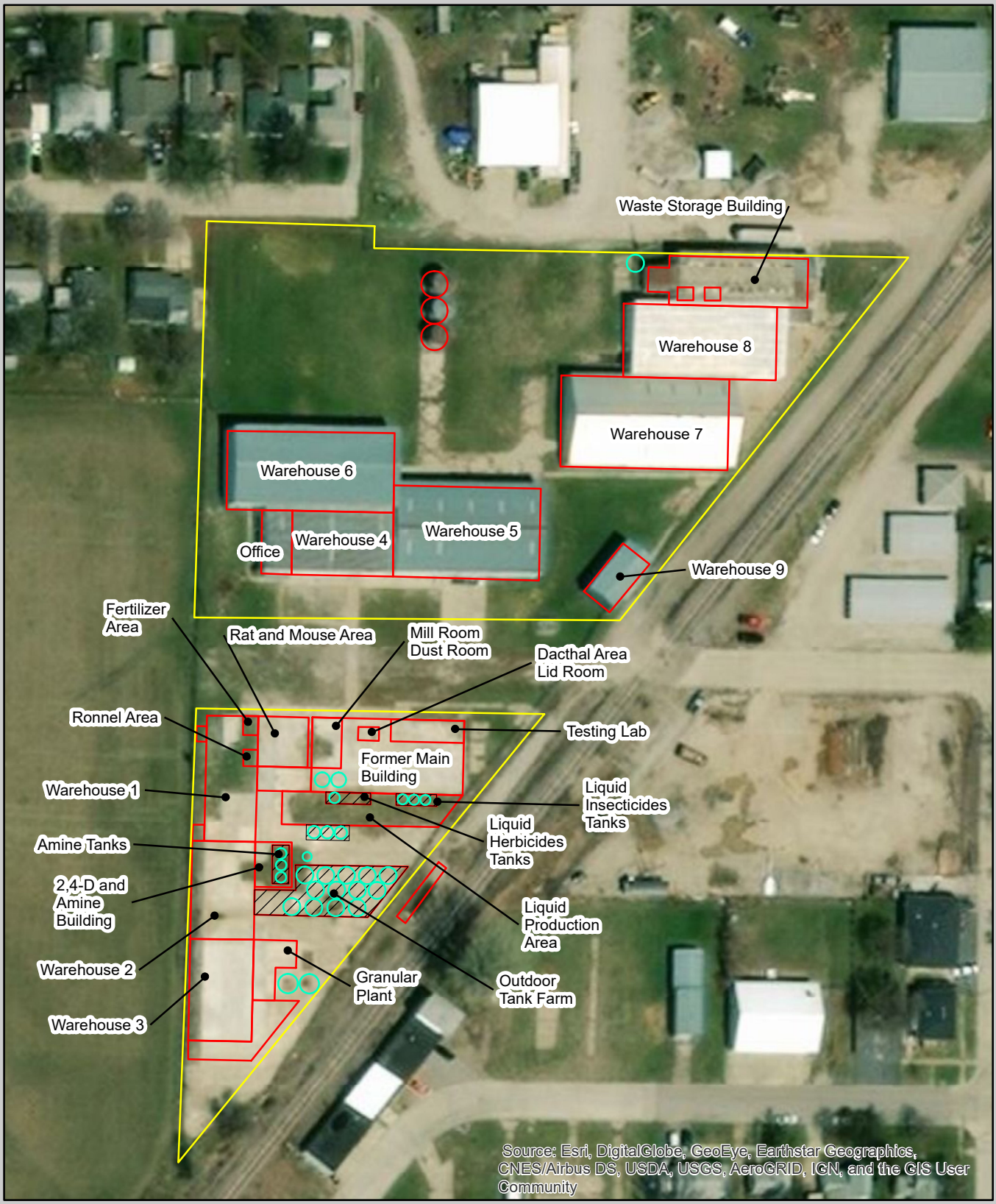
Signature Page for Settlement Regarding the Former Imperial, Inc. Facility

FOR: AGRILIANCE, LLC

1-20-2025
Dated

[Name] Charles VanFeldt
[Title] Assistant Secretary
[Company] Agriliance, LLC
[Address] 5500 Cenex Drive
Inver Grove Heights, MN 55077

Appendix A. Agriliance (Former Imperial, Inc.) Facility Map



Feet

0 50 100 200 300 400

N W E S

Known and Suspected Storage Tanks

Agriliance Parcels

Former Imperial Containment Dikes

Former Imperial Facility

Appendix B
SCHEDULE
For Deliverables and Milestones

Deliverable or Milestone	Due
CAF Meeting	30 days after Effective Date of Order
CAF and Characterization CSM	30 days after CAF Meeting
HASP	30 days after Finalized CAF
QAPP	Together with submittal of RFI Workplan
RFI Workplan and project schedule	120 days after Effective Date of Order
RFI Report	In accordance with approved RFI Workplan schedule
RSP Meeting	In accordance with approved RFI Workplan schedule
RSPD	30 days after RSP Meeting
CMS Workplan and project schedule	In accordance with approved RSPD
CMS Report and Design CSM	In accordance with approved RSPD or CMS Workplan schedule
CMI Workplan and project schedule	Due 60 days after EPA issues FD/RTC
Operation and Maintenance Plan	Due in accordance with approved CMI Workplan schedule
Corrective Measures Completion Report and Post Remedy CSM	Due in accordance with approved CMI Workplan schedule
Progress Reports	Annually starting 365 days after Effective Date of Order

Appendix C: Model Corrective Action Framework Meeting Agenda

Introduction

The CAF Meeting Agenda is the most important tool in the Toolbox. This is the initial entry to the RCRA FIRST process and the measurable RFI objectives that come from this meeting will anchor all subsequent activity and define the successful completion of the RFI.

It is critical that both the State/EPA and the facility do their homework prior to the meeting. This tool starts with a list of documents that should be exchanged at least 30 days prior to the meeting. Communication among the parties prior to the meeting is encouraged to verify that everyone is working with the same, most up-to-date versions of each document.

The meeting preparation, meeting, and development of a final CAF is expected to occur in 180 days or less.

Supporting Documents

Recommended Documents from Facility:

- Background information (items usually included in the Current Conditions Report)
- Stakeholder analysis with clear roles and responsibilities (e.g., facility, technical support, public facilitator, other)
- Closure information/post-closure information
- Relevant data from other programs

Recommended Documents from Lead Agency:

- Stakeholder analysis with clear roles and responsibilities (e.g., lead agency, support agency, technical support, public, facilitator, other)
- RCRA Facility Assessment
- Environmental indicator assessment
- Solid Waste Management Unit (SWMU) calling letter
- Permit/order
- Closure information/post-closure information
- Finalized summary of the CAF meeting and schedule of deliverables

Corrective Action Framework (CAF) Meeting Agenda

Time & Date
Location

Participants

- Lead Agency Project Manager*
- Lead Agency Supervisor*
- Lead Agency Technical Support (hydrogeologist, risk assessor, etc.)
- Lead Agency Legal
- Facility Project Manager*
- Facility Supervisor*
- Facility Technical Support (hydrogeologist, risk assessor, etc.)
- Facility Legal
- Support Agency

* *Suggested minimum participants*

Identification of Roles and Responsibilities

- *Lead Agency* – Provides legal and technical oversight of investigation to ensure facility is adequately characterized and approves workplans/reports.
- *Support Agency* – Provides technical guidance, represents support agency interests, and supports Lead Agency in formulating goals and expectations to obtain final concurrence.
- *Facility* – Collects and analyzes data, recommends path forward through process.

Topics for Discussion

I. Introductions
II. Reaffirm goals and objectives for CAF meeting and CAF process
III. Discuss any permits or orders at the facility and remind all participants that the CAF process is not legally binding or intended to alter any legal requirements at the site unless the permit (or order, for interim status facilities) expressly incorporates the CAF
    a. Discuss the dispute resolution process
IV. Discuss Project Communication Plan
V. Identify Roles and Responsibilities, including the elevation point of contact
VI. Site Tour
    a. Overview of facility/surrounding properties/environmental characteristics
    b. Areas of Concern (AOCs)/SWMUs
    c. Previous releases
    d. RCRA regulated history
    e. Other permitted activities (e.g., NPDES, Stormwater, Air)

f. Receptors
g. Access or physical constraints
h. Other potential areas of investigation based on site history
i. Other

VII. Site Conceptual Model

a. History
b. Current operations (e.g., facility and neighboring properties)
c. Current and reasonably-expected future site use
d. AOCs and SWMU description
e. Human health and ecological receptors
f. Exposure pathways
g. Constituents of concern/constituents of potential concern
h. Extent of known impacts
i. Discussion of unknowns and uncertainty with respect to current conditions

VIII. Goals and Expectations

a. Land use/reasonably-expected further use in relation to characterization and remediation
b. Existing background conditions and consideration in RFI process
c. Use of historical data
d. Use of presumptive remedies
e. Expected groundwater use/process for addressing groundwater contamination including state, federal, and local requirements
f. Coordination with other programs
g. Potential facility process/land use/owner changes
h. Toxicity value/criteria changes
i. Expected risk range issues (target cancer risk and non-cancer hazard index)
j. Expected process for addressing remediation
    i. Unknown sources
    ii. Source removal vs. source control (containment)
    iii. Use of risk based or pathway elimination approach
    iv. Potential for determination of technical impracticability (TI)
    v. Identification of areas with corrective action obligation
    vi. Use of institutional controls and engineering controls
k. Other issues

IX. Discussion of interim measures

a. Immediate interim measures
b. Future potential interim measures

X. Discussion of Items that may be included in the RFI workplan

a. Elements of framework (e.g., Corrective Action Objectives)
b. Site conceptual model
c. Screening levels
d. Adaptive approach
e. Quality Assurance Project Plan (QAPP)

i. Data quality objectives
ii. Standard operating procedures

f. Modeling
g. Use of historical data
h. Background conditions
i. Health and safety plan
j. Community involvement and environmental justice
k. Sampling approach/design
l. Sample analysis
m. Elements of RFI report
n. Workplan implementation schedule

XI. Other Potential Issues

a. Schedule of deliverables (e.g., RFI workplan)
b. Format for data/information exchange/submissions
c. Interim submission
d. Elements of RFI
e. Risk assessment

XII. Summary of Framework Meeting (brief written document by the end of the meeting)

Expected Session Outcomes

Expected outcomes correspond with Roman numerals in topic for discussion outline.

I-V. Common understanding of the roles and responsibilities of the regulatory authority (EPA and/or state) and facility as well as understanding the CAF process/meeting objectives

VI. Common understanding of the physical setting and constraints

VII. Common understanding of current conditions and site conceptual model (including data gaps)

VIII. Discussion and identification of goals and expectations for the regulatory authority (EPA and/or state) and facility including identifying methods to address any differences

IX. Common understanding of planned interim measures and/or a process to address interim measures that may be needed

X-XI. Common understanding of RFI workplan tasks with the goal of creating an approvable document with no revisions

XII. Finalized summary of the CAF meeting and schedule of deliverables (e.g., workplan)

Appendix D: Corrective Action Framework Template

Corrective Action Framework

[Facility name]
[EPA ID]
[Address]

The Corrective Action Framework *(CAF)* is a tool intended to summarize the goals and expectations of the *[regulatory authority]* and the *[Responsible Party, facility, or Representative]* that will facilitate the RCRA Facility Investigation (RFI) at the *[facility name].* The CAF is not a legally binding document and does not alter any legal requirements under any permit or order applicable to the facility. Nor is the CAF a substitute for a permit or order. Only where the CAF is expressly incorporated into a new permit (or order, for interim status facilities) or incorporated through a modification to an existing permit (or order for interim status facilities) will the CAF become an enforceable condition of the permit (or order for interim status facilities). The CAF is also not expected to address every technical or administrative aspect or detail of the RFI. Rather, the CAF describes the discussions that took place during the CAF meeting or any subsequent meetings (e.g., elevation to management for resolution of differences to avoid delay). The CAF also documents material exchanged during the CAF meeting(s) which are necessary for the RFI to efficiently commence. Note that this CAF is a "living document" and is subject to change in light of new information or data.

[The sections below should be included as appropriate, to address the CAF goals for the specific facility.]

I. CAF Meeting Participants

[Provide a list of meeting attendees, including name, title, employer, and contact information]

II. Site Characterization

[Provide a brief overview of the types of facility characteristics discussed in the CAF meeting, primarily focusing on the historical and current operational characteristics of the facility.]

a. Overview of facility/surrounding properties
[Provide a description of the uses of the facility and surrounding properties, including land uses.]

b. Environmental characteristics
[Briefly discuss key environmental characteristics of the facility and surrounding properties that are relevant to the RFI and evaluation of exposure pathways. This may include facility hydrogeology, groundwater characteristics/usability, presence of streams and rivers, etc. EPA recommends these discussions be drafted with appropriate technical experts present (e.g., hydrogeologists).]

c. Areas of Concern (AOCs)/ Solid Waste Management Units (SWMUs) descriptions
[Provide a list the AOCs, SWMUs, and wastes handled at those locations. It is crucial that the list be consistent with the facility's Permit, Order, and/or RCRA Facility Assessment (RFA). Describe any discussions between the regulatory authority and facility on the SWMUs/AOCs needing or not needing additional investigation. This discussion may

address, as appropriate, contamination beyond the facility boundary.]

d. Previous releases
[Provide a description of any previously-documented and suspected releases.]

e. RCRA regulatory history
[If applicable, summarize the facility's RCRA regulatory history (e.g., compliance orders, closures, etc.) that could affect the investigation's scope.]

f. Other permitted activities
[If applicable, summarize the discussion of the facility's non-RCRA permits (e.g., stormwater, NPDES, air) which could affect the RFI, and interpretation and evaluation of facility data (e.g., does the facility have a permitted storm water discharge upstream of a SWMU?).]

g. Access or physical constraints
[Summarize physical and/or operational characteristics of the facility that limit and/or prevent access to contamination. Describe how these physical and/or operational characteristics may affect sampling and current exposures. The discussion should clearly indicate the exact locations of any access limitations.]

h. Other potential areas of investigation based on facility history
[Describe any facility investigations which may not necessarily be tied to the defined SWMUs/AOCs and releases discussed above (e.g., new areas of contamination).]

i. Other
[If necessary, provide a summary of the facility's characteristics and history that are not covered under the above headings (e.g., CERCLA or State cleanup actions).]

III. Conceptual Site Model

The following sections describe the *[facility name]* Conceptual Site Model (CSM). The CSM is based on information currently available for the facility and surrounding areas. This information may be updated based on new data or information that is generated during the investigation.

[It is envisioned that the regulatory authority and facility would complete a tabularized or text CSM or both. An example of a tabularized CSM is provided in Enclosure 1. Human health and ecological risk assessors should be consulted during the development of the CSM.]

a. Sources and extent of known contamination
[Provide a list of sources of contamination (e.g., tanks, landfill, AOCs etc.), their location, and extent of known impacts for all environmental media within and beyond the facility boundary. Consider specifying the types of contaminants/constituents of potential concern (COPCs) for all sources and contaminated media.]

b. Contamination transport/migration pathways
[For all sources of contamination, identify key migration pathways, such as soil leaching, vapor intrusion, groundwater discharge into surface water, and inter-aquifer exchange.]

c. Tentative exposure pathways

[Describe current and future exposure pathways for all known and/or suspected contaminated media. Note that because the exposure pathways evaluation is being performed prior to the completion of the investigation, the exposure pathways would typically be considered tentative (and the CAF drafted accordingly) until the investigation is completed and the complete pathways can be confirmed. The tentative exposure pathways may need to be broken out according to individual or groups of SWMUs/AOCs or other defined exposure units. Consider having the exposure pathway evaluation and identification of units be performed by or in consultation with human health and ecological risk assessors.]

d. Exposure receptors
[Summarize the current and future human and ecological receptors within and beyond the facility boundary. This may include the receptor population(s) (residential, commercial, recreational, etc.) and receptor age(s) (child/adolescent/adult). Provide a description of current operations and current land uses for the facility and neighboring properties, as well as the reasonably-expected future land use for the facility and surrounding properties.]

i. Exposure point and exposure medium
[Document the point of potential human and ecological contact with the contaminated medium (e.g., soils, water, or air). The contaminated medium (exposure medium) may include the source itself or other media impacted by releases from the source.]

ii. Exposure routes
[Document the routes of exposure (e.g., ingestion, inhalation, or dermal contact) at each exposure point.]

e. Discussion of unknowns and uncertainty
[Discuss data gaps and how these gaps will be addressed (e.g., sampling).]

IV. RFI Workplan

[Discuss the key elements that the parties anticipate including in the RFI workplan.]

a. Scope and objectives of the investigation
[Summarize the scope and key objectives of the RFI. This may also include a discussion of the performance objectives of the RCRA process (e.g., Corrective Action Objectives).]

b. Screening levels
[Specify the source of the risk-based screening levels that should be used for each environmental media (e.g., use of EPA's residential soil RSLs for screening soils and sediments beyond the facility boundary).]

c. Adaptive approach
[During the CAF process, the administrative authority and facility may identify flexible and adaptable sampling approaches (e.g., iterative sampling) that could improve the efficiency and timeliness of the investigation by reducing the number of field mobilizations and/or exchanges between the parties during phases of the investigation. This section should summarize these approaches.]

d. Quality Assurance Project Plan (QAPP)
[Describe the key elements and special conditions of the QAPP]

e. Data quality objectives
[Summarize the data quality objectives for the investigation.]

    i. Standard Operating Procedures
    [Summarize discussion pertaining to Standard Operating Procedures used to conduct sample and data analysis.]

f. Modeling
[Summarize how modeling will be used to evaluate the facility, such as appropriate use and expectations for initial and ongoing calibration and validation.]

g. Sampling approach/design
[Provide a summary of sampling methods and approaches to be implemented during the investigation, which may include, but is not limited to, soil sampling depth intervals, well locations, and sampling schemes (e.g., random).]

h. Sample analysis
[Provide a summary of the COPCs to be analyzed in each environmental medium and/or SWMU/AOC, as well as required detection limits (e.g., below 10-6 cancer screening levels), etc.]

i. Use of historical data
[Provide a brief summary of how historical data will be used to scope the investigation (e.g., whether data is adequate and reliable enough that a particular location need not be resampled). Also, consider discussing the use of historical data in risk assessments.]

j. Background
[Provide a brief summary on how background will be derived, evaluated, and used in risk assessments. This will likely include the locations and amount of background sampling to be performed.]

k. Health and Safety Plan
[Provide a brief discussion on any special circumstances pertaining to the facility's Health and Safety Plan of which both parties should be aware, including those that could affect the investigation, such as overhead power lines, railroads, and high-hazard processes within an operating facility.]

l. Community involvement and environmental justice
[Summarize any discussion pertaining to community involvement and environmental justice issues/concerns that could influence the project.]

m. Workplan implementation schedule
[Provide a schedule of the RFI activities, including a schedule of sampling activities, notifications, and interim deliverables (if necessary). It is crucial for the scheduling to be

consistent with the facility's Permit or Order requirements.]

V. Interim Measures

[This section should briefly summarize any proposed or planned interim measures (IMs) at the facility and any discussion on IMs between the regulatory authority and owner/operator. This could include a description of the IM, its scope and objectives, and schedule for its implementation.]

a. Immediate IMs
[Identify and summarize the implementation of immediate IMs. Consider including a discussion on the use of immediate IMs that may be part of the overall facility remedy.]

b. Future potential IMs
[Summarize any discussion on SWMUs/AOCs where IMs may be considered in the future, but immediate action is not necessary (e.g., a discussion on the use of IMs to facilitate cleanup in advance of a final remedy).]

VI. Goals and Expectations

Prior to and during the CAF meeting, the *[regulatory authority]* and facility identified the following goals and expectations. Each goal and expectation is summarized below.

[Goals and expectations can be thought of as key project management or risk management issues requiring resolution specific to the RFI and ultimately Corrective Action at the facility. The examples below may or may not be relevant for a specific facility. It may be useful to identify as goals and expectations in this section, key elements of other discussions in the CAF, such as elements of the site characterization, CMS, and/or RFI workplan discussions identified in Sections II, III, and IV above, respectively.]

- Land use/reasonably-expected future land use related to characterization and remediation
- Existing background conditions and consideration in RFI process
- Use of historical data
- Use of presumptive remedies
- Expected groundwater use/process for addressing groundwater contamination including state, federal, and local requirements
- Coordination with other programs
- Potential facility process/land use/owner changes
- Toxicity/criteria changes
- Expected risk range issues (Target Cancer Risk and Non-Cancer Hazard Index)
- Expected process for addressing remediation
    - Unknown sources (if source cannot be found)
    - Source removal vs. source control (containment)
    - Use of risk based or pathway elimination approach
    - Potential for determination of technical impracticability
    - Use of institutional and engineering controls

VII. Other Potential Issues

a. Format for data/information exchange/submissions
[Describe the format of electronic data and reports to be submitted to the administrative authority. This may also include the methods and ground rules for routine correspondence and updates, such as communications between the administrative and facility's technical experts. It is crucial to be consistent with the facility's Permit or Order requirements.]

b. Interim submissions approaches
[A CAF need not address every technical or administrative detail of the RFI, such as modeling parameters or exposure factors. However, should the regulatory authority and facility identify approaches or submissions on technical or administrative issues that can improve project efficiency, the parties may wish to document these for future reference. For example, the parties may identify a preferred procedure for information exchange, that is consistent with permit or order requirements.]

c. Schedule of deliverables (e.g., RFI workplan)
[This section should summarize the schedules of any action items generated as a result of CAF meeting. Additionally, this section should describe when and how often the CAF will be revisited for updates and/or revisions.]

d. Elements of RFI
[List the elements, and associated materials, necessary for a complete RFI.]

e. Risk Assessment
[Summarize the scope of the Risk Assessment, such as whether it is a baseline risk assessment or streamlined risk evaluation. This may also include any discussion on interim submissions, such as a Risk Assessment workplan.]

Enclosure I

[Depending on the size and complexity of the facility, a table may need to be completed for individual or groups of SWMUs/AOCs or other defined exposure unit.]

Table A.1 Initial Conceptual Site Model*

Contaminant Source/ Contaminated Media [2]	Transport/ Migration Pathway (e.g., leaching to groundwater, volatilization, plant uptake, fugitive dust emissions, runoff)	Scenario Timeframe (current or future)	Exposure Medium (contaminated media)	Exposure Point (the point of contact with exposure medium)	Within or Beyond the Facility Boundary	Receptor Population (e.g., resident, commercial, industrial)	Receptor Age (child/adult)	Exposure Route (ingestion, inhalation, dermal contact)

*Guidance on how to complete this table is can be found in the EPA Risk Assessment Guidance for Superfund (RAGS) including, but not limited to RAGS Parts A and D.

2 The contaminant source/contaminated media can include the sources of releases (e.g., tanks, spills, landfills, lagoons, etc.), as well as the media directly impacted by those releases.

Appendix E
RCRA FACILITY INVESTIGATION (RFI)
Statement of Work

PURPOSE

The purpose of this RCRA Facility Investigation ("RFI") is to determine the nature and extent of releases of hazardous wastes and/or hazardous constituents from regulated units, hazardous waste management units (HWMUs), solid waste management units (SWMUs), areas of concern (AOCs) and other source areas at the Former Imperial Inc. Facility, and to gather all necessary data to support a Corrective Measures Study. The RFI includes the collection of site-specific data to evaluate any human health and/or ecological impacts of contamination from the facility. The Respondent shall furnish all personnel, materials, and services necessary for, or incidental to, performing the RCRA facility investigation.

SCOPE

The RCRA Facility Investigation consists of three tasks:

TASK I: RFI WORK PLAN REQUIREMENTS

A. Description of Current Conditions
B. Quality Assurance Project Plan
C. Sampling and Analysis Plan
D. Public Involvement Plan

TASK II: RCRA FACILITY INVESTIGATION

A. Environmental Setting
B. Source Characterization
C. Contamination Characterization
D. Potential Receptor Identification
E. Data Analysis
F. Site Conceptual Model
G. Risk Assessment

TASK III: RFI REPORTING

A. RFI Work Plan
B. RFI Report
C. Progress Reports

In accomplishing the above Tasks, the Respondent shall comply with the provisions of the corresponding Administrative Order on Consent (Order) between the United States Environmental Protection Agency (EPA) and the Respondent; this SOW; the RCRA Corrective Action Pl

an, EPA/520-R-94-004, OSWER Directive 9902.3-2A, May 1994; and all applicable EPA guidance, (including, but not limited to, the guidance documents referenced in the Order and this SOW).

TASK I: RFI WORK PLAN REQUIREMENTS

Within the timeframes specified in the Order, the Respondent shall prepare an RFI Work Plan to support and guide the work necessary to characterize the nature and extent of contamination and complete all requirements listed in Task II of this Statement of Work. This RFI Work Plan shall include the components described below and a schedule for completing all requirements listed in Task II of this Statement of Work. During the RCRA Facility Investigation, it may be necessary to revise the RFI Work Plan to increase or decrease the amount and/or type of information collected to accommodate the facility-specific situation or to perform subsequent phases of the RFI. EPA will review and approve or modify this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order. The RFI Work Plan shall include the following elements:

A. Current Conditions

Respondent shall submit for EPA approval a report providing the background information pertinent to the facility. This report shall include information gathered during any previous investigations, inspections, interim measure activities and any other relevant data, which helps to identify potential sources of contamination and characterize the current site conditions. In addition, this report shall assess whether any contaminated groundwater plumes are migrating off-site. EPA will review and approve or modify this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order.

1. Facility Background

The Respondent's report shall summarize the regional location, pertinent boundary features, general facility physiography, hydrogeology, and historical use of the facility for the treatment, storage, or disposal of solid and hazardous waste. The Respondent's report shall include:

a. Map(s) depicting the following:

i) General geographic location;

ii) Property lines, with the owners of all adjacent property clearly indicated;

iii) Topography (with a contour interval of 10 feet and a scale

of 1 inch = 100 feet), water ways, all wetlands, flood plains, water features, drainage patterns;

iv) All tanks, buildings, utilities, paved areas, easements, rights-of-way, and other features;

v) All solid or hazardous waste treatment, storage, or disposal areas active after November 19, 1980;

vi) All known past solid or hazardous waste substance treatment, storage, or disposal areas and all known spill, fire, or other accidental release locations where hazardous substances may have been released or disposed;

vii) All known past and present product and waste underground tanks or piping;

viii) Surrounding land uses (residential, commercial, agricultural, recreational); and

ix) Location and construction details of all production and groundwater monitoring wells at and within a one mile radius of the site. These wells shall be clearly labeled. Monitoring well installed depth, well screen interval, casing diameter, and top of casing elevations shall be included (these elevations may be included as an attachment).

All maps shall be consistent with the requirements set forth in 40 C.F.R. Section 270.14 and be of sufficient detail and accuracy to locate and report all current and future work performed at the site;

b. History and description of ownership and operation; solid and hazardous waste generation; and treatment, storage, and disposal activities at the facility;

c. Approximate dates or periods of past product and waste spills, identification of the materials spilled, the amount spilled, the location of the spills, and a description of the response actions conducted (local, state, or Federal response units or private parties), including any inspection reports or technical reports generated as a result of the response; and

d. Summary of past permits requested and/or received, any enforcement actions and their subsequent responses.

2. <u>Nature and Extent of Contamination</u>

The Respondent's report shall describe the existing information on the nature and extent of contamination.

a. The Respondent's report shall summarize all possible source areas of contamination. This, at a minimum, should include all regulated units, SWMUs, HWMUs, AOCs, spill areas, and other suspected source areas of contamination. For each area, the Respondent shall identify the following:

    i) Location of unit/area (which shall be depicted on a facility map);

    ii) Quantities of solid and hazardous wastes;

    iii) Hazardous waste or hazardous constituents, to the extent known; and

    iv) Identification of areas where additional information is necessary.

b. The Respondent shall prepare an assessment and description of the existing nature and extent of contamination. This should include:

    i) Available monitoring data in tabular form and qualitative information on locations and levels of contamination at the facility;

    ii) All potential migration pathways including information on geology, soils, hydrogeology, physiography, hydrology, water quality, meteorology, and air quality; and

    iii) Potential impact(s) on human health and the environment, including demography, groundwater and surface water use, and land use.

3. Implementation of Interim Measures

The Respondent's report shall document interim measures which were, or are, being undertaken at the facility. This report shall include:

a. Objectives of the interim measures: how the measure is mitigating a potential threat to human health and the environment and/or is consistent with and integrated into any long-term solution at the facility;

c. Design, construction, operation, and maintenance requirements;

d. Schedules for design, construction, and monitoring; and

e. Schedule for progress reports.

B. Quality Assurance Project Plan (QAPP)

To ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented, the Respondent shall prepare a QAPP to document all monitoring procedures, sampling, field measurements and sample analysis performed during the investigation to characterize the environmental setting, source(s), and contamination as required in Task II. The Respondent shall use quality assurance, quality control, and chain-of-custody procedures approved by the EPA. The QAPP should be prepared in accordance with the EPA *Requirements for Quality Assurance Project Plans,* EPA QA/R-5, EPA/240/B-01/003, March 2001, and following EPA *Guidance for Preparing Quality Assurance Project Plans*, EPA QA/G-5, EPA/240/R-02/009, December 2002. The minimum elements of Respondent's quality assurance program for data collection activities are in Chapter One of EPA publication SW-846, entitled *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*. The QAPP shall include a description and qualifications of all personnel performing or directing the RFI, including contractor personnel. Additional requirements are included in the [Order/Permit]. Standard operating procedures (SOPs) shall be included as an attachment to the plan(s) if SOPs are cited in the text.

C. Sampling and Analysis Plan (SAP)

The SAP shall outline the field investigation activities which will be conducted to determine the nature and extent of contamination associated with the Facility, and fulfill the purpose and objectives of the RFI as described in Task II. The SAP shall be prepared in accordance with EPA *Guidance on Choosing a Sampling Design for Environmental Data Collection*, EPA QA/G-5S, EPA/240/R-02/005, December 2002. The SAP at a minimum should include the following:

1. A description of the site, its regulatory status;

2. Clearly stated objectives for the specific sampling event, including the ultimate goal and/or use of the sampling data and the techniques which will ensure that the samples will provide the required data;

3. A description of all SWMUs, AOCs and HWMUs requiring characterization along with the sampling approach/rationale for defining the nature and extent of contamination and its rate of movement for all potentially impacted media;

4. A discussion of sampling procedures which shall include: sampling locations, field quality assurance samples, analyses to be conducted including analytical method numbers, sample containers, sample preservation and shipment, and chain-of-custody procedures;

5. Monitoring well and soil boring location, monitoring well construction details (installed depth, well screen interval, casing diameter, and top of casing elevations), installation, development and sampling procedures; and

6. The SAP shall detail the planned sampling approach for any sampling required to meet the requirements of Task II for characterization the environmental setting, defining the sources of releases, and identifying potential receptors and human health and/or ecologic impacts.

D. Public Involvement Plan

The Respondent shall submit a Public Involvement Plan detailing how the facility will inform the public of investigation activities and results. This plan shall conform to EPA's *RCRA Public Participation Manual*, EPA/530-R-96-007, September 1996. All Public Involvement Plans prepared by the Respondent shall be submitted to the implementing agency for comment and approval prior to use. Respondent must never appear to represent or speak for the implementing agency before the public, other government officials or the media. A schedule for community relations activities shall be included in the Public Involvement Plan. EPA will review and approve or modify this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order.

TASK II: FACILITY INVESTIGATION

Within the timeframes specified in the approved RFI Work Plan, the Respondent shall conduct investigations necessary to: characterize the facility (Environmental Setting); define the source(s) of contamination (Source Characterization); define the nature and extent of contamination (Contamination Characterization); identify actual or potential receptors (Potential Receptor Identification), and determine the impact(s) of contamination on human health and/or ecological receptors (Risk Assessment). The investigation should result in data of adequate technical quality to support the development and evaluation of the corrective measures alternative(s) during the Corrective Measures Study.

The site investigation activities shall follow the plans set forth in Task I. All sampling and analyses shall be conducted in accordance with the approved QAPP. All sampling locations shall be documented in a log and identified on a detailed site map.

A. Environmental Setting

The Respondent shall collect information to supplement and verify existing information on the environmental setting at the facility. The Respondent shall characterize the following:

1. Hydrogeology - The Respondent shall conduct a program to evaluate hydrogeologic conditions at the facility. The following information, at a minimum, must be included in the RFI Report:

a. Description of the regional and facility-specific geologic and hydrogeologic characteristics affecting groundwater flow beneath the facility, including:

    i) Regional and facility-specific stratigraphy;

    ii) Structural geology: description of local and regional structural features (e.g., folding, faulting, jointing);

    iii) Depositional and erosional history;

    iv) Identification and characterization of recharge and discharge areas;

    v) Regional and facility-specific groundwater flow patterns for each hydrogeologic unit; and

    vii) Characterization of seasonal variations in each groundwater flow regime.

b. Analysis of any topographic features that might influence the groundwater flow system.

c. Based on field data, tests, and cores, a representative and accurate classification and description of each hydrogeologic unit which may be part of the migration pathways at the facility (i.e., the aquifers and any intervening saturated and unsaturated units), including:

    i) Hydraulic conductivity and porosity (total and effective);

    ii) Lithology, grain size, sorting, and degree of cementation;

    iii) Interpretation of hydraulic interconnections between saturated zones; and

    iv) Attenuation capacity and mechanisms of the natural earth materials (e.g., ion exchange capacity, organic carbon content, mineral content, etc.).

d. Based on field studies and cores, structural geology and hydrogeologic cross sections showing the extent (depth, thickness, lateral extent) of hydrogeologic units which may be part of the migration pathways, identifying:

    i) Sand and gravel deposits in unconsolidated deposits;

    ii) Zones of fracturing or channeling in

unconsolidated deposits;

iii) Zones of high permeability or low permeability that might direct and/or restrict the flow of contaminants;

iv) The uppermost aquifer: geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs; and

v) Water-bearing zones above the first confining layer that may serve as a pathway for contaminant migration, including perched zones of saturation.

e. Based on data obtained from groundwater monitoring wells and piezometers installed upgradient and downgradient of the potential contaminant source(s), a representative description of water level or fluid pressure monitoring, including:

i) Water-level contour and/or potentiometric maps;

ii) Hydrologic cross-sections showing vertical gradients;

iii) The flow system, including the vertical and horizontal components of flow; and

iv) Any temporal changes in hydraulic gradients, for example, due to seasonal influences.

f. Description of man-made influences that may affect the hydrogeology of the site, identifying:

i) Active and inactive local water supply and production wells (including construction details) within a [XXX] mile radius of the site, with an approximate schedule of pumping; and

ii) Man-made hydraulic structures (pipelines, french drains, ditches, unlined ponds, septic tanks, NPDES outfalls, retention areas, etc.).

2. Soils - The Respondent shall conduct a program to fully characterize the soil and rock units at the facility. The following information, at a minimum, must be collected and included in the RFI Report:

a. Soil Conservation Service (SCS) soil classification;

b. Surface soil distribution;

c. Soil profile, including American Standard Test Method (ASTM) classification of soils;

d. Transects of soil stratigraphy;

e. Hydraulic conductivity (saturated and unsaturated);

f. Relative permeability;

g. Bulk density;

h. Porosity;

i. Soil sorptive capacity;

j. Cation exchange capacity (CEC);

k. Soil organic content;

l. Soil pH;

m. Particle size distribution;

n. Depth of water table;

o. Moisture content;

p. Effect of stratification on unsaturated flow;

q. Infiltration;

r. Evapotranspiration;

s. Storage capacity;

t. Vertical flow rate; and

u. Mineral content.

3. Surface Water and Sediment - The Respondent shall conduct a program to characterize the surface water bodies in the vicinity of the facility. The following information, at a minimum, must be included in the RFI Report:

a. Description of the temporal and permanent surface water bodies.

b. Description of the chemistry of the natural surface water and sediments (e.g. pH, total organic carbon).

c. Description of sediment characteristics, including:

i) Deposition area(s);

ii) Thickness profile; and

iii) Physical and chemical parameters (e.g., grain size, density, organic carbon content, ion exchange capacity, pH)

4. Air - The Respondent shall provide information characterizing the climate in the vicinity of the facility. The following information, at a minimum, must be included in the RFI Report:

a. Description of the following parameters:

i) Annual and monthly rainfall averages;

ii) Monthly temperature averages and extremes;

ii) Wind speed and direction; and

iv) Evaporation data.

b. Description of topographic and man-made features which affect air flow and emission patterns.

B. Source Characterization

The Respondent shall collect analytical data to supplement and update the description prepared pursuant to Task I.A. herein. The data shall completely characterize the wastes and the areas where wastes have been placed or released. At a minimum, this information shall include quantification of the following specific characteristics at each source area and documentation of the procedures used to make the determinations.

1. Source Area Characteristics:

a. Location of unit/disposal or source area;

b. Type of unit/disposal area or cause of source/release;

c. Design features;

d. Operating practices (past and present);

e. Period of operation;

f. Age of unit/disposal area;

g. General physical condition; and

h. Method used to close the unit/disposal area.

2. Waste Characteristics:

a. Type of waste/product:

i) Hazardous classification (e.g., flammable, reactive, corrosive, oxidizing, or reducing agent);

ii) Quantity; and

iii) Chemical composition.

b. Physical and chemical characteristics:

i) Physical form and description (e.g., powder, oily sludge);

ii) pH;

iii) General chemical class (e.g., acid, base, solvent);

iv) Density;

v) Viscosity;

vi) Solubility in water;

vii) Cohesiveness of the waste; and

viii) Vapor pressure.

c. Migration and dispersal characteristics of the waste/product:

i) Sorption;

ii) Biodegradability, bioconcentration, biotransformation; and

iii) Chemical transformations.

C. Contamination Characterization

The Respondent shall collect analytical data on groundwater, soils, surface water, and sediment contamination in the vicinity of the facility. This data shall be sufficient to define the extent, origin, direction, and rate of movement of contaminant plumes affecting all media. Data shall include time and location of sampling, media sampled, concentrations found, conditions during sampling, and the identity of the individuals

performing the sampling and analysis. The Respondent shall address the following types of contamination at the facility:

1. Groundwater Contamination - The Respondent shall conduct a groundwater investigation to fully characterize all plumes of contamination at the facility and document the procedures used to characterize contaminant plume(s), (e.g., geophysics, modeling, pump tests, slug tests, nested piezometers). This investigation shall, at a minimum, provide the following information:

    a. Specific origin (source) of each contaminant plume;

    b. Description of the full horizontal and vertical extent of each immiscible or dissolved plume(s) originating from the facility;

    c. Horizontal and vertical direction of contaminant movement;

    d. Velocity of contaminant movement;

    e. Horizontal and vertical concentration profiles of hazardous constituents;

    f. Evaluation of factors influencing the plume movement; and

    g. Extrapolation of future contaminant movement.

2. Soil Contamination - The Respondent shall conduct and document the procedures used to investigate and characterize the contamination of the soil and geologic units in the vicinity of any contaminant release. The investigation shall include the following information:

    a. Specific origin (source) of each soil contamination area;

    b. Description of the full vertical and horizontal extent of contamination;

    c. Description of contaminant and soil chemical properties within the contaminant source area and plume (e.g. contaminant solubility, adsorption, leachability) that might affect contaminant migration and transformation;

    d. Specific contaminant concentrations;

    e. Velocity and direction of contaminant movement; and

    f. Extrapolation of future contaminant movement.

3. Surface Water and Sediment Contamination - The Respondent shall conduct and document the procedures used to investigate and characterize contamination in surface water bodies and sediments resulting from contaminant releases at the facility. The investigation shall include, but not be limited to, the following information:

a. Specific origin (source) of each contaminant release to surface water and sediments;

b. Description of likely discharge locations of any immiscible or dissolved plume(s) originating from the facility, and the extent of contamination in sediments and surface water;

c. Horizontal and vertical direction of contaminant movement;

d. Evaluation of the physical, biological, and chemical factors influencing contaminant movement;

e. Extrapolation of future contaminant movement; and

f. Description of the chemistry of the contaminated surface waters and sediments (e.g. pH, total dissolved solids, specific contaminant concentrations).

D. Potential Receptor Identification

The Respondent shall collect data describing the human populations and environmental systems that are susceptible to contaminant exposure from the facility. Chemical analysis of biological samples may be required. Data on observable effects in ecosystems may also be required. The following characteristics shall be identified:

1. Local uses and possible future uses of groundwater within a 1 mile radius of the facility:

   a. Type of use (e.g., drinking water source: municipal or residential, agricultural, domestic/non-potable, and industrial); and

   b. Location of groundwater users, including wells and discharge areas.

2. Local uses and possible future uses of surface waters near the facility:

   a. Type of use(s) (e.g. domestic municipal, recreational, agricultural) (e.g., potable and lawn/garden watering); and

   b. Location of designated use area relative to the site and the contamination.

3. Current and potential human use of or access to the facility and adjacent lands, including, but not limited to:

   a. Types of current and potential uses (e.g. residential, commercial, zoning/deed restrictions); and

b. Any use restrictions relative to the site and the contamination.

4. A description of the ecology overlying and in proximity to the facility including, but not limited to:

   a. Location and size of each identified habitat (e.g., streams, wetlands, forested areas).

   b. Description and complete species listing of each habitat's plant and animal (both resident and transient) communities.

   c. Non-jurisdictional delineation of any wetlands present.

   d. Database searches for the potential presence of any federal or state listed threatened, endangered, or rare species.

5. An evaluation of the pollutant impacts on the ecosystems/populations potentially exposed to contamination. This evaluation may be accomplished through the use of toxicity test (acute and chronic) population surveys and literature reviews.

E. Data Analysis

The Respondent shall analyze all facility investigation data outlined in this Task and prepare a report. The objective of the data analysis section is to summarize the investigation and demonstrate that a sufficient amount of data in quality (e.g., quality assurance procedures have been followed) and quantity has been collected to describe the nature and extent of contamination, potential threat to human health and/or the environment, and to support the Corrective Measures Study. EPA will review and approve or modify this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order.

F. Site Conceptual Model

Respondent shall synthesize data on environmental setting and contaminant three-dimensional distribution to produce a site conceptual model. EPA will review and approve or modify this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order.

G. Risk Assessment

Respondents may submit a work plan for conducting a site-wide Human Health and Screening Level Ecological Risk Assessment. The work plan shall outline the procedures and schedule for completing a risk assessment in accordance with EPA's *Risk Assessment Guidance for Superfund,* EPA/540/1-89/002, December 1989, and the *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological*

Risk Assessments, EPA-540-R-97-006, July 1997, and any subsequent updates, amendments or supplements. The Risk Assessment work plan must include:

1. A site-specific exposure conceptual model, which either graphically illustrates or states the impacted media and all the primary and secondary exposure pathways; and

2. A list of all contaminants of concern, standard exposure parameters, land use, methodologies for determining reasonable maximum exposure point concentrations, proxy determinations, and other statistical considerations.

Only information and environmental data that has been validated as representative of facility conditions may be used to describe the potential excess human health and/or ecological risk posed by the site.

In lieu of performing a site-specific Risk Assessment to evaluate risk and arrive at cleanup goals for this site, Respondent may elect, with the concurrence of the EPA project manager, to defer to EPA for development of cleanup goals.

Coordination with EPA is required throughout the risk characterization process.

TASK III: REPORTS

At a minimum, Respondent shall prepare reports for the following submissions, except Progress Reports. These reports shall present the results of Tasks I and II. These reports and any others shall be submitted in accordance with the schedule contained in the Administrative Order and the RFI Work Plan, upon its approval:

A. RFI Work Plan (Task I)

B. RFI Report (Task II)

C. Progress Reports – The Respondent will, at a minimum, provide the implementing agency with signed annual progress reports.

These progress reports must contain the following elements, at a minimum:

1. A description and estimate of the percentage of the RFI completed;

2. Summaries of all findings in the reporting period, including results of any pilot studies;

3. Summaries of all changes made in the RFI during the reporting period;

4. Summaries of all contacts with representatives of the local community, public interest groups or state government during the reporting period;

5. Summaries of all contacts made regarding access to property;

6. Summaries of all problems encountered during the reporting period;

7. Actions being taken to rectify problems;

8. Changes in relevant personnel during the reporting period;

9. Projected work for the next reporting period; and

10. Copies of daily reports; inspection reports, laboratory/monitoring data, etc.

Facility Submission

RFI Work Plan

RFI Report

Progress Reports

Appendix F: Template for Remedy Selection Process Meeting

Agenda for Remedy Selection Process (RSP) Meeting

Date:
Location:

Purpose

The RCRAFIRST Remedy Selection Process (RSP) Meeting has two objectives:

1. The participants all must agree on a set (or sets) of Corrective Action Objectives (CAOs) that guide the proposed remedy(ies) for all contaminated media or other areas identified in the RFI and the Site Conceptual Model. These CAOs must be measurable and, when the remedy is fully implemented, provide for the appropriate level of protection for human health and the environment.
2. The participants must choose an approach to the development of the proposed remedy among the following: no CMS, modified CMS, or full CMS.

To facilitate the most effective RSP meeting possible, meeting participants exchange all relevant documents within 60 days of the RFI approval and the RSP meeting must be held within 120 days of the RFI approval. A list of potential documents for exchange follows.

While EPA expects that the regulatory authority (EPA and/or State) and facility will already have the same documentation, careful planning can help identify the most recent revisions to documents or documents missing entirely. Advance discussions between the participants can help identify other relevant information.

For more information about the RSP Meeting and the resulting RSP document (RSPD), please see the RCRA FIRST Toolbox, section IV.

Recommended Documents From Facility:

- Proposed Corrective Action Objectives
- Stakeholder analysis with clear roles and responsibilities (e.g., facility, technical support, public facilitator, other)
- Closure information/post-closure information
- Relevant data from other programs
- RFI Report (or draft RFI)
- Interim Measures (if implemented), workplans, performance monitoring, trend analysis, or other relevant reports
- Results from pump tests
- Pilot Study data, if implemented

Recommended Documents From Lead Agency:

- Proposed Corrective Action Objectives
- Stakeholder analysis with clear roles and responsibilities (e.g., lead agency, support agency, technical support, public, facilitator, other)
- Permit/order requirements
- Closure information/post-closure information/post remedial care
- Presumptive remedy guidance/examples

Participants

- Lead Agency Project Manager*
- Lead Agency Supervisor*
- Lead Agency Technical Support (hydrogeologist, risk assessor, etc.)
- Lead Agency Legal
- Facility Project Manager*
- Facility Supervisor*
- Facility Technical Support (hydrogeologist, risk assessor, etc.)
- Facility Legal
- Support Agency (state VCP/EPA)
- Support Agency (USCOE, Stormwater, Soil Conservation)

**Suggested minimum participants*

Roles and Responsibilities

Lead Agency – Provides legal and technical oversight of remedy selection process.

Support Agency – Provides technical guidance, represents support agency interests, and supports Lead Agency in formulating goals and expectations to obtain final concurrence.

Facility – Facilitates RSP meeting, evaluates remedy alternatives, collects and analyzes data (if necessary), recommends path forward through process.

All Participants – Responsible for identifying first and second level individuals for elevation.

Topics for Discussion

I. Introductions

II. Reaffirm goals and objectives for RSP meeting and remedy selection process (reach mutual understanding on approaches for selecting the final remedy)

III. Discuss any permits or orders at the facility and remind all participants that the RSP process is not legally binding or intended to alter any legal requirements at the site unless the permit (or order, for interim status facilities) expressly incorporates the RSP.

IV. Discuss project communication plan

V. Identify roles and responsibilities

VI. Summary and review and confirm the RFI, risk assessment, and the site conceptual model asit pertains to remedy selection

VII. Develop Corrective Action Objectives

a. Point of Compliance
b. Media Cleanup Standards (list of impacted media at the site, data averaging, background)
c. Aquifer use classifications
d. Land use/reasonably expected future use in relation to characterization and remediation
e. Timeframes for achieving cleanup objectives
f. Long-term stewardship/exit strategy

VIII. Remedial Strategy (including risk management approach and suite of potential remedial alternatives)

a. Discussion of the three required threshold criteria
    i. Protect human health and the environment
    ii. Attain media cleanup standards
    iii. Control source(s) of the release
b. Discussion of how the seven balancing criteria are to be applied:
    i. Long-Term Effectiveness
    ii. Toxicity, Mobility, and Volume Reduction
    iii. Short-Term Effectiveness
    iv. Implementability
    v. Cost
    vi. Community acceptance
    vii. State/EPA acceptance and compliance with other applicable laws
c. Identify alternative(s) to be considered
    i. Current interim measures, appropriate for final remedy?
    ii. Presumptive remedies
    iii. Media-specific remedies
    iv. SWMU/AOC/Unit-specific remedies
    v. Institutional controls and their implementability
    vi. Engineering controls and post-implementation care
d. Identify data gaps or needs to evaluate and/or support remedial alternatives
    i. Pump tests
    ii. Pilot studies/bench scale tests
    iii. Additional investigation, delineation/characterization
    iv. Research

IX. Identify Remedy Selection path

a. No CMS needed—Go to Statement of Basis
    i. Will a presumptive remedy meet the CAOs?
    ii. Is there a single dominant alternative?
    iii. Does the single remedy achieve the three threshold criteria?
    iv. Is remedy reasonable with regards to balancing criteria?
    v. List documents needed (may be Region-specific) for Agency to prepare Statement of Basis
b. CMS needed, but not CMS workplan required; RSP document sufficient

i. Confirm all final alternatives being considered meet the three threshold criteria
ii. Develop consensus on how balancing criteria will be applied.
iii. Determine if workplans are necessary for additional data collection

c. CMS needed and CMS workplan necessary
i. Identify why CMS workplan is necessary in addition to RSP document
ii. Confirm all final alternatives being considered meet the three threshold criteria
iii. Develop consensus on how balancing criteria will be applied
iv. Determine if workplans are necessary for additional data collection

X. Scope CMS workplan (if necessary, Agency review required)

XI. Scope data collection workplan (if necessary)
a. Determine whether Agency review and approval required

XII. Scope CMS Report

XIII. Other potential issues
a. Sustainability/greener cleanups
b. Schedule of deliverables (e.g., CMS Report)
c. Format for reports, data/information exchange/submissions
d. Interim submissions (e.g., Pilot Study Report)
e. Financial assurance expectations
f. Stakeholder considerations (if any)
g. Community engagement planning

XIV. Draft Summary of RSP meeting (brief written document by the end of the meeting)

XV. Preparation of final RSP document by the facility for agency and facility acceptance

Expected Session Outcomes

Expected outcomes correspond with roman numerals in topic for discussion outline.

I-V. Common understanding of the roles and responsibilities of the regulatory authority (EPA and/or state) and facility as well as understanding the RSP process/meeting objectives

VI. Common understanding of current conditions and site conceptual model

VII-VIII. Identification and concurrence of Corrective Action Objectives for the site including point of compliance and risk based management strategy

IX. Common understanding of remedy selection process including need for CMS Report, CMS workplan or need for additional data collection, and identification of site-specific remedial alternatives for consideration

X-XI. Common understanding of scope of reports, and workplans if necessary, to be prepared with the goal of creating approvable documents with the goal of no revisions

XII. Summary of the RSP meeting and a finalized RSP document with a schedule of deliverables

Appendix G: Remedy Selection Process Document (RSPD) Template

Remedy Selection Process Document

[Facility name]
[EPA ID]
[Address]

The Remedy Selection Process Document (RSPD) is a tool intended to summarize the process and goals of the *[regulatory authority]* and the [*responsible party, facility, or representative]* that will facilitate RCRA remedy selection at the *[facility name].* The RSPD is not a legally binding document and does not alter any legal requirements under any permit or order applicable to the facility. Nor is the RSPD a substitute for a permit or order. Only where the RSPD is expressly incorporated into a new permit (or order, for interim status facilities) or incorporated through a modification to an existing permit (or order for interim status facilities) will the RSPD become an enforceable condition of the permit (or order for interim status facilities). The RSPD is also not expected to address every technical or administrative aspect or detail of remedy selection. Rather, the RSPD records the discussions and process selected and developed by the *[regulatory authority*] and the [*responsible party, facility, or representative]* during the RSP meeting or any subsequent meetings. The RSPD also documents the Corrective Action Objectives (CAOs) discussed during the RSP meeting which the selected remedial alternative(s) should be able to attain. Note that this RSPD is a "living document" and is subject to change in light of new information or data.

[The sections below should be included as appropriate, to address the RSP for the specific facility.]

I. RSP Meeting Participants

[Provide a list of meeting attendees, including name, title, employer, and contact information]

II. RFI Summary

a. Summary of the findings of the RFI
[Provide a brief overview of the key findings of the RFI as pertinent to remedy selection.]

b. Confirm the objectives of the RFI for this facility have been met
[Typically the objectives of an RFI are to determine the nature, extent (vertical and horizontal) and rate of migration of contaminant releases; identify the source(s) of contamination; and provide sufficient information and data to choose appropriate response actions. Both the regulatory authority and facility should concur that the RFI is sufficient.]

c. Identify any data gaps that must be filled to proceed with the remedy selection process
[List data needs and how they are proposed to be filled. Include necessary deliverables and timeframes.]

III. Conceptual Site Model Summary

a. Summary of the conceptual site model (CSM) as refined by the RFI
[Provide an overview of the CSM with particular focus on the aspects pertinent to remedy selection.]

b. Confirm the validity of the CSM for the purpose of remedy selection
[Typically the CSM should address the following issues: sources and extent of known contamination; contamination transport/migration pathways; tentative exposure pathways; exposure receptors; exposure point and exposure medium; and exposure routes.]

c. Identify any issues or concerns about the CSM with respect to remedy selection

IV. Development of Corrective Action Objectives (CAOs)

[Include discussion of the general objectives, (e.g., protect human health and the environment; achieve media cleanup standards; and control the sources of contamination) and more specific objectives, as necessary.]

a. Point of compliance

b. Aquifer use classifications
[Include all aquifers present]

c. Current land use and reasonably expected future land use

d. Media cleanup standards
[Include each impacted media at the site, with the cleanup standard and background level.]

e. Timeframes for achieving CAOs

f. Exit strategy

V. Remedial Strategy

[This section should address all information below that will be taken into consideration in Section VI to select the site-specific path to be used.]

a. Identify the suite of potential remedial alternatives to be considered
   i. Current interim measures and whether they are appropriate for final remedy
   ii. Pertinent presumptive remedies
   iii. Media-specific remedies
   iv. SWMU/AOC/unit-specific remedies
   v. Institutional controls and their implementability
   vi. Engineering controls and post-implementation care

b. Discuss the three required threshold criteria with regards to the remedial alternatives

i. *Protect human health and the environment*
ii. *Attain media clean-up standards*
iii. *Control of contaminant source(s)*

c. Discuss how the seven balancing criteria will be applied to the remedial alternatives.
[If there is only a single remedial alternative that meets the threshold criteria, this section should discuss it that remedy is reasonable with respect to these criteria.]
i. *Long-term effectiveness*
ii. *Reduction of toxicity, mobility or volume of contaminants*
iii. *Short-term effectiveness*
iv. *Cost*
v. *Implementability*
vi. *Community acceptance*
vii. *State acceptance*

d. Identify data gaps or data needs to evaluate and/or support remedial alternatives
i. *Pump tests*
ii. *Pilot studies*
iii. *Additional investigation, delineation/characterization*
iv. *Research*

VI. Identify the Site-Specific Remedy Selection Path

[Identify which of the following remedy selection paths below was selected for use at [facility name] Provide the information indicated below and any additional rationale or supporting information for the path selected]

a. No CMS - Move on to Statement of Basis preparation
i. *List the single dominant alternative and state why*
ii. *Discuss whether the single alternative meets all three threshold criteria adequately*
iii. *Discuss whether the single remedy is reasonable with respect to the balancing criteria*
iv. *List any documents needed by the regulatory authority to prepare the Statement of Basis [e.g., site figure, remedy costs]*

b. Limited CMS - No workplan required
i. *Document that all final alternatives being considered meet the three threshold criteria*
ii. *Document the consensus on how the balancing criteria will be applied to the alternatives*
iii. *Discuss whether additional data is necessary to evaluate the alternatives, and if so whether a workplan for collection of the additional data is necessary.*

c. Full CMS
i. *Identify why a CMS workplan is necessary in addition to this RSPD*
ii. *Document that all final alternatives being considered meet the three threshold criteria*
iii. *Document the consensus on how the balancing criteria will be applied to the alternatives*

iv. *Discuss whether additional data is necessary to evaluate the alternatives, and if so whether a workplan for collection of the additional data is necessary.*

VII. Scope of Deliverable Documents

[Discuss the scope of each of the documents listed below if required or any other documents determined to be deliverables during the RSP meeting.]

a. Scope of the CMS workplan, if necessary

b. Scope of the additional data collection workplan(s), if necessary

c. Scope of the CMS report, if necessary

VIII. Other Potential Issues

a. Schedule of deliverables (e.g., CMS Report)
[This section should summarize the schedules of any action items generated as a result of the RSP meeting.]

b. Format for reports/data/information exchange/submissions

c. Interim submissions (e.g. Pilot Study Report)

d. Financial assurance expectations and timing

e. Stakeholder considerations, if any

f. Community engagement plan

Appendix H
CORRECTIVE MEASURES STUDY (CMS)
Statement of Work

PURPOSE

Respondent shall conduct a Corrective Measures Study (CMS) that identifies and compares alternative potential remedies and recommends a preferred remedy(ies) to address the contamination at and/or originating from the Former Imperial Inc. Facility. The CMS shall provide sufficient information to support EPA's selection of an appropriate remedy and to support the implementation of corrective measures. This process shall conform to EPA's *RCRA Corrective Action Plan,* EPA/520-R-94-004, OSWER Directive 9902.3-2A, May 1994, and other applicable EPA guidance. Respondent is encouraged to coordinate early and often with the EPA project manager to obtain concurrence with the scope of the CMS and encourage Agency acceptance of the corrective measures alternative preferred by the Respondent.

SCOPE

The CMS shall consist of the following tasks:

TASK I: CMS WORK PLAN

TASK II: CMS REPORT

TASK III: PROGRESS REPORTS

TASK I: CMS WORK PLAN

Within the timeframes specified in the Order, the Respondent shall prepare a CMS Work Plan. EPA will review and approve or modify this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order. The CMS Work Plan shall include the following elements:

1. A site-specific description of the overall purpose of the Corrective Measure Study;

2. A description of the corrective measure objectives, including proposed target media cleanup standards (e.g., promulgated federal and state standards, risk derived standards) and points of compliance or a description of how a risk assessment will be performed (e.g., guidance documents);

3. A description of the specific corrective measure technologies and/or corrective measure alternatives which will be studied (including Institutional Controls);

4. A description of the general approach to investigating and evaluating potential corrective measures;

5. A detailed description of any proposed pilot, laboratory and/or bench scale treatability studies and/or pilot tests;

6. A proposed outline for the CMS Report including a description of how information will be presented; and

7. A schedule for completion of the CMS Report.

TASK II: CMS REPORT

Within the time frames specified in the Order, Respondent shall submit to EPA for approval a CMS Report. The CMS Report shall address, without limitation, all items set forth in this section, below. EPA will review and approve or modify this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order. Irrespective of an approved CMS Work Plan, EPA may require the Respondent to collect, present and/or analyze additional information beyond the scope of the approved CMS Work Plan and the following list to accomplish the purpose and objectives of the CMS. The following information must be included in the CMS Report:

1. **Statement of Purpose -** The CMS Report shall describe the purpose of the document and provide a summary description of the project;

2. **Description of Current Conditions -** The CMS Report shall include a brief discussion of any new information that has been developed since the RFI, particularly where that information could affect the evaluation and selection of the corrective measures alternative(s).

3. **Corrective Action Objectives** - The CMS Report shall describe and propose Respondent's corrective action objectives. Specifically, Respondent shall propose applicable media cleanup standards for each medium where Facility-related contamination poses an unacceptable risk to human health and the environment. The CMS Report shall explain how these objectives are protective of human health and the environment and are consistent with EPA guidance and the requirements of applicable federal statutes. Final corrective action objectives will be determined by the EPA when the final corrective action remedy is selected.

4. **Potential Receptors -** The CMS Report shall describe the human populations and environmental systems that currently or potentially are at risk of contaminant exposure from the Facility.

5. **Identification, Screening, and Development of Corrective Measure Alternatives**

   a. The CMS Report shall list and describe potentially applicable technologies for each affected media that may be used to achieve the corrective action objectives proposed by Respondent. The CMS Report shall include a table that summarizes the available technologies; and

   b. Screening of Technologies - the CMS Report shall present a screening of corrective measures technologies to demonstrate why certain corrective measures technologies may not prove feasible to implement given existing waste and site-specific conditions. This screening process must use consistent, defensible, and quantitative evaluation criteria to the extent possible.

6. **Corrective Measure Development**

   a. The CMS Report shall assemble the technologies that pass the screening step into specific alternatives that have the potential to meet the corrective action objectives for all contaminated environmental media; and

   b. Each alternative proposed in the CMS Report shall consist of an individual technology or a combination of technologies used in parallel or in sequence (i.e., a treatment train). Different alternatives may be considered for separate areas of the Facility. The developed alternatives shall be carried forward for evaluation using the EPA's four Screening Criteria and five Balancing Criteria.

7. **Screening Criteria -** For each remedy which warrants a more detailed evaluation, the CMS Report shall provide detailed documentation of how the potential remedy will comply with each of the Screening Criteria listed below:

   a. Protect human health and the environment;

   b. Attain media cleanup standards set by the EPA;

   c. Control the source(s) of releases so as to reduce or eliminate, to the extent practicable, further releases that may pose a threat to human health and the environment; and

d. Comply with any applicable standards for management of wastes.

Any corrective measure alternative proposed by Respondent in the CMS Report must satisfy the four Screening Criteria in order to be carried forward for evaluation using the Balancing Criteria. In evaluating the selected corrective measure alternative or alternatives, the Respondent shall prepare and submit information that documents that the specific remedy will meet the standards listed above. A detailed explanation of the Screening Criteria is set forth in the *RCRA Corrective Action Plan* guidance.

8. **Balancing Criteria** - Any remedy proposed by Respondent which meets the four Screening Criteria shall also be evaluated according to the five Balancing Criteria. These criteria represent a combination of technical measures and management controls for addressing the environmental problems at the Facility. The five criteria are:

   a. Long-term reliability and effectiveness;

   b. Reduction in the toxicity, mobility or volume of wastes;

   c. Short-term effectiveness;

   d. Implementability; and

   e. Cost.

   The CMS Report shall discuss and provide information on these criteria in the evaluation of corrective action alternatives. A detailed explanation of the Balancing Criteria is set forth in the *RCRA Corrective Action Plan.*

9. **If the CMS Report proposes corrective measures that leave contamination on site at a level that does not allow for unrestricted use and unlimited exposure** (where unrestricted use means that there are no limits or conditions placed on the use of a property, including use for residential purposes; and unlimited exposure means that any residual contaminant concentrations at or below the site surface are at or below concentrations EPA deems adequately protective for any site use scenario)**,** Respondent shall include as a component of such corrective measures a plan to implement institutional controls to prevent unacceptable exposures to human health and the environment. Such a plan shall be consistent with EPA guidance including but not limited to "*Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*," EPA 540-F-00-005, OSWER 9355.0-74FS-P,

September 2000 and the draft "*Institutional Controls: A Guide to Implementing, Monitoring, and Enforcing Institutional Controls at Superfund, Brownfields, Federal Facility, UST and RCRA Corrective Action Cleanups*" February 2003.

10. **Recommendation by Respondent for a Final Corrective Measure Alternative** – In the CMS Report, the Respondent shall recommend a preferred remedial alternative for consideration by EPA. Such a recommendation should include a description and supporting rationale for the proposed remedy, consistent with the remedial standards and decision factors discussed above. The implementing agency still retains the role of remedy selection.

11. **Public Involvement Plan** – Respondent shall develop a community-specific plan for interacting with the community concerning the corrective action activities. The plan shall address the assessment, using a variety of sources, of the level of community interest and the types of concerns with regard to the RCRA corrective action activities. The plan shall also recommend specific activities for involving and informing the community in the RCRA corrective action process.

Task III: PROGRESS REPORTS

The Respondent will, at a minimum, provide the implementing agency with signed annual progress reports.

These progress reports must contain the following elements, at a minimum:

1. A description and estimate of the percentage of the CMS completed;

2. Summaries of all findings in the reporting period, including results of any pilot studies;

3. Summaries of all changes made in the CMS during the reporting period;

4. Summaries of all contacts with representatives of the local community, public interest groups or state government during the reporting period;

5. Summaries of all contacts made regarding access to property;

6. Summaries of all problems or potential problems encountered during the reporting period;

7. Actions being taken to rectify problems;

8. Changes in relevant personnel during the reporting period;

9. Projected work for the next reporting period; and
10. Copies of daily reports; inspection reports, laboratory/monitoring data, etc.

Facility Submission

CMS WorkPlan

Draft CMS Report

Final CMS Report

Progress Reports

Appendix I
CORRECTIVE MEASURES IMPLEMENTATION (CMI)
Statement of Work

PURPOSE

The Respondent shall perform a Corrective Measures Implementation (CMI) program that implements the remedy selected by EPA to prevent, mitigate, and/or remediate any migration or release of solid and/or hazardous wastes and/or hazardous constituents at, and/or from, the Facility. The purpose of the CMI program is to design, construct, operate, maintain and monitor the performance of the corrective measure(s) selected in the Final Decision Document (FDD). Corrective measures are intended to protect human health and the environment from harm or potential harm from contamination. This process shall conform to EPA's *RCRA Corrective Action Plan,* EPA/520-R-94-004, OSWER Directive 9902.3-2A, May 1994, and all other applicable EPA guidance.

SCOPE

The CMI shall consist of the design, construction, operation, maintenance and monitoring of the corrective measures(s) selected by EPA for the Facility. The CMI shall consist of 5 tasks.

TASK I: CMI Work Plan

ATTACHMENT A: Updated Quality Assurance Project Plan, and Sampling and Analysis Plan

ATTACHMENT B: Updated Public Involvement Plan

ATTACHMENT C: Operation and Maintenance Plan

TASK II: Corrective Measures Construction Completion Report

TASK III: Remedy Performance 5-Year Review

TASK IV: Corrective Measures Completion Report

TASK V: Progress Reports.

Respondent may be required to conduct additional investigations beyond what is discussed in the SOW in order to support the CMI program.

TASK I: CMI WORK PLAN (CMIWP)

Within the timeframe specified in the Order, Respondent shall submit a CMI Work Plan to EPA. The required CMI Work Plan shall specify the work required for the design, construction, implementation, operation, maintenance, and continued performance monitoring of EPA's selected final corrective measure(s) for the facility described in the FDD. EPA will review this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order. The CMI Work Plan shall include, at a minimum, the following elements:

1. **Introduction/Purpose**: containing a description of the purpose of the document and a summary description of the project;

2. **Corrective** measure **objectives:** including media cleanup standards;

3. **Description of the final corrective measure(s):** selected by EPA including institutional controls, if any;

4. **Conceptual model of contaminant migration:** consisting of a working hypothesis of how the contaminants may move from the release source to the receptor population developed by looking at the applicable physical parameters for each contaminant and assessing how the contaminant may migrate given the existing site conditions.**;**

5. **Design Criteria**: specifying performance requirements for the overall corrective measure(s) and for each major component. The Respondent must select equipment that meets the performance requirements. Initial versus long term performance considerations should be included;

6. **Design Basis:** discussing the process and methods for designing all major components of the corrective measure. At a minimum the following must be addressed:

   a. Conceptual process/Schematic diagrams;

   b. Site plan showing preliminary plan layout and/or treatment area.

7. **Startup Procedures**: including all applicable system startup procedures and operational testing;

8. **Design and implementation considerations to implement the selected remedy**: including, but not be limited to:

   a. Anticipated technical problems;

b. Additional engineering data that may be required;

c. A description of any permits and regulatory requirements; and

d. Access, easements and right-of-way.

9. **Waste Management Practices –** Describe the wastes generated by the construction of the corrective measure(s) and how they will be managed. Also discuss drainage and indicate how rainwater runoff will be managed;

10. **Long-term monitoring requirements**;

11. **Cost estimates**, including the capital and O&M costs for implementing the entire corrective measure;

12. **Corrective Measures Completion Criteria** - The CMI Work Plan shall propose the process and criteria for determining when the implemented corrective measures have achieved the corrective measure objectives. The CMI Work Plan shall also describe the process and criteria for determining when maintenance and monitoring may cease; and

13. **Project Schedule** - The CMI Work Plan shall also specify a schedule for key elements of the CMI process including bidding and construction process, and for the initiation of all major corrective measure construction tasks and milestones.

ATTACHMENT A: UPDATED QUALITY ASSURANCE PROJECT PLAN (QAPP) AND SAMPLING AND ANALYSISPLAN (SAP)

Respondent shall submit updates of the referenced plans, either as amendments, or stand alone documents. The updated Plans shall be revised as appropriate to address the requirements of implementing the final corrective measures for the Facility. The EPA will review all updates to the QAPP in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order.

ATTACHMENT B: UPDATED PUBLIC INVOLVEMENT PLAN (PIP)

Respondent shall revise the PIP to include any material changes in the level of concern or information needs of the community during design and construction activities. EPA will review this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order.

ATTACHMENT C: OPERATION AND MAINTENANCE (O&M) PLAN

Respondent shall submit to EPA an Operations and Maintenance (O&M) Plan that outlines procedures for performing operations, long-term maintenance and

monitoring of the final corrective measure(s) required by the FDD. The O&M Work Plan shall address all elements set forth below, including but not limited to, Project Management, Data Collection, Waste Management Procedures and Contingency Procedures. EPA will review and approve or modify this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order. The O&M Plan shall, at a minimum, include the following elements:

1. **Project Management** - The O&M Plan shall describe the management approach including levels of personnel authority and responsibility (including an organizational chart), lines of communication and the qualifications of key personnel who will operate and maintain the corrective measure(s) (including contractor personnel);

2. **System description** - The O&M Plan shall describe the corrective measure components including;

    a. Significant equipment, as applicable to each selected corrective measure;

    b. Schematics or process diagrams to illustrate system design, operation, and on-going maintenance of contaminant mitigation systems;

    c. A description of the support requirements for appropriate service visits by experienced personnel to supervise the installation, adjustment, start-up and operation of contaminant mitigation systems;

3. **Personnel Training** - The O&M Plan shall describe the training process for O&M personnel including, training covering appropriate operational procedures once the start-up has been successfully accomplished;

4. **Start-Up Procedures** - The O&M Plan shall describe all applicable system start-up procedures including any operational testing;

5. **O&M Procedures** - The O&M Plan shall describe all normal operation and maintenance procedures including:

    a. A description of tasks for operation;

    b. A description of tasks for maintenance;

    c. A description of prescribed treatment or operation conditions; and

d. A schedule showing frequency of each O&M task.

6. **Data Management and Documentation Requirements** - The O&M Plan shall specify that Respondent shall collect and maintain the following information:

   a. Progress report information;

   b. Monitoring and laboratory data;

   c. Records of operating costs; and

   d. Personnel, maintenance and inspection records.

7. **Replacement Schedule** - the O&M Plan shall specify a replacement schedule for equipment and installed components;

8. **Waste Management Practices -** The O&M Plan shall describe any solid wastes/hazardous wastes which may be generated by the operation of the corrective measures components and describe how they will be managed;

9. **Contingency Procedures -** The O&M Plan shall describe, as applicable, the following types of contingency procedures necessary to ensure system operation in a manner protective of human health and the environment:

   a Procedures to address system breakdowns and operational problems including a list of redundant and emergency back-up equipment and procedures;

   b. Alternative procedures to be implemented if the corrective measure systems suffer complete failure. The alternative procedures must be able to achieve the performance standards for the corrective measures until system operations are restored;

   c. The O&M Plan shall specify that, in the event of a major breakdown and/or the failure of the corrective measures, Respondent shall notify EPA within 24 hours of the event; and

   d. The O&M Plan shall specify the procedures to be implemented in the event that the corrective measure(s) are experiencing major operational problems, are not performing to design specifications, and/or will not achieve the corrective measure objectives.

TASK II: CORRECTIVE MEASURES CONSTRUCTION COMPLETION REPORT (CMCCR)

Within the timeframes specified in the Order, Respondent shall submit a Corrective Measures Construction Completion Report. EPA will review this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order. The CMCCR shall include at a minimum, the following elements:

1. A statement of the purpose of the Report;

2. A synopsis of the corrective measures, design criteria, and a certification that the corrective measure was constructed and put in operation in accordance with the approved CMI Work Plan;

3. An explanation and description of any modifications to the approved CMI Work Plan and design specifications, why such modifications were necessary and appropriate, and referencing the terms under which the modification was approved by EPA;

4. Copies of any sampling/test results for operational testing and/or monitoring that documents how initial operation of the corrective measure compares to design criteria;

5. A summary of significant activities that occurred during the implementation/construction, including a discussion of any problems encountered and how such problems were addressed;

6. A summary of all maintenance and inspection records (including copies of records, documents and appendices); and

7. Copies of as-built drawings and photographs.

TASK III: REMEDY PERFORMANCE 5-YEAR REVIEW

Beginning on the fifth (5^{th}) anniversary of EPA's approval of Respondent's Remedy Construction Completion Report, and every five (5) years thereafter until the AOC is terminated pursuant to Section XXII (Termination and Satisfaction), Respondent shall submit to EPA for review a 5-Year Remedy Performance Evaluation Report evaluating the remedy's effectiveness and performance. This evaluation shall be consistent with the *CERCLA Comprehensive Five-Year Review Guidance, OSWER9355.7-03B-P*, and any subsequent revisions or additions, and shall include the following:

1. **Horizontal capture zone analysis** prepared in accordance with *Capture Zone How-To Guide for Groundwater Pump and Treat Systems* if a pump and treat system is a component of the selected remedy;

2. **Effectiveness of the remedy in protecting human health and the environment** as planned in the Statement of Basis;

3. **Effectiveness of Engineering Controls and Institutional Controls** in protecting human health and the environment as planned in the Statement of Basis;

4. **Results of sampling and analysis** to determine the effectiveness and performance of the remedy;

5. **Progress toward attaining site-specific media cleanup goals,** an estimate of the time remaining to attain those goals, and identification of limiting factors in attaining those goals;

6. **Any changed circumstances** that render the remedy, including engineered and institutional controls, ineffective;

7. **Possible modifications** to the remedy to provide necessary protection; and

8. **Any other reporting requirements included in the EPA approved CMIWP.**

Based upon EPA's review of the 5-Year Remedy Performance Evaluation Report, EPA may require Respondent to conduct additional investigations and/or work in order to modify the existing remedy or to select a new remedy or remedies. If action is needed to protect human health or the environment from harm or potential harm from contamination or to prevent or minimize the further spread of contamination while long-term remedies are pursued, EPA may require Respondent to implement Interim Measures pursuant to this Order.

TASK IV: CORRECTIVE MEASURES COMPLETION REPORT (CMCR)

Within the timeframes specified in the Order and upon satisfaction of the EPA approved completion criteria, Respondent shall submit to EPA a Corrective Measures Completion Report. EPA will review this submittal in accordance with Section XIV (Agency Approvals/Additional Work/Modifications) of the Order. The CMCR shall fully document how the corrective measure objectives and corrective measures completion criteria have been satisfied, and shall justify why the corrective measure and/or monitoring may cease. The CMCR shall, at a minimum, include the following elements:

1. A synopsis of the corrective measures;

2. Corrective Measures Completion Criteria - the CMCR shall include the process and criteria used to determine, and recommend, that the corrective measures operation, maintenance, and monitoring may cease;

3. A demonstration that the corrective measure objectives and corrective measure completion criteria have been met. The CMCR shall include results of tests and/or monitoring that document how operation of the corrective measures compares to, and satisfies, the corrective measure objectives and completion criteria;

4. A summary of work accomplishments (e.g. performance levels achieved, total hours of operation, total volume treated and/or excavated volumes of media, nature and volume of wastes generated, etc.);

5. A summary of significant activities that occurred during operation of the corrective measures, including a discussion of any problems encountered and how such problems were addressed;

6. A summary of maintenance and inspection records (including copies of key records in appendices); and

7. A summary of total O & M costs.

TASK V: PROGRESS REPORTS

The Respondent will, at a minimum, provide the implementing agency with signed annual progress reports

These progress reports must contain the following elements, at a minimum:

1. A description and estimate of the percentage of the CMS completed;

2. Summaries of all findings in the reporting period, including results of any pilot studies;

3. Summaries of all changes made in the CMS during the reporting period;

4. Summaries of all contacts with representatives of the local community, public interest groups or state government during the reporting period;

5. Summaries of all contacts made regarding access to property;

6. Summaries of all problems encountered during the reporting period;

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8. Changes in relevant personnel during the reporting period;
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10. Copies of daily reports; inspection reports, laboratory/monitoring data, etc.

Facility Submission

CMI Work Plan

Updated Quality Assurance Project Plan, and Sampling and Analysis Plan

Updated Public Involvement Plan;

Operation and Maintenance Plan;

Corrective Measures Construction Completion Report

Corrective Measures Completion Report

Progress Reports

Appendix J
ACKNOWLEDGMENT OF TERMINATION OF ADMINISTRATIVE ORDER ON CONSENT
Template

Mary Blel
CHS, Inc.
5500 Cenex Drive, MS 628
Inver Grove Heights, Minnesota 55077

Rick Yabroff
Land O'Lakes, Inc.
3317 Dixon Cove Dr.
Fort Collins, CO 80526

RE: Acknowledgment of Termination of Administrative Order on Consent
Docket No. RCRA-07-2024-(xx)
Former Imperial, Inc.
1102 West Sixth
Shenandoah, Iowa 51601
EPA ID # IAD007492085

Dear Mrs. Blel and Mr. Yabroff:

The U.S. Environmental Protection Agency Region 7 has completed a review of the (corrective measures implementation report, completion report, or other supportive documentation) submitted on (date) by (contractor or facility), EPA ID No IAD007492085, for the for the termination of the above refenced Order. The (corrective measures implementation report, completion report, or other supportive documentation) was submitted as required in the Order and is approved without further comment as of the date of this communication.

The EPA finds that the facility has demonstrated to the satisfaction of the EPA that the terms of the above referenced Order, including any additional tasks determined by the EPA as pursuant to the Order, have been satisfactorily completed and hereby terminates the Order.

Your signature on the enclosed page is required to affirm this acknowledgement of termination and the continuing obligation to preserve all records as required in Section XII (Record Retention), to maintain any necessary Property Requirements as required in Section X, and to recognize EPA's Reservation of Rights as required in Section XIX of the Order.

This acceptance of the (corrective measures implementation report, completion report, or other supportive documentation), and termination of the above referenced Order, does not relieve Former Imperial, Inc of the responsibility to comply with all other Federal, State and local regulations and ordinances.

If you have any questions, please contact Annah Murray of my staff by phone at (913) 551-7413 or by email at murray.annah@epa.gov.

Sincerely,

John J. Smith
Acting Director
Land, Chemical & Redevelopment Division

cc: Amie Davidson, IDNR
Michaela Brewster, Terracon (Michaela.Brewster@terracon.com)
Gary Perowitz, CHS (Gary.Perowitz@chsinc.com)
Andrew Brown, Dorsey & Whitney LLP (brown.andrew@dorsey.com)

Signature Page for Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Rights Regarding the Administrative Order on Consent, Docket No. RCRA-07-2020-(xx) issued to Agriliance, LLC.

FOR _____:
[Print name of Respondent]

_____ _____
Dated [Name]
[Title]
[Company]
[Address]