



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

November 1, 2005

**MEMORANDUM**

SUBJECT: Model RCRA § 7003 Administrative Order on Consent

FROM: Susan E. Bromm, Director /s/  
Office of Site Remediation Enforcement

TO: Regional Counsel, Regions 1-10  
RCRA Program Managers, Regions 1-10

The Office of Site Remediation Enforcement (OSRE) is pleased to issue the attached Model RCRA § 7003 Administrative Order on Consent (AOC) for use in requiring cleanup of sites or facilities where past disposal of solid or hazardous waste may present an imminent and substantial endangerment to health or the environment. This model order is intended for long term cleanups, but includes optional provisions that may be substituted to address sites with less complex cleanup needs. With this model order we are providing a list of frequently asked questions (FAQS). The FAQS are designed to assist you in drafting and negotiating RCRA §7003 administrative orders on consent.

This model order on consent is part of the Office of Enforcement and Compliance Assurance's (OECA) broader initiative to improve financial assurance to ensure the cleanup of hazardous waste sites and contains language requiring the respondent to provide financial assurance for a corrective action. For information on OECA's financial assurance initiative please see <http://www.epa.gov/oeca/data/planning/priorities/index.html>.

Regions are strongly encouraged to consider incorporating financial assurance language in RCRA § 7003 administrative orders on consent. Pursuant to RCRA §7003, financial assurance may be required for corrective action if EPA makes a finding that such assurance is necessary to protect human health or the environment. This may be the case, for example, when the estimated costs of the remedy are expected to be significant and implementation of the remedy will take more than a few weeks. A trust fund is one mechanism that can be used for financial assurance, to satisfy RCRA § 7003 AOCs, if the trust agreement is carefully drafted so as not to name EPA as the beneficiary. To promote the use of financial assurance when using this model RCRA § 7003 order, OSRE is also developing and plans to issue in the near future a sample trust agreement, as well as a "tip sheet," that explain how a trust agreement operates. For additional information concerning the timing of when to seek financial assurance for corrective action the

Regions should consult OSRE's "Interim Guidance on Financial Responsibility for Facilities Subject to RCRA Corrective Action" issued September 30, 2003.

If a Region is considering whether to issue a RCRA § 7003 order versus a RCRA § 3008(h) order, they should consult OECA's "Guidance on the Use of Section 7003 of RCRA," issued October 1997. This guidance discusses when it is appropriate to use RCRA § 7003 instead of RCRA § 3008(h) or other EPA enforcement authorities to require cleanup of solid or hazardous waste. OSRE also plans to issue model financial assurance language for RCRA 3008(h) administrative orders on consent in the near future.

If a Region determines that it is appropriate to issue a joint RCRA §7003/CERCLA § 106 administrative order on consent, they should consult with OSRE regarding the most current CERCLA agreement language or go to <http://intranet.epa.gov/oeca/osre/project/aviall.html>.

The model RCRA §7003 administrative order will be available in approximately 30 days on the following internet and intranet addresses:

<http://www.epa.gov/compliance/resources/policies/cleanup/rcra/7003-aoc-05-mod.pdf>

<http://intranet.epa.gov/oeca/osre/documents/models/7003-aoc-05-mod.wpd>

I would like to express my appreciation to the Regional offices, the Office of Solid Waste, the Office of General Counsel and the Department of Justice for their assistance in developing this document. This model order is intended solely as guidance for employees of the U.S. Environmental Protection Agency. If you have questions concerning the model RCRA §7003 consent order, or the FAQs, please contact Amy Legare, OSRE at 202-564-4256. If you have specific questions concerning the RCRA financial assurance provisions please contact Tracy Gipson, OSRE, at 202-564-4236.

Enclosures

cc: Matt Hale, OSW  
Scott Sherman, OGC  
Kathy Kelly, Lead RCRA Regional Coordinator, Region 10

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY

\_\_\_\_\_  
IN THE MATTER OF: )  
 )  
[Insert name of site or facility )  
and name(s) of respondents & EPA )  
ID No., if applicable] )  
 )  
 )  
RESPONDENT )  
 )  
 )  
Proceeding under Section 7003 of )  
the Resource Conservation and )  
Recovery Act, 42 U.S.C. Section )  
6900, et seq., as amended. )  
\_\_\_\_\_ )

EPA DOCKET NO.  
RCRA 7003 - [insert docket number]

MODEL RCRA § 7003 ADMINISTRATIVE ORDER ON CONSENT

This model is intended solely as guidance for employees of the U.S. Environmental Protection Agency. Any statutory provisions and EPA regulations described in this document contain legally binding requirements. But this document itself does not impose any legally binding requirements on EPA, States, or the regulated community, and may not be relied upon to create a right or benefit, substantive or procedural, enforceable at law or in equity, by any person. EPA decisionmakers have the discretion to take action at variance with this model on a case-by-case basis, for example in connection with the RCRA reform for streamlined corrective action orders. This guidance is a living document and may be revised periodically without public notice.

This model is designed to assist in the preparation of administrative orders on consent that require cleanup of sites or facilities where past or present handling, storage, treatment, transportation or disposal of solid or hazardous waste may present an imminent and substantial endangerment to health or the environment. This model order is intended primarily to assist in the preparation of consent orders for long term cleanups, but includes some alternative provisions that may be of assistance in preparing orders for sites with less complex cleanup needs. It is not designed for use as a unilateral order or as a consent order for injunctive relief in a court action.

Before issuing a joint RCRA § 7003/CERCLA § 106 administrative order on consent Regions should consult with the Office of Site Remediation Enforcement regarding the most current CERCLA agreement language.

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ATTACHMENT

## I. INTRODUCTION

1. This Administrative Order on Consent (AOC) is entered into voluntarily by the United States Environmental Protection Agency (EPA) and Respondent **[insert name]**. This AOC provides for the performance of **[insert a brief, general description of activities that will be included in the Scope of Work (SOW) and/or Section VIII (Work to be Performed)]**, including any Additional Work that may be required by Section XXVII (Additional Work) of this AOC, by Respondent in connection with the property located at **[insert address]**. In entering into this AOC, the mutual objectives of EPA and Respondent are to identify, investigate, remedy, and/or prevent the potential endangerment to human health and/or the environment from activities involving **[insert as appropriate either “solid waste,” “hazardous waste,” “solid waste and hazardous waste,” or constituents of such wastes]**, and to insure that the Work ordered by EPA be designed and implemented to protect human health and/or the environment. These mutual objectives are described in Attachment A, the SOW, which is hereby incorporated into this AOC by reference. **[NOTE: If the description of the Work to be performed is short then it may be included in Section VIII (Work to be Performed) instead of in a SOW.]** Respondent shall finance and perform the Work in accordance with this AOC, plans, standards, specifications and schedules set forth in this AOC or developed by Respondent and approved by EPA pursuant to this AOC.
2. EPA has determined that Respondent has contributed or is contributing to the past or present handling, storage, treatment, transportation or disposal of **[insert as appropriate either “solid waste”, “hazardous waste”, “solid waste and hazardous waste” or constituents of such wastes]** that may present an imminent and substantial endangerment to health or the environment.
3. EPA has notified the State of \_\_\_\_\_ of this action pursuant to Section 7003(a) of RCRA, 42 U.S.C. § 6973(a), on **[insert date of notice]**.

**[NOTE: For actions in Indian country, substitute the name of the affected tribe for the state. The January 17, 2001 “Guidance on the Enforcement Principles Outlined in the 1984 Indian Policy” calls for government-to-government consultation with the affected tribe. If the state is also affected by the action and the tribe agrees that it is appropriate, then the AOC should note that both the tribe and the state were notified.]**

4. **[OPTIONAL: Respondent may be willing to sign the AOC without this paragraph.]** Respondent’s participation in this AOC shall not constitute or be construed as an admission of liability. Respondent neither admits nor denies the factual allegations and legal conclusions set forth in this AOC (Sections V and VI, Findings of Fact and

Conclusions of Law).

5. EPA and Respondent acknowledge that this AOC has been negotiated by the parties in good faith and that this AOC is fair, reasonable, and in the public interest.

## II. JURISDICTION

6. This AOC is issued under the authority vested in the Administrator of EPA by Section 7003 of RCRA, which authority has been delegated to the Regional Administrators of EPA by Delegations 8-22-A and 8-22-C (April 20, 1994), and redelegated to **[insert Regional delegated manager title]** of EPA Region **[insert number of Region]** by Delegation **[insert regional delegation number]**.
7. Respondent agrees to undertake and complete all actions required by the terms and conditions of this AOC. In any action by EPA or the United States to enforce the terms of this AOC, Respondent consents to and agrees not to contest the authority or jurisdiction of the **[insert Regional delegated manager title]** to issue or enforce this AOC, and agrees not to contest the validity of this AOC or its terms or conditions.

## III. PARTIES BOUND

8. This AOC shall apply to and be binding upon EPA, and on Respondent and Respondent's officers, directors, employees, agents, successors, assigns, heirs, trustees, receivers, and upon all persons, including but not limited to contractors and consultants, acting on behalf of Respondent, as well as upon subsequent purchasers of the Site. **[Optional: insert if more than one Respondent: Respondents are jointly and severally responsible for carrying out all actions required of them by this AOC.]** Any change in the ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this AOC.
9. Respondent shall provide a copy of this AOC to any subsequent owners or successors before a controlling interest in ownership rights, stock, assets or the Site is transferred. Respondent shall be responsible for and liable for completing all of the activities required pursuant to this AOC, regardless of whether there has been a transfer of ownership or control of the Site or whether said activities are to be performed by employees, agents, contractors, subcontractors, laboratories, or consultants of Respondent. Respondent shall provide a copy of this AOC within seven (7) days of the Effective Date of this AOC, or the date that such services are retained, to all contractors, subcontractors, laboratories, and consultants that are retained to conduct or monitor any portion of the Work performed pursuant to this AOC. Respondent shall condition all contracts or agreements

with contractors, subcontractors, laboratories and/or consultants in connection with this AOC, on compliance with the terms of this AOC. Respondent shall ensure that its contractors, subcontractors, laboratories, and consultants comply with this AOC.

10. Not later than 60 days prior to any voluntary transfer by Respondent of any interest in the Site or the operation of the facility, Respondent shall notify EPA of the proposed transfer. In the case of a voluntary transfer through a bankruptcy, Respondent shall notify EPA within 24 hours of the decision to transfer property. Respondent shall notify EPA of any involuntary transfers immediately upon Respondent's initial receipt of notice of any involuntary transfer. Not later than 3 days after any transfer, Respondent shall submit copies of the transfer documents to EPA.

#### IV. DEFINITIONS

11. Unless otherwise expressly provided herein, terms used in this AOC that are defined in the RCRA statute shall have the meaning assigned to them in that statute. Whenever the terms listed below are used in this AOC the following definitions apply: **[insert terms and definitions specific to this AOC, e.g.,]**

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

“Data Quality Objectives” shall mean those qualitative and quantitative statements derived from the outputs of a scientific and legally defensible data collection planning process.

“Day” shall mean a calendar day unless expressly stated otherwise.

“Effective Date” shall be the date on which EPA signs this AOC following the public comment period which is held pursuant to Section XXVIII (Public Comment on this AOC).

“AOC” shall mean this Administrative Order on Consent, any amendments thereto, and any documents incorporated by reference into this AOC.

“RCRA” shall mean the Resource Conservation and Recovery Act (also known as the Solid Waste Disposal Act), as amended, 42 U.S.C. § 6901, *et seq.*

“Site” shall mean **[describe the actual physical area to be addressed under this AOC, e.g. includes the 1 1/4 mile radius area in all directions from the Washington Monument]**, encompassing approximately \_\_ acres, located at



[address or description of location] in [name of city], \_\_\_\_\_County, [name of state].

“SOW” shall mean Scope of Work that may be attached to this AOC.

“Work” shall mean all the activities and requirements specified in this AOC including, but not limited to [**OPTIONAL: the SOW provided as Attachment A to this AOC and in**] Section VIII (Work To Be Performed) of this AOC.

## V. FINDINGS OF FACT

12. **[NOTE: This section should include facts necessary to substantiate that the past or present handling, storage, treatment, transportation or disposal of material, which is a solid waste, and if relevant, a hazardous waste, may present an imminent and substantial endangerment, and that Respondent is a person who has contributed or who is contributing to such handling, storage, treatment, transportation, or disposal, and that the actions required under this AOC by EPA are necessary to protect public health, the environment or both. The October 1997 “Guidance on the Use of Section 7003 of RCRA” is recommended for assistance in preparing this section. Information should be included on the contamination, description of the Site and its surroundings, description of contaminated media, discussion of exposure pathways, work in progress at the Site, enforcement history (e.g., prior orders, consent decrees or permits), cleanup activity, description of waste material of concern, Respondent’s business status (e.g., operational or bankrupt) and nature of the business. A finding of fact should be included for each of the following:**

- 1) Conditions may present an imminent and substantial endangerment to health or the environment.**

**Element 1 should include a showing of “endangerment” which is an actual, threatened, or potential harm to health or the environment. Neither certainty nor proof of actual, present harm is necessary, only a risk of harm. An endangerment is “imminent” if present conditions indicate that there may be future risk to health or the environment, even though the harm may not be realized for years. An endangerment is “substantial” if there is reasonable cause for concern that health or the environment may be seriously harmed.**

- 2) This potential endangerment stems from the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous**

**waste.**

**Element 2 should include facts showing:**

- a) the type of handling, storage, treatment, transportation and/or disposal that has occurred in the past or is occurring in the present;**
- b) the material of concern is a solid waste as defined in RCRA § 1004(27) because it is discarded;**
- c) if applicable, the material of concern is a hazardous waste as defined in RCRA § 1004(5); and,**
- d) the potential endangerment is caused by that past/present handling, storage, treatment, transportation or disposal of a solid [and if applicable, hazardous] waste.**

**3) Respondent is a person who has contributed or is contributing to such handling, storage, treatment, transportation, or disposal.**

**Element 3 should include facts showing:**

- a) Respondent is or has had a role/share in the past/present handling, storage, treatment, transportation, and/or disposal that caused the potential endangerment; and,**
- b) Respondent is a person as defined by RCRA § 1004(15).**

**4) This AOC may be necessary to protect public health and the environment.]**

## **VI. CONCLUSIONS OF LAW AND DETERMINATIONS**

**[NOTE: This section should refer to the facts presented in Section V (Findings of Fact) and support the determinations and conclusions being made. ]**

13. Based on the Findings of Fact set forth above, and an administrative record supporting this AOC, EPA has determined that:
  - a. Respondent is a “person” as defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15). **[OPTIONAL: If Respondent is a past or present generator, transporter, or owner or operator of a treatment, storage, or disposal facility, add that**

**determination and supporting information here.]**

b. **[Insert waste material(s) of concern]** is discarded material, and thus a “solid waste” as defined in Section 1004(27) of RCRA, 42 U.S.C. § 6903(27). **[OPTIONAL: “Such solid waste is also a “hazardous waste” as defined in Section 1004(5) of RCRA, 42 U.S.C. § 6903(5) because [insert appropriate language from Section 1004(5)]. If the waste material of concern is a listed or characteristic hazardous waste or hazardous constituent under 40 C.F.R. Part 261, then insert that statement as well.]**

c. Imminent and Substantial Endangerment. The **[insert “past” and/or “present” as appropriate ] [insert, as appropriate, one or more of the following terms that describe the activity causing the potential endangerment: “handling,” “storage,” “treatment,” “transportation,” or “disposal”]** of **[insert waste material of concern]** may present an imminent and substantial endangerment to human health and/or the environment within the meaning of Section 7003(a) of RCRA, 42 U.S.C. § 6973(a). **[Insert a basic explanation of why the selected activities may cause the potential endangerment.]**

d. Respondent **[insert “has contributed” and/or “ is contributing” ]** to the **[insert, as appropriate, one or more of the following activities identified in Paragraph 13.c. - handling, storage, treatment, transportation, or disposal]** by **[insert explanation of how Respondent contributed to the handling, storage, treatment, transportation, or disposal causing the potential endangerment]**.

e. The actions required by this AOC may be necessary to protect **[insert “human health” and/or “the environment” as appropriate ]** because **[insert explanation of why this AOC is necessary]**.

## VII. ORDER ON CONSENT

14. Based upon the administrative record for the Site and the Findings of Fact (Section V) and Conclusions of Law and Determinations (Section VI) set forth above, and in consideration of the promises set forth herein, the following is hereby agreed to and ordered. Respondent shall comply with all provisions of this AOC, including, but not limited to, all appendices to this AOC and all documents incorporated by reference into this AOC.
15. Respondent shall finance and perform the Work in accordance with this AOC, plans, standards, specifications and schedules set forth in this AOC or developed by Respondent and approved by EPA pursuant to this AOC.

### VIII. WORK TO BE PERFORMED

16. Project Coordinator. On or before the Effective Date of this AOC, Respondent shall designate its Project Coordinator. Respondent shall notify EPA in writing within five (5) days of the Effective Date of this AOC of the name, address, phone number, electronic mail address and qualifications of its Project Coordinator. The EPA Project Coordinator will be **[insert name, address, phone number, and electronic mail address]**. EPA may also designate an Alternate Project Coordinator. Each Project Coordinator shall be responsible for overseeing the implementation of this AOC. EPA and Respondent have the right to change their respective Project Coordinators. The other party must be notified in writing at least 10 days prior to the change.
17. EPA will approve/disapprove of Respondent's Project Coordinator (original or replacement) based upon the person's qualifications and ability to effectively perform this role. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements of the EPA. All persons under the direction and supervision of Respondent's Project Coordinator must possess all necessary professional licenses required by federal and state law.
18. The EPA Project Coordinator shall be EPA's designated representative for the Site. Unless otherwise provided in this AOC, all reports, correspondence, notices, or other submittals relating to or required under this AOC shall be in writing and shall be sent to the EPA Project Coordinator at the address specified in Paragraph 16, unless notice is given in writing to Respondent of a change in address. Reports, correspondence, notices or other submittals shall be delivered by U.S. Postal Service, private courier service or electronic mail. All correspondence shall include a reference to the case caption EPA Docket No. RCRA 7003 - **[insert the docket number of this AOC]**.
19. Respondent shall undertake and complete all of the Work to the satisfaction of EPA, pursuant to RCRA § 7003, 42 U.S.C. § 6973. All of the Work performed under this AOC shall be under the direction and supervision of Respondent's Project Coordinator and shall be in accordance with the terms of this AOC. **[OPTIONAL: Within 25 days of the Effective Date of this AOC, Respondent shall notify EPA in writing of the names, titles and qualifications of the personnel, including agents, contractors, subcontractors, consultants and laboratories, to be used in carrying out the Work.]**
20. Respondent's obligation to perform the Work will begin on the Effective Date of this AOC.

**[NOTE: If the description of the Work to be performed is short then it may be included**

**here instead of developing a SOW.]**

21. The Work undertaken pursuant to this AOC shall be conducted in compliance with all applicable EPA guidances, policies and procedures, and with this AOC, and is subject to EPA approval.
22. The Work Plan shall include a schedule of the Work to be performed. The Work Plan shall be submitted to EPA for approval. Following EPA's approval or modification of the Work Plan pursuant to Paragraph 25, Respondent shall implement the Work Plan in accordance with the schedule and provisions approved by EPA.

**[NOTE: If a SOW is not necessary because the Work to be performed is incorporated into this AOC, then a schedule of the Work to be performed should be presented as an appendix and incorporated into this AOC by reference.]**

23. Health and Safety Plan. Respondent shall develop a Health and Safety Plan and it shall be implemented during the Work performed under this AOC. The Health and Safety plan shall comply with applicable Occupational Safety and Health Administration (OSHA) regulations.

#### **IX. EPA APPROVAL OF DELIVERABLES**

**[NOTE: Regions may opt to include language requiring Respondent to provide the state/tribe with copies of all submittals. This Section may not be applicable if the Work to be performed does not include deliverables.]**

24. Deliverables required by this AOC shall be submitted to EPA for approval or modification pursuant to Paragraph 25. All deliverables must be received at EPA by the due date specified in this AOC or by schedules developed pursuant to this AOC.
25. After review of any deliverable that is required pursuant to this AOC, EPA will: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondent modify the submission; or (e) any combination of the above. However, EPA will not modify a submission without first providing Respondent at least one notice of deficiency and an opportunity to cure within 10 days, except where EPA determines that to do so would cause serious disruption to the Work or where EPA has disapproved previous submission(s) due to material defects and EPA determines that the deficiencies in the submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

26. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 25(a), (b), or (c), Respondent shall proceed to take any action required by the deliverable, as approved or modified by EPA subject only to Respondent's right to invoke the Dispute Resolution procedures set forth in Section XVIII (Dispute Resolution) with respect to the modifications or conditions made by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 25(c) and EPA determines the submission has a material defect, EPA retains its right to seek stipulated penalties, as provided in Section XIX (Penalties).
27. Resubmission of Deliverable. Upon receipt of a notice of disapproval, in whole or in part, pursuant to Paragraph 25(d), Respondent shall, within 10 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XIX (Penalties), shall accrue during the 10-day opportunity to cure period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 25 and 26.
28. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 25(d), Respondent shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for stipulated penalties for the deficient portion of the deliverable under Section XIX (Penalties).
29. In the event that a resubmitted deliverable, or portion thereof, is disapproved by EPA, EPA may again require Respondent to correct the deficiencies, in accordance with the preceding Paragraphs. EPA also retains the right to modify or develop the plan, report or other item. Respondent shall implement any action as required in a deliverable which has been modified or developed by EPA, subject only to Respondent's right to invoke the procedures set forth in Section XVIII (Dispute Resolution).
30. If upon resubmission, a deliverable is disapproved or modified by EPA due to a material defect, Respondent shall be deemed to have failed to submit such deliverable timely and adequately unless Respondent invokes the dispute resolution procedures set forth in Section XVIII (Dispute Resolution) and EPA's action to disapprove or modify a deliverable is overturned pursuant to that Section. The provisions of Section XVIII (Dispute Resolution) and Section XIX (Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XIX (Penalties).

31. All deliverables required to be submitted to EPA under this AOC, shall, upon approval or modification by EPA, be incorporated into and be enforceable under this AOC. In the event EPA approves or modifies a portion of a deliverable required to be submitted to EPA under this AOC, the approved or modified portion shall be enforceable under this AOC.

## **X. MODIFICATION OF THE WORK PLAN**

**[NOTE: This section may not be necessary if a SOW is not needed because the Work to be performed is incorporated into Section VIII (Work To Be Performed) of this AOC.]**

32. If at any time during the implementation of the Work, Respondent identifies a need for a compliance date modification or revision of the Work Plan, Respondent shall submit a memorandum documenting the need for the modification or revision to the EPA Project Coordinator. EPA in its discretion will determine if the modification or revision is warranted and may provide written approval or disapproval. Any approved modified compliance date or Work Plan modification is incorporated by reference into this AOC.
33. Emergency Response. In the event of any action or occurrence during the performance of the Work that constitutes an emergency situation or may present an immediate threat to human health and the environment, Respondent shall immediately take all appropriate action to minimize such emergency or threat, and shall immediately notify the EPA's Project Coordinator. Respondent shall take such immediate and appropriate actions in consultation with EPA's Project Coordinator. Respondent shall then submit to EPA written notification of such emergency or threat at the Site within three (3) calendar days of such discovery. Respondent shall thereafter submit to EPA for approval, within 20 days, a plan to mitigate this threat. EPA will approve or modify this plan, and Respondent shall implement this plan as approved or modified by EPA. In the case of an extreme emergency, Respondent may act as it deems appropriate, at its own risk, to protect human health or the environment.
34. **[OPTIONAL: Imminent and Substantial Endangerment due to Hazardous Waste, not required if material of concern is only a Solid Waste: Upon receipt of information that there is hazardous waste at the Site which has presented an imminent and substantial endangerment to human health or the environment, Respondent shall immediately provide notice to EPA and [insert appropriate local government agency]. Respondent shall also immediately post a notice of the endangerment at the Site.]**

## XI. QUALITY ASSURANCE

**[NOTE: This section may not be applicable for all AOCs.]**

35. As part of the Work Plan, Respondent shall include a Quality Assurance Project Plan (QAPP), for EPA review and approval. The QAPP shall address quality assurance, quality control, and chain of custody procedures for all sampling, monitoring and analytical activities. Respondent shall follow "EPA Requirements for Quality Assurance Project Plans" (QA/R5)" (EPA/240/B-01/003, March 2001), "Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998), and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/b-01/002, March 2001) as well as other applicable documents identified by EPA. The QAPP shall be incorporated into this AOC by reference.
36. As part of the Work Plan, Respondent shall include Data Quality Objectives for any data collection activity to ensure that data of known and appropriate quality are obtained and that data are sufficient to support their intended use as required by this AOC.
37. Respondent shall ensure that laboratories used by Respondent for analysis perform such analysis according to the latest approved edition of "Test Methods for Evaluating Solid Waste (SW-846)" or other methods approved by EPA. If methods other than EPA methods are to be used, Respondent shall specify all such protocols in the applicable Work Plan. EPA may reject any data that does not meet the requirements of the approved Work Plan and EPA analytical methods and may require resampling and additional analysis.
38. Respondent shall ensure that all laboratories it uses for analyses participate in a quality assurance/quality control (QA/QC) program equivalent to the program that EPA follows. Respondent shall, upon EPA's request, make arrangements for EPA to conduct a performance and QA/QC audit of the laboratories chosen by Respondent, whether before, during, or after sample analyses. Upon EPA's request, Respondent shall have its laboratories perform analyses of samples provided by EPA to demonstrate laboratory QA/QC and performance. If the audit reveals deficiencies in a laboratory's performance or QA/QC, Respondent shall submit a plan to address the deficiencies and EPA may require resampling and additional analysis.
39. EPA reserves the right to require a change in laboratories for reasons which may include, but shall not be limited to, QA/QC, performance, conflict of interest, or confidential agency audit information. In the event EPA requires a laboratory change, Respondent shall propose two alternative laboratories within 30 calendar days. Once EPA approves of the laboratory change, Respondent shall ensure that laboratory service shall be made



available within 15 calendar days.

## **XII. ADMINISTRATIVE DOCUMENTATION**

**[NOTE: The compilation of administrative documentation (an administrative record) is not statutorily required but is recommended by headquarters.]**

40. EPA retains the responsibility for the issuance of any decision documents related to the Site.
41. EPA will provide Respondent with copies of all decision documents for the Site.
42. Submission of Documentation. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondents shall submit to EPA documents developed during the course of performing the WORK upon which selection of the response action may be based. EPA will maintain an administrative record file. The administrative record supporting this AOC and the Work to be performed shall be available for public review at **[insert the address of one or more locations with times and days that the record will be available. Locations may be near the regional office and/or near the site.]**

## **XIII. DOCUMENT CERTIFICATION**

43. Any report or other document submitted by Respondent pursuant to this AOC which makes recommendations as to whether or not further actions are necessary, or makes any representation concerning Respondent's compliance or noncompliance with any requirement of this AOC shall be certified by a responsible corporate officer of Respondent. A responsible corporate officer means: a president, secretary, treasurer, or vice-president in charge of a principal business function, or any other person who performs similar policy or decision-making functions.
44. The certification required by Paragraph 43 above, shall be in the following form:

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 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. SAMPLING, ACCESS AND DATA AVAILABILITY**

45. All results of sampling, testing, modeling or other data generated (including raw data if requested) by Respondent, or on Respondent's behalf, during implementation of this AOC shall be validated by Respondent and submitted to EPA within 30 days of Respondent's receipt of the data. Respondent shall tabulate data chronologically by media. EPA will make available to Respondent data generated by EPA for the purposes of oversight of the Work unless it is exempt from disclosure by any federal or state law or regulation. **[NOTE: EPA has the discretion to validate data prior to making it available to Respondent.]**
46. Respondent shall orally notify EPA at least 20 days prior to conducting field sampling. At EPA's request, Respondent shall allow split or duplicate samples to be taken by EPA or EPA's representative.
47. Site Access. Pursuant to RCRA § 3007(a), 42 U.S.C. § 6927(a), Respondent shall provide access to the Site at reasonable times to EPA, EPA's contractors and oversight officials. Respondent shall also provide access at reasonable times to EPA, EPA's contractors and oversight officials to all records and documentation in its possession or control, including those records and documents in the possession or control of Respondent's contractors and employees, related to the conditions at the Site and the actions conducted pursuant to this AOC. Respondent shall use its best efforts to gain access to areas owned by or in the possession of someone other than Respondent, as necessary to implement this AOC, as described in Paragraph 49. Such access shall be provided to EPA, its contractors and oversight officials. These individuals shall be permitted to move freely about the Site and appropriate off-site areas in order to conduct actions that EPA determines to be necessary. **[NOTE: Regions may opt to include language providing states/tribes access to the Site.]** EPA, its contractors and oversight officials shall notify Respondent of their presence on the Site by presenting their credentials. All parties with access to the Site under this paragraph shall comply with all

approved health and safety plans and regulations.

48. Pursuant to this Section, any denial of access at reasonable times to any portion of the Site property where a request for access was made for the purposes of enforcing the requirements of RCRA or this AOC shall be construed as a violation of the terms of this AOC subject to the penalty provisions outlined in Section XIX (Penalties) of this AOC.
49. Access Agreements. Where action under this AOC is to be performed in areas owned by, or in possession of, someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within 45 days of approval of any Work Plan for which access is necessary or as otherwise specified, in writing, by the EPA Project Coordinator. Any such access agreement shall provide for access by EPA and its representatives to move freely in order to conduct actions that EPA determines to be necessary. The access agreement shall specify that Respondent is not EPA's representative with respect to any liabilities associated with activities to be performed. Respondent shall provide EPA's Project Coordinator with copies of any access agreements. Respondent shall immediately notify EPA if after using Respondent's best efforts it is unable to obtain such agreements within the time required. Best efforts as used in this paragraph shall include, at a minimum, a certified letter from Respondent to the present owner of such property requesting access agreements to permit Respondent, EPA, and EPA's authorized representatives to enter such property, and the offer of payment of reasonable sums of money in consideration of granting access. Respondent shall, within 10 days of its receipt of a denial of access, submit in writing, a description of its efforts to obtain access. EPA may, at its discretion, assist Respondent in obtaining access. In the event EPA obtains access, Respondent shall undertake the Work on such property and Respondent shall reimburse EPA for all costs and attorney fees incurred by the United States in obtaining such access.
50. Confidential Business Information. Respondent may assert a claim of business confidentiality covering part or all of the information submitted to EPA pursuant to the terms of this AOC under 40 CFR § 2.203 in the manner described at 40 CFR § 2.203(b) and substantiated with the information described at 40 CFR 2.204(e)(4). Information EPA determines is confidential will be given the protection specified in 40 CFR Part 2. If no such claim or substantiation accompanies the information when it is submitted to EPA, it may be made available to the public by EPA or the state without further notice to Respondent. Respondent agrees not to assert confidentiality claims with respect to any data related to Site conditions, sampling, monitoring or the Work performed pursuant to this AOC.
51. Privileged Documents. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege

recognized by federal law. If Respondent asserts such a privilege in lieu of providing documents, Respondent shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the author's name and title; (4) the name and title of each addressee and recipient; (5) a description of the contents; and (6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this AOC shall be withheld on the grounds that they are privileged.

52. All data, information, and records created or maintained relating to any Solid or Hazardous Waste found at the Site shall be made available to EPA upon request unless Respondent asserts a claim that such documents are legally privileged from disclosure. Respondent shall have the burden of demonstrating to EPA by clear and convincing evidence that such privilege exists.
53. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.
54. Nothing in this AOC shall be construed to limit EPA's right of access, entry, inspection, and information gathering pursuant to applicable law, including but not limited to RCRA and CERCLA.

#### **XV. COMPLIANCE WITH OTHER LAWS**

55. Respondent shall perform all actions required pursuant to this AOC in accordance with all applicable local, state, and federal laws and regulations. Respondent shall obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations in a timely manner so as not to delay the Work required by this AOC.

**[NOTE: RCRA § 7003(a) allows for a waiver of otherwise applicable RCRA requirements. Any RCRA requirements so waived should be specified in this section.]**

#### **XVI. RECORD RETENTION**

56. Respondent shall preserve all documents and information, including raw data, relating to the Work performed under this AOC, or relating to any solid waste or hazardous waste found at the Site, for 10 years following completion of the Work required by this AOC.
57. Respondent shall acquire and retain copies of all documents that relate to the Site that are in the possession of its employees, agents, accountants, contractors or attorneys.

58. Respondent shall make available to EPA all employees and persons, including contractors, who engage in activities under this AOC and ensure their cooperation with EPA with respect to this AOC.
59. After the 10 year retention period and 90 days before any document or information is destroyed, Respondent shall notify EPA that such documents and information are available to EPA for inspection, and upon request, shall provide the originals or copies (at no extra cost) of such documents and information to EPA. Notification shall be in writing and shall reference the effective date, caption, and docket number of this AOC and shall be addressed to the **[insert appropriate regional manager title]**. In addition, Respondent shall provide documents and information retained under this Section at any time before expiration of the 10 year retention period at the written request of EPA.
60. All documents pertaining to this AOC shall be stored by Respondent in a centralized location at the Site, or an alternative location mutually approved by Respondent and EPA, to promote easy access by EPA or its representatives.

#### **XVII. REIMBURSEMENT OF OVERSIGHT COSTS**

**[NOTE: This section is optional depending on regional practices. Headquarters recommends oversight cost provisions be included in the AOC if a significant accrual of oversight costs is expected.]**

61. EPA reserves the right to bring an action against Respondent under any applicable law for recovery of all response costs, including oversight costs, and past costs incurred by EPA with respect to the Site that have not been reimbursed by Respondent; any costs incurred in the event that EPA performs the SOW or any part thereof; and any costs incurred by EPA in connection with any other response activities conducted at this Site. Oversight costs shall mean costs that EPA incurs in monitoring and supervising Respondent's performance of the Work to determine whether such performance is consistent with the requirements of this AOC, including costs incurred in reviewing plans, reports and other documents submitted pursuant to this AOC, as well as costs incurred in overseeing implementation of the Work.
62. Respondent agrees to pay EPA for oversight costs associated with the implementation and execution of this AOC, in the following manner:
  - A. Upon EPA's written request, Respondent shall pay such costs. On a periodic basis, EPA will send Respondents a bill requiring payment that includes a **[insert the name of a standard Regionally-prepared cost summary]**.

**[NOTE: The cost summary should include direct and indirect costs incurred by EPA and its contractors.]**

B. Payments for all EPA oversight costs shall be made by money order, certified check, company check, electronic funds transfer, or cashier's check payable to the Treasurer of the United States within thirty (30) days of Respondent's receipt of EPA's request, and shall be submitted to the following address:

Regional Hearing Clerk (#C)  
U.S. EPA, Region #  
P.O. Box XXXXXXM  
Pittsburgh, PA 15251

C. Docket No. **[insert this AOC docket number]** should be clearly typed on the check to ensure proper credit. Respondent shall send simultaneous notices of such payments, including copies of the money order, certified check, company check, electronic funds transfer, or cashier's check to the following:

**[insert regional manager title(s) and office(s)]**  
U.S. EPA, Region **[insert region]**  
**[insert regional address]**

D. If EPA does not receive payment within thirty (30) days of Respondent's receipt of EPA's request for oversight costs, interest shall accrue at the Current Value of Funds Rate established by the Secretary of the Treasury. An additional penalty of six percent (6 %) per annum on any unpaid principal shall be assessed for any oversight cost payment which is overdue for ninety (90) days or more [pursuant to 31 U.S.C. § 3717].

### **XVIII. DISPUTE RESOLUTION**

63. Respondent shall raise any disputes concerning the Work required under this AOC to EPA (excluding any decision document(s) issued by EPA), in writing, within 15 days after receiving written notice from EPA regarding any aspect of the Work required under this AOC that Respondent disputes. EPA and Respondent shall expeditiously and informally attempt to resolve any disagreements. EPA and Respondent Project Coordinators shall first confer in an effort to resolve the dispute. If the Project Coordinators are unable to informally resolve the dispute within 3 days of the first conference, Respondent shall notify EPA, within 5 days, in writing of its objections. Written objections shall identify Respondent's objections, state the basis for those objections, and provide all data, analyses and information relied upon by Respondent. EPA and Respondent then have an additional 14 days from EPA's receipt of the objections to reach agreement. If an agreement is not reached within the 14 days, Respondent may request in writing, within 5 days, a determination resolving the dispute

by EPA's Division Director of **[insert appropriate regional title]**. The request should provide all information that Respondent believes is relevant to the dispute. If such request is submitted within 5 days, the Division Director shall issue a determination in writing. EPA's final decision shall be incorporated into and become an enforceable part of this AOC and shall no longer be subject to dispute pursuant to this AOC. Respondent shall proceed in accordance with the Division Director's decision regarding the matter in dispute, regardless of whether Respondent agrees with the decision. If Respondent does not agree to perform or does not actually perform the Work in accordance with EPA's decision, EPA reserves the right in its sole discretion to conduct the Work itself, seek reimbursement from Respondent, seek enforcement of this AOC, seek stipulated penalties, and/or any other appropriate relief. Any disputes arising under this AOC are not subject to judicial review until such time as EPA seeks to enforce this AOC.

64. If EPA and Respondent reach agreement on the dispute at any stage, the agreement shall be set forth in writing and shall, upon signature of both parties, be incorporated into and become an enforceable part of this AOC.
65. The existence of a dispute and EPA's consideration of matters placed in dispute shall not excuse, toll, or suspend any compliance obligation or deadline required pursuant to this AOC during the pendency of the dispute resolution process except as agreed by EPA in writing. The invocation of dispute resolution does not stay the accrual of stipulated penalties under this AOC.

#### **XIX. PENALTIES**

66. Stipulated Penalties. Any time Respondent fails to comply with any requirement of this AOC, Respondent shall be liable for stipulated penalties in the amounts set forth in this section unless a Force Majeure event has occurred as defined in Section XX (Force Majeure) and EPA has approved the extension of a deadline as required by Section XX (Force Majeure). Compliance with this AOC by Respondent shall include completion of an activity or any matter under this AOC in accordance with this AOC, and within the specified time schedules approved under this AOC.

**[Insert specific stipulated penalty information based on deliverables required by this AOC.]**

67. 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 correction of the violation or completion of the activity. Payment shall be due within 30 days of receipt of a demand letter from EPA. Nothing herein shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this AOC, even where

those violations concern the same event (e.g., submission of a Work Plan that is late and is of unacceptable quality).

68. If payment is not made within 30 days of the date of Respondent's receipt from EPA of a written demand for payment of the penalties or of the date of agreement or decision resolving the dispute, interest shall begin to accrue on any unpaid stipulated penalty balance beginning on the first day after Respondent's receipt of EPA's demand letter, or the date of the agreement or decision resolving the dispute, and will accrue until such penalties and interest have been paid in full. Interest shall accrue at the Current Value of Funds Rate established by the Secretary of the Treasury. An additional penalty of six percent (6 %) per annum on any unpaid principal shall be assessed for any stipulated penalty payment which is overdue for ninety (90) days or more. The applicable rate of interest shall be the rate in effect at the time the interest accrues [pursuant to 31 U.S.C. § 3717].
69. Respondent shall make payments by money order, certified check, company check, electronic funds transfer, or cashier's check payable to the Treasurer of the United States within thirty (30) days of Respondent's receipt of EPA's request, and shall be submitted to the following address:
- Regional Hearing Clerk (#C)  
U.S. EPA, Region #  
P.O. Box XXXXXXM  
Pittsburgh, PA 15251
70. Docket No.[**insert this AOC docket number**] should be clearly typed on the check to ensure proper credit. Respondent shall send simultaneous notices of such payments, including copies of the money order, certified check, company check, electronic funds transfer, or cashier's check to the following:
- [insert regional manager title(s) and office(s)]**  
U.S. EPA, Region [**insert region**]  
**[insert regional address]**
71. Respondent may dispute an EPA determination that it failed to comply with this AOC by invoking the dispute resolution procedures under Section XVIII (Dispute Resolution) unless the matter has already been in or is the subject of dispute resolution. Penalties shall accrue but need not be paid during the dispute resolution period. If Respondent does not prevail upon resolution, all penalties shall be due to EPA within 30 days of resolution of the dispute. If Respondent prevails upon resolution, no penalties shall be paid. In the event that Respondent prevails in part, penalties shall be due on those matters in which Respondent did not prevail.



72. Neither the invocation of dispute resolution nor the payment of penalties shall alter in any way Respondent's obligation to comply with the terms and conditions of this AOC. The stipulated penalties set forth in this Section do not preclude EPA from pursuing any other remedies or sanctions which may be available to EPA by reason of Respondent's failure to comply with any of the terms and conditions of this AOC.
73. No payments under this Section shall be deducted for federal tax purposes.
74. 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 AOC.
75. Civil Penalties. Violation of this AOC may subject Respondent to civil penalties of at least six thousand five hundred dollars (\$ 6,500.00) per violation per day. The assessment of penalties are provided for in Section 7003(b) of RCRA, 42 U.S.C. § 6973(b), as adjusted pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996, 28 U.S.C. § 2461 note. Should Respondent violate this AOC or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to any applicable authorities, and/or may seek judicial enforcement of this AOC.

#### **XX. FORCE MAJEURE**

76. Respondent agrees to perform all requirements under this AOC within the time limits established under this AOC, unless the performance is delayed by a force majeure. For purposes of this AOC, a force majeure is defined as any event arising from causes beyond the control of Respondent, or any entity controlled by Respondent or Respondent's contractors, which delays or prevents performance of any obligation under this AOC despite Respondent's best efforts to fulfill the obligation. The requirement that the Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event: (1) as it is occurring, and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. Force majeure does not include financial inability to complete the Work, increased cost of performance, changes in Respondent's business or economic circumstances, or inability to attain media cleanup standards.
77. If any event occurs or has occurred that may delay the performance of any obligation under this AOC, whether or not caused by a force majeure event, Respondent shall orally notify EPA within 48 hours of when Respondent knew or should have known that the event might cause a delay. Such notice shall: (1) identify the event causing the delay, or

anticipated to cause delay, and the anticipated duration of the delay; (2) provide Respondent's rationale for attributing such delay to a force majeure event; (3) state the measures taken or to be taken to prevent or minimize the delay; (4) estimate the timetable for implementation of those measures; and (5) state whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or the environment. Respondent shall undertake best efforts to avoid and minimize the delay. Failure to comply with the notice provision of this paragraph and to undertake best efforts to avoid and minimize the delay shall waive any claim of force majeure by Respondent. Respondent shall be deemed to have notice of any circumstances of which its contractors had or should have had notice.

78. If EPA determines that a delay in performance or anticipated delay in fulfilling a requirement of this AOC is or was attributable to a force majeure, then the time period for performance of that requirement will be extended as deemed necessary by EPA. If EPA determines that the delay or anticipated delay has been or will be caused by a force majeure, then EPA will notify Respondent, in writing, of the length of the extension, if any, for performance of such obligations affected by the force majeure. Any such extensions shall not alter Respondent's obligation to perform or complete other tasks required by this AOC which are not directly affected by the force majeure.
79. If EPA disagrees with Respondent's assertion of a force majeure, then Respondent may elect to invoke the dispute resolution provision, and shall follow the procedures set forth in Section XVIII (Dispute Resolution). 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 Respondent's best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondent complied with the requirements of this section. If Respondent satisfies this burden, then EPA will extend the time for performance as EPA determines is necessary.

## **XXI. RESERVATION OF RIGHTS**

80. Notwithstanding any other provisions of this AOC, the United States 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 Site, including but not limited to the right to bring enforcement actions under RCRA, CERCLA, and any other applicable statutes or regulations.

81. EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Respondent's failure to comply with any of the requirements of this AOC, including without limitation the assessment of penalties under Section 7003 of RCRA, 42 U.S.C. § 6973.
82. This AOC 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.
83. This AOC 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 Work Plan does not constitute a warranty or representation that the Work and/or Work Plans will achieve the required cleanup or performance standards. Compliance by Respondent with the terms of this AOC shall not relieve Respondent of its obligations to comply with RCRA or any other applicable local, state, or federal laws and regulations.
84. Notwithstanding any other provision of this AOC, no action or decision by EPA pursuant to this AOC, including without limitation, decisions of the Regional Administrator, the Director [**insert proper regional title**], or any authorized representative of EPA, shall constitute final agency action giving rise to any right of judicial review prior to EPA's initiation of a judicial action to enforce this AOC, including an action for penalties or an action to compel Respondent's compliance with the terms and conditions of this AOC.

## **XXII. OTHER CLAIMS**

85. By issuance of this AOC, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA 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 AOC.
86. Respondent waives all claims against the United States relating to or arising out of conduct of this AOC, including, but not limited to, contribution and counterclaims.
87. Respondent shall bear their own litigation costs and attorney fees.
88. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive or other appropriate relief relating to the Site, 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 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.

### XXIII. INSURANCE

89. Prior to commencing the on-site Work under this AOC, Respondent shall secure, and shall maintain in force for the duration of this AOC and for 2 years after the completion of all activities required by this AOC, comprehensive general liability insurance and automobile insurance with limits of \$\_\_ million dollars, combined single limit, naming EPA as an additional insured. Prior to commencement of the Work under this AOC, and annually thereafter on the anniversary of the Effective Date of this AOC, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. If Respondent demonstrates by evidence satisfactory to EPA that its contractors and subcontractors maintain insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by the contractors and subcontractors.
90. For the duration of this AOC, Respondent shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of employer's liability insurance and worker's compensation insurance for all persons performing the Work on behalf of Respondent, in furtherance of this AOC.
91. At least 7 days prior to commencing the Work under this AOC, Respondent shall certify to EPA that their contractors and subcontractors have obtained the required insurance.

### XXIV. COST ESTIMATES AND FINANCIAL ASSURANCE

**[NOTE: EPA should consider including a financial assurance provision in the order if EPA expects that the costs of the remedy will be significant. However, financial assurance may be required for corrective action under a RCRA § 7003 AOC only if EPA finds that financial assurance is necessary to protect human health or the environment. Such a finding should be included in Section V (Findings of Fact) and the administrative record should provide facts to support such a conclusion. EPA needs a good cost estimate in order to know how much financial assurance to require.]**

92. Cost Estimates. Within thirty (30) days after the Effective Date of this AOC Respondent shall submit to EPA a detailed written initial estimate, in current dollars, of the cost of hiring a third party to perform the Work described in Section VIII (Work to be Performed) and the attached SOW. 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 initial cost estimate must account for the total costs of the work activities described in Section VIII (Work to be Performed) and the SOW for the entire period of this AOC, including any necessary long term costs, such as operation and maintenance costs, monitoring costs, and institutional controls. The cost estimate must 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 Site.

**[NOTE: (1) Where EPA has a good estimate of the costs of the Work prior to signing this AOC, EPA may choose not to require an initial cost estimate. (2) Where the AOC covers several phases of work, and total extent of needed corrective action cannot be known until investigation phases are complete, EPA may require cost estimates to be done in phases.]**

93. Concurrent with the submission of any Work Plan(s) for additional work required under Section XXVII (Additional Work), Respondent shall submit revised detailed written estimate(s), in current dollars, of the cost of hiring a third party to perform the Work.
94. Respondent must annually adjust the cost estimate(s) for inflation within thirty (30) days after the close of Respondent's fiscal year until the Work required by this AOC is completed. In addition, Respondent must adjust the cost estimate if EPA determines that any additional work is required, pursuant to Section XXVII (Additional Work), or if any other conditions increase the cost of the Work to be performed under this Consent Order.
95. Respondent shall submit each cost estimate to EPA for review, pursuant to Section IX (EPA Approval of Deliverables).

**[NOTE: The financial assurance mechanism used under RCRA § 7003 may not name EPA as a beneficiary. A trust fund is one mechanism that can be used if the trust agreement is carefully drafted. EPA staff should consult with OSRE about appropriate trust fund language, who may be a named beneficiary for such a trust fund, and who may be able to ensure that the trustee administers the fund in accordance with the trust agreement. These determinations will need to be made based on the specific circumstance of each case. OSRE continues to work with OGC/SWERLO and OGC/FOLO to determine whether additional financial assurance mechanisms might be used, and if so, under what circumstances. If you have questions about this section, please call Tracy Gipson at 202-564-4236.]**

96. Assurances of Financial Responsibility for Completing the Work. In order to secure the

completion of the Work in accordance with this AOC, Respondent shall establish financial assurance in the form of a trust fund administered by a trustee who has the authority to act as a trustee under federal or state law and whose trust operations are regulated and examined by a U.S. 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 only for the costs of performing the Work required under this AOC, and only after EPA has advised the trustee that the Work has been performed in accordance with the requirements of the approved Work Plans. 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 AOC has been successfully completed.

97. Respondent shall submit a draft trust agreement to EPA for review pursuant to Section IX (EPA Approval of Deliverables) within thirty (30) days after the Effective Date of this AOC, concurrently with Respondent's submission of the initial cost estimate required by Paragraph 92. The trust agreement shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion.
98. Within thirty (30) days after EPA's approval of both the initial cost estimate and the draft trust agreement, whichever date is later, Respondent shall establish a trust fund in an amount at least equal to the initial cost estimate approved by EPA.

**[NOTE: Where EPA has a good estimate of the costs of the Work prior to signing the AOC, the financial assurance should be required to be effective when the AOC is effective.]**

99. Respondent shall submit an original copy of the trust agreement to **[insert name and address of regional financial assurance specialist or coordinator or other person designated to be the custodian of such documents, i.e. attorney]**.
100. Whenever the annually adjusted estimate for the cost of completing the remaining Work exceeds the amount of financial assurance already provided pursuant to this Section, Respondent shall, within thirty (30) days thereafter, increase the amount of the trust fund to cover such cost increase. In addition, in the event that EPA determines at any time that the financial assurances provided pursuant to this AOC are inadequate (including, without limitation, the trust agreement or the trustee), Respondent shall, within thirty (30) days after receipt of notice of EPA's determination, correct the inadequacy. Furthermore, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within thirty (30) days after receipt of such notification, Respondent shall increase the amount of the trust fund to cover such cost increase.
101. Respondent's inability to post financial assurance for completion of the Work shall in no

way excuse performance of any other requirements of this AOC, including, without limitation, Respondent's obligation to complete the Work in strict accordance with the terms of this AOC.

102. 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 AOC, Respondent may, on any anniversary date of the Effective Date of this AOC, or at any other time agreed to by EPA and Respondent, submit a written proposal to EPA to reduce the amount of the financial assurance provided under this Section 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. The decision whether to approve a proposal to reduce the amount of financial assurance shall be within EPA's sole discretion and EPA shall notify Respondent of its decision regarding such a proposal in writing. Respondent may reduce the amount of the financial assurance only after receiving EPA's written decision and 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 by this Section only in accordance with a final administrative decision resolving such dispute under Section XVIII (Dispute Resolution) of this AOC.
103. Release of Financial Assurance. Respondent may submit a written request to the Director, [insert title], EPA Region \_\_\_\_, that EPA release Respondent from the requirement to maintain financial assurance under this Section at such time as EPA has provided written notice, pursuant to Section XXVIII (Termination and Satisfaction) that Respondent has demonstrated that all the terms of this Order have been addressed to the satisfaction of EPA. The Director, [insert title], shall notify both Respondent and the Trustee in writing that Respondent is released from all financial assurance obligations under this AOC.

## XXV. INDEMNIFICATION

104. Respondent agrees to indemnify, save and hold harmless the United States, its officials, agents, contractors, employees, and representatives from any and all claims or causes of action: (a) arising from, or on account of, acts or omissions of Respondent, Respondent's directors, officers, employees, agents, successors, assigns, heirs, trustees, receivers, contractors, or consultants in carrying out actions pursuant to this AOC; and (b) for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any persons for performance of the Work on or relating to the Site, including claims on account of construction delays. In addition, Respondent agrees to pay the United States all costs incurred by the United States,

including litigation costs arising from or on account of claims made against the United States based on any of the acts or omissions referred to in the preceding sentence.

#### **XXVI. MODIFICATION OF THIS AOC**

105. Except for Modification of the Work Plan as provided in Section X, this AOC may only be modified by the mutual agreement of EPA and Respondent. Any agreed modifications shall: be in writing; be signed by both parties; have as their effective date the date on which they are signed by EPA; and be incorporated into this AOC.
106. No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain such formal approval as may be required by this AOC, and to comply with all requirements of this AOC unless it is formally modified. Any deliverables, plans, technical memoranda, reports, specifications, schedules and attachments required by this AOC are, upon approval by EPA, incorporated into and enforceable under this AOC.

#### **XXVII. ADDITIONAL WORK**

107. EPA may determine or Respondent may propose that certain tasks are necessary in addition to or in lieu of the tasks included in any EPA-approved Work Plan when such additional work is necessary to meet the objectives set forth in Section I (Introduction). EPA may determine that Respondent shall perform any additional work and EPA will specify, in writing, the basis for its determination that any additional work is necessary. Within 5 days after the receipt of such determination, Respondent shall have the opportunity to meet or confer with EPA to discuss any additional work. Respondent shall submit for EPA approval a Work Plan for any additional work. Such Work Plan shall be submitted within 10 days of Respondent's receipt of EPA's determination that any additional work is necessary, or according to an alternative schedule established by EPA. Upon approval of a Work Plan for any additional work, Respondent shall implement the Work Plan for any additional work in accordance with the schedule and provisions contained therein. The Work Plan for any additional work shall be incorporated by reference into this AOC.

#### **XXVIII. TERMINATION AND SATISFACTION**

108. The provisions of this AOC shall be deemed terminated and satisfied by Respondent upon written notice from EPA that Respondent has demonstrated that all of the terms of this AOC, including any additional work as may be performed pursuant to Section XXVII (Additional Work) and any stipulated penalties demanded by EPA under Section



XIX (Penalties), have been addressed to the satisfaction of EPA. Termination of this AOC shall not terminate Respondent's obligation to comply with: Sections XIV (Sampling, Access and Data Availability); XVI (Record Retention); XXI (Reservation of Rights); and XXV (Indemnification) of this AOC, [**OPTIONAL: and to maintain institutional and engineering controls**].

### **XXIX. PUBLIC COMMENT ON THIS AOC**

**[NOTE: Regions should provide public notice and opportunity to comment. Public notice and opportunity to comment is required by RCRA § 7003(d) if the agreement provides a covenant not to sue.]**

109. EPA shall provide public notice, opportunity for a public meeting and a reasonable opportunity for public comment on the proposed settlement. After consideration of any comments submitted during a public comment period of not less than 30 days (which EPA may extend), EPA may withhold consent or seek to amend all or part of this AOC if EPA determines that comments received disclose facts or considerations which indicate that this AOC is inappropriate, improper, or inadequate.

### **XXX. SEVERABILITY**

110. If a court issues an order that invalidates any provision of this AOC or finds that Respondent has sufficient cause not to comply with one or more provisions of this AOC, Respondent shall remain bound to comply with all provisions of this AOC not invalidated or determined to be subject to a sufficient cause defense by the court's order.

### **XXXI. EFFECTIVE DATE**

111. This AOC shall be effective when EPA signs this AOC after the public comment period as specified in Section XXIX (Public Comment on This AOC) above. Within 2 business days of signing this AOC, EPA will provide Respondent with a copy of the signature page of this AOC signed by the Director [**insert appropriate regional title**]. The undersigned representative of Respondent certifies that it is fully authorized to enter into the terms and conditions of this AOC and to bind the party it represents to this document. Respondent agrees not to contest the validity or terms of this AOC, or the procedures underlying or relating to it in any action brought by the United States, including EPA, to enforce its terms or seek penalties for its violation. Respondent retains its right to assert claims against any third parties with respect to this Site.

Agreed this \_\_\_\_ day of \_\_\_\_\_, 200\_.

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company Address

It is so ORDERED and Agreed this \_\_\_\_ day of \_\_\_\_\_, 200\_.

By: \_\_\_\_\_ Date: \_\_\_\_\_

**[insert name]**  
Director, **[insert title]**  
Region \_\_, U.S. Environmental Protection Agency

EFFECTIVE DATE: \_\_\_\_\_



## RCRA § 7003 AOC FAQs

### 1. What should be included in the Findings of Fact section?

Answer: Respondent may request that certain material facts not be presented in the Findings of Fact Section. In that situation, it may be appropriate to present those facts in the Conclusions of Law Section or in an administrative record. The facts in this section should show that the actions that may be required under this AOC are “necessary to protect public health and the environment.” This section is the keystone of the AOC and must fully and clearly elucidate the situation at the site while providing the three legal elements for initiating action under RCRA § 7003. The language presented below is an example of what could be used in the Findings of Fact section.

1. Respondent [individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, State, Municipality, commission, political subdivision of a State, or any interstate body] **[specify type of "person"]** is doing business in the State of [State]. Respondent is a corporation incorporated under the laws of the State of [State] and is a "person" as defined in § 1004(15) of RCRA, 42 U.S.C. § 6903(15).

2. Respondent owns/operates a property commonly known as “ \_\_\_\_\_”, consisting of approximately \_\_\_\_\_ acres, located approximately **[give mileage & directions to site or legal land description or intersection or street address]** in \_\_\_\_\_ County/Parish/Township **[select one]**, near the City of \_\_\_\_\_, **[insert state]**.

3. On or about **[insert date(s)]**, EPA conducted an inspection at Respondent’s Site. The inspection found and excavated a total of 25 drums from the Excavation Site. Samples collected from the liquid in five (5) of the buried drums exhibited the hazardous waste characteristic of ignitability and toxicity characteristic for benzene, identified at 40 CFR §§ 261.21 and 261.24. Liquid wastes sampled from two (2) drums contained hazardous constituents as specified in 40 CFR § 261 Appendix VIII, as summarized below:

a. Waste liquid samples exhibited the hazardous waste characteristic of ignitability and toxicity characteristic for benzene as follows:

DRUM	TCLP RESULTS (ppm benzene <sup>1</sup> )	IGNITABILITY
L8	604.00	Positive
L14	189.00	Positive

DRUM	TCLP RESULTS (ppm benzene <sup>1</sup> )	IGNITABILITY
L15	50.40	Positive
L16	1.77	Positive
L17	8.45	Positive

<sup>1</sup> TCLP Regulatory Level for benzene: 0.5 mg/L (0.5 ppm)

b. The waste liquid sample L005 from Drum L12 contained the following hazardous constituents:

CONSTITUENT	CONCENTRATION (ppm)
2,4-dimethylphenol	633.000
2-butanone	1.080
benzene	0.341
butylbenzylphthalate	7.000
methylene chloride	1420.000
naphthalene	21.000
phenol	82.000
tetrachloroethene	0.078
toluene	0.830

c. The waste liquid sample L006 from Drum L13 contained the following hazardous constituents:

CONSTITUENT	CONCENTRATION (ppm)
benzene	37.40
toluene	27.50
naphthalene	23.00

4. According to field notes and photographs from the EPA inspection conducted on or about **[insert date(s)]**, a majority of the buried drums were found to be crushed, open, and/or corroded, and leaking fluids into the surrounding soil, as follows:

DRUM	CONDITION OF DRUM
L1	Ruptured
L2	Crushed and bung open
L3	Began leaking when moved
L7	Leaking and deteriorated
L11	Crushed
L12	Beginning to deteriorate, rotting through on top
L13	Rotten on top
L14	Drum leaking from pin holes
L16	Partially crushed drum, small leak
L18	Mostly crushed drum
L19	Partially crushed drum, bottom collapsed & leaking
L20	Partially crushed drum with bung off
L22	Crushed and ruptured
L23	Bung off, several holes
L24	Numerous leaks
L25	Mostly crushed, partially rusted out

**5. [OPTIONAL: An endangerment assessment may be developed to support the issuance of the AOC. A brief description of the conditions that may present an endangerment may also be acceptable. See the October 1997 "Guidance on the Use of Section 7003 of RCRA."]** The constituents identified at Respondent's Site include known and suspected carcinogens and mutagens, which can affect the central nervous system and damage internal organs at low levels. These constituents, under certain conditions of dose, duration, or extent of exposure, constitute a threat to human health by ingestion and/or absorption. The following information was compiled from "Chemical,

Physical, and Biological Properties of Compounds Present at Hazardous Waste Sites", prepared by Clement Associates, Inc., dated September 27, 1985, publications of the Agency for Toxic Substances and Disease Registry (ATSDR), and the Report on Carcinogens, 8th Summary 1998 Edition (RoC) published by the National Institute of Environmental Health Science (NIEHS), EPA's Integrated Risk Information System (IRIS), and 40 C.F.R. Part 141:

- A. Arsenic is a potent poison and large doses can produce death. Ingestion of 200 mg may be fatal to adults. Lower levels may cause systemic injury to the body. When ingested it causes irritation to the digestive tract, pain, vomiting, and diarrhea. Other effects include decreased production of red and white blood cells, blood vessel damage, liver and kidney injury, impaired nerve function, and liver tumors. Oral exposure to arsenic contaminated drinking water has shown significantly elevated standard mortality ratios for cancer of the bladder, lung, liver, kidney, skin, and colon. The maximum contaminant limit (MCL) for arsenic in drinking water is 0.05mg/L. IRIS lists arsenic as a Group A (known human) carcinogen.
  
- B. Asbestos refers to a group of naturally occurring fibrous silicate minerals rather than one specific material. Generally, asbestos refers to the six (6) silicate minerals amosite, chrysotile, tremolite, actinolite, anthophyllite, and crocidolite. These minerals vary considerably in their physical and chemical properties with the most common minerals types being chrysotile (white color), crocidolite (blue color), anthophyllite (gray color), and amosite (brown color).
  
- C. Benzene: Benzene is a volatile, aromatic hydrocarbon and a component of gasoline. EPA claims that half of the U.S. population is exposed to benzene in gasoline. IRIS and the RoC lists benzene as a Group A (known human) carcinogen, causing leukemia in exposed individuals. Benzene exposure is associated with chromosomal damage in both humans and animals, although it is not mutagenic in microorganisms. Benzene has been shown to be fetotoxic and to cause embryo-lethality in experimental animals. Exposure to benzene has resulted in leukemia in humans. It also adversely affects the hematopoietic system. Very high concentrations in air (about 20,000 ppm) can cause death in minutes, with central nervous system depression and convulsions, and cardiovascular collapse. Vertigo, dizziness, drowsiness, headache, nausea, confusion, tremors, tachycardia, and eventual unconsciousness result from milder exposures. Dermal adsorption of liquid benzene can result in erythema, blistering, and scaly dermatitis. Benzene contamination of drinking and surface waters, fruits, vegetables, dairy products, nuts, and eggs all add to the human body burden of benzene. Long-term benzene exposures affect

bone marrow thereby diminishing erythrocyte production and causing anemia. Excessive bleeding and deleterious effects on the immune system may also occur. Drinking fluids or eating food contaminated with high concentrations can result in vomiting, gastritis, vertigo, convulsions, tachycardia, and death. The maximum contaminant level (MCL) for benzene in drinking water is 0.005 mg/l.

- D. Chromium is a heavy metal generally existing in either a trivalent or hexavalent oxidation state. Hexavalent chrome compounds are carcinogenic in rats and an excess of lung cancer has been observed among workers in the chromate producing industry. Hexavalent chrome can also cause DNA and chromosome damage in animals and humans. Short term high-level exposure to hexavalent chrome can cause adverse effects at the point of contact. Trivalent chrome is less toxic than hexavalent chromium; its main effect is contact dermatitis in sensitive individuals. Chromium has been shown to damage the kidney, nervous system, and the circulatory system of laboratory animals such as rats and mice when the animals are exposed at high levels. Some humans who were exposed to high levels of chromium suffered liver and kidney damage, dermatitis, and respiratory problems. The MCL for total chromium in drinking water is 0.1 mg/L. IRIS lists chromium VI as a Group A (known human) carcinogen.
- E. DDT is a probable human carcinogen. DDT is an organochlorine pesticide, which together with its metabolites, is very persistent in the environment. DDT, DDE, and DDD have been shown to be carcinogenic in mice. They primarily cause liver tumors, but they also increase the incidence of lung tumors and lymphomas. In addition, DDT is a reproductive toxin. Chronic exposure can damage the central nervous system and liver. DDT and other organochlorine pesticides are highly toxic to aquatic organisms and are responsible for the decreased reproductive success of many bird species.
- F. Lead is a heavy metal that is indestructible. It is stored mainly in the bone. It has induced kidney tumors in mice and rats. Lead is also a reproductive hazard, and it can adversely affect the brain and central nervous system by causing encephalopathy and peripheral neuropathy. Chronic exposure to low levels of lead can cause subtle learning disabilities in children. Exposure to lead can also cause kidney damage, retard physical growth, and anemia. The action level for lead in drinking water, as noted in 40 CFR 141, Subpart I, is 0.015 mg/l. IRIS lists lead as a Group B2 (probable human) carcinogen.

- G. Methylene Chloride (dichloromethane): Methylene chloride increased the incidence of lung and liver tumors, and sarcomas in rats and mice. It was found to be mutagenic in bacterial test systems. In humans, methylene chloride irritates the eyes, mucous membranes, and skin. Exposure to high levels adversely affects the central and peripheral nervous systems and the heart. In experimental animals, methylene chloride is reported to cause kidney and liver damage, convulsions, and paresis. The MCL for methylene chloride in drinking water is 0.005 mg/l. IRIS lists methylene chloride as a Group B2 (probable) human carcinogen.
- H. Naphthalene: Naphthalene has retarded cranial ossification and heart development in the offspring of exposed pregnant rats. Inhalation exposure has caused nausea, headache, and optic and kidney damage in humans and experimental animals. Oral administration has produced cataracts in rabbits and induced changes in motor activity in rats and mice. Exposure to high doses causes severe hemolytic effects. A drinking water MCL has not been established for naphthalene. IRIS lists naphthalene as a Group D (not classifiable as to human carcinogenicity) carcinogen.
- I. Polychlorinated Biphenyls (PCB's) have been classified as probable human carcinogens. PCBs are very persistent in the natural environment and are readily bio-accumulated. In humans, exposure to PCBs has been associated with chloracne, impairment of liver function, a variety of neuro-behavioral symptoms, menstrual disorders, minor birth abnormalities, and an increased incidence of cancer. Experimental animals exposed to PCBs experienced an increased incidence of cancer; reproductive problems; neuro-behavioral degradation; pathological changes in the liver, stomach, skin, and other organs; and suppression of immunological function. PCBs have induced hepatocellular carcinomas in three strains of rats and two strains of mice. There is inadequate, yet suggestive, evidence of excess risk of liver cancer in humans via ingestion, inhalation, or dermal contact. PCB is a probable human carcinogen. PCBs have an MCL in drinking water of 0.0005 mg/L.
- J. Tetrachloroethene: Tetrachloroethene (PCE) produces liver cancer in mice when administered orally by gavage. Renal and hepatotoxicities have been reported following inhalation exposure of rats to fairly high concentrations. The MCL in drinking water is 0.005 mg/l. A final decision on whether PCE should be classified as a Class B2 (probable) or Class C (possible) carcinogen has not yet been made.
- K. Toluene: Acute exposure to toluene at concentrations of 375-1,500 mg/kg produces central nervous system depression and narcosis in humans.



Toluene has been shown to be embryo-toxic in experimental animals, and the incidence of cleft palate increased in the offspring of dosed mice. Chronic inhalation exposure to relatively high levels of toluene caused cerebellar degeneration and an irreversible encephalopathy in mammals. In humans, acute exposure depressed the central nervous system and caused narcosis. The MCL for toluene in drinking water is 1 mg/l. IRIS lists toluene as a Group D (not classifiable as to human carcinogenicity) carcinogen.

6. Respondent's site is located [describe residences, aquifers, domestic water supplies, river/lake used for recreational purposes, wells (including number and type of use), fragile environment, etc. and their distance and location with respect to the site].

7. Hazardous wastes, hazardous constituents, and/or solid waste identified in Paragraph 5 have migrated or may migrate from Respondent's Site into the environment through the following pathways:

- A. Soils: Hazardous wastes and constituents have been released to the soil as a result of spills and leaks from the buried drums. The soils at Respondent's Site include Crockett and Mabank Loams, which consist of 0" to 8" of surface loam underlain by clays.
- B. Ground Water: The hazardous wastes and constituents spills and/or leakage from the buried drums may enter the ground water as leachate from the contaminated soil. Respondent's Site is located in the outcrop area of the **[insert name]** Aquifer, which is recharged chiefly by precipitation on the outcrop areas. The **[insert name]** Aquifer is the principal source of ground water in \_\_\_\_\_ County for public supply, industrial, irrigation, and domestic uses.
- C. Surface Water and Sediment: The hazardous wastes and constituents spills and/or leakage from the buried drums may enter the surface water as a result of water runoff from the contaminated soils, and from discharge of contaminated ground water. The Excavation Site is located approximately 20 yards north of an unnamed creek, which drains Respondent's Site and flows to the east into a residential area approximately one-quarter mile downstream from the Excavation Site at Respondent's Site. The unnamed creek is a tributary of **[insert name]**, which flows **[insert direction]** into the **[insert name]**.
- D. Ground water recharge and surface water runoff result from approximately 39 inches per year of average precipitation in **[insert name]** County, which has a moist, subhumid climate.

8. The handling, storage, treatment, transportation or disposal of hazardous wastes, hazardous constituents, and/or solid waste from Respondent’s Site, if not addressed by implementing the Work required by this AOC, may present an imminent and substantial endangerment to human health and/or the environment.

**2. What should stipulated penalty language look like?**

Answer: The following language could be used:

Stipulated Penalty Amounts - Work.

The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph \_\_\_\_\_:

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

Compliance Milestones.

[List violations or compliance milestones including due dates for payments]

Stipulated Penalty Amounts - Reports.

The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports [or other written documents] pursuant to Paragraphs \_\_\_\_\_ :

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

**3. Does Headquarters have to approve a RCRA § 7003 AOC for cleanup?**

Answer: OECA’s Federal Facilities Enforcement Office retains a consultation role in all actions in which a federal agency is a Respondent. Regions must consult with the Director of OECA’s Office of Site Remediation Enforcement for administrative orders which significantly deviate from written Agency policy or which break new ground in an important sensitive area.

**4. What constitutes an imminent and substantial endangerment?**

Answer: Refer to EPA “Guidance on the Use of Section 7003 of RCRA”, October 1997, for a description of “imminent and substantial endangerment.”

## **5. Can mediation be used in dispute resolution?**

Answer: The dispute resolution procedures may be supplemented to provide for use of mediation in appropriate cases. Mediation provisions in an AOC should contain time limits to ensure that mediation does not cause delays in dispute resolution that could delay the work required under the AOC.

## **6. How do you know if the penalty interest and method of payment information are correct?**

Answer: Regions should consult their finance office who will be responsible for preparing the bill and tracing payment as an account receivable.

## **7. How do you know when work under a RCRA § 7003 AOC is complete?**

Answer: Regions should craft their AOCs based on the desired endpoint. A RCRA § 7003 AOC may or may not require corrective action through a completion stage. The AOC may require that only human exposures be controlled. Regions should refer to the “Final Guidance on Completion of Corrective Action Activities at RCRA Facilities” issued February 13, 2003. The Guidance describes two types of corrective action completion (with and without controls).

## **8. What is a “material defect” in a deliverable?**

Answer: A material defect in a deliverable is an error that is not typographical or editorial in nature.

## **9. What are data quality objectives?**

Answer: Regions should refer to the “Data Quality Objectives Process for Superfund” Fact Sheet, Interim Final Guidance, and Workbook issued in September 1993.

## **10. Why are comprehensive general liability insurance and automobile insurance required by the AOC?**

Answer: Respondents are required by the AOC to have comprehensive general liability insurance and automobile insurance for protection from third party injury law suits that may arise during and after the performance of the Work required by the AOC. This insurance is not a financial assurance mechanism nor is it for reimbursement of response/oversight costs incurred by EPA.