

US EPA ARCHIVE DOCUMENT

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

IN THE MATTER OF:	)	ADMINISTRATIVE ORDER ON CONSENT
	)	
CHEVRON U.S.A., INC.	)	U.S. EPA Docket No:
5000 STATE ROUTE 128	)	
CLEVES, OHIO 45002	)	
EPA ID#: OHD004 254 132	)	
	)	Proceeding under Section 3008(h) of the
	)	Resource Conservation and Recovery Act,
	)	as amended, 42 U.S.C. § 6928(h).
	)	
CHEVRON USA, INC.,	)	
	)	
RESPONDENT.	)	
_____	)	

**I. JURISDICTION**

1. The Administrator of the United States Environmental Protection Agency ("U.S. EPA") is issuing this Administrative Order on Consent ("Order") to Chevron U.S. A. Inc. ("Respondent") under Section 3008(h) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. § 6928(h). The Administrator has delegated the authority to issue orders under Section 3008(h) of RCRA to the Chief, Enforcement and Compliance Assurance Branch; Waste, Pesticides and Toxics Division; U.S. EPA Region 5.

2. Respondent owns and operates the Facility to which this Order is applicable. Respondent's Facility is a former petroleum refinery near the intersection of State Route 128 and U.S. Route 50 in Whitewater Township, Hamilton County, Ohio just east of the town of Hooven, Ohio. The Facility occupies approximately 500 acres of land, consisting of the former refinery property, a landfarm located to the west of State Route 128 and the refinery portion of the Facility, two islands in the Great Miami River (No.1 and No. 2), pipelines leading from the refinery portion through the islands up to and including Chevron's terminal on the Ohio River ("the Facility"). The Facility was previously owned by Gulf Oil from 1931 until 1985. In 1985, Respondent Chevron U.S.A., Inc. acquired Gulf Oil and continued petroleum refining operations until mid-1986. Since 1986, Respondent has undertaken decommissioning, dismantling and environmental remediation at the Facility. Remediation activities conducted pursuant to RCRA to date include: demolishing and removing nearly all of the above- and below-ground structures associated with the former refining operations, removal of most Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) (with completion of all SWMU and AOC removal projected by the end of 2007), and ongoing hydraulic control and remediation of dissolved hydrocarbons in groundwater, light non-aqueous phase liquids (LNAPL) recovery, soil vapor recovery and groundwater monitoring.

3. Respondent agrees not to contest U.S. EPA's jurisdiction to issue this Order, to enforce its terms, or to impose sanctions for violations of the Order.

4. Respondent waives any rights to request a hearing on this matter pursuant to Section 3008(b) of RCRA, 42 U.S.C. §6928(b) and 40 C.F.R. Part 24, and consents to the issuance of this Order without a hearing under Section 3008(b) of RCRA as a Consent Order issued pursuant to Section 3008(h) of RCRA, 42 U.S.C. § 6928(b).

## II. DEFINITIONS

5. This Order incorporates the definitions in RCRA, 42 U.S.C. § 6901 - 6922k, and the regulations promulgated under RCRA unless otherwise specified.

6. "OEPA" is the Ohio Environmental Protection Agency.

## III. PARTIES BOUND

7. This Order applies to and binds U.S. EPA, Respondent and its agents, successors, assigns, trustees, receivers, and all persons, including but not limited to contractors and consultants, acting on behalf of Respondent. Respondent shall be responsible and liable to perform the Work under this Order, and for any violations of this Order, regardless of the use of employees, agents, contractors, or consultants to perform work required by this Order.

8. No change in ownership or corporate or partnership status relating to the Facility will alter the obligations of Respondent under this Order. Any conveyance of title, easement, or other interest in the Facility, or a portion of the Facility, will not affect Respondent's obligations under this Order. Respondent will give written notice of this Order to any successor in interest prior to transferring ownership or operation of the Facility or a portion thereof and will notify U.S. EPA and OEPA in writing not less than sixty (60) days in advance of the transfer. This written notice will describe how Respondent has assured that, despite the transfer, all institutional controls required now or in the future for the Facility will be implemented and maintained.

## IV. DETERMINATIONS

9. After consideration of the Administrative Record, the Chief, Enforcement and Compliance Assurance Branch; Waste, Pesticides and Toxics Division; U.S. EPA Region 5 has made the following conclusions of law and determinations:

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

- b. Respondent is the owner and operator of a Facility that has operated under interim status subject to Section 3005(e) of RCRA, 42 U.S.C. § 6925(e).
- c. Certain wastes and constituents found at the Facility are hazardous wastes and/or hazardous constituents pursuant to Section 1004(5), 3001 of RCRA, 42 U.S.C. § 6903(5) and 40 C.F.R. Part 261.
- b. There is or has been a release of hazardous wastes or hazardous constituents into the environment from the Facility.
- c. The actions required by this Order are necessary to protect human health or the environment.

#### V. PROJECT MANAGER

10. U.S. EPA and Respondent must each designate a Project Manager and notify each other in writing of the Project Manager selected within fourteen (14) days of the effective date of this Order. Each Project Manager will be responsible for overseeing the implementation of this Project. The parties must provide prompt written notice whenever they change Project Managers.

#### VI. WORK TO BE PERFORMED

11. Pursuant to Section 3008(h) of RCRA, Respondent agrees to and is hereby ordered to perform the selected remedy and achieve the performance measures included in U.S. EPA's August 30, 2006 Final Decision ("Final Decision") and set forth in this Paragraph; and the actions specified in this Section VI; in the manner and by the dates specified herein and in all plans and schedules developed by Respondent and approved by U.S. EPA pursuant to this Order. The Final Decision, Appendix 1 to this Order, is incorporated into and made an enforceable part hereof. Respondent represents that it has the technical and financial ability to carry out corrective action at the Facility. Respondent must perform the work undertaken pursuant to this Order in compliance with RCRA and other applicable federal and state laws and their implementing regulations, and consider all relevant U.S. EPA guidance documents as appropriate to the Facility. This guidance includes, but is not limited to, the Use of Institutional Controls in the RCRA Corrective Action Program, and relevant portions of the Model Scopes of Work for RCRA Corrective Action, Region 5 Framework for Monitored Natural Attenuation Decisions for Groundwater (Appendix 1 to the Final Decision), OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Pathway from Groundwater and Soils (November 2002), RCRA Groundwater Monitoring Draft Technical Guidance (November 1992), Handbook of Groundwater Protection and Cleanup Policies for RCRA Corrective Action (April 2004), Results-based Approaches and Tailored Oversight Guidance for Facilities Subject to RCRA Corrective Action Under Subtitle C of RCRA (September, 2003); and U.S. EPA's risk assessment guidance.

A Remedy Implementation Plan (RIP) and schedule to implement the selected remedy shall be developed. This RIP shall include an Operation, Maintenance and Monitoring (“OMM”) Plan. Specifications for conducting the performance monitoring components of the selected remedy shall be included in the OMM Plan. The RIP/OMM shall be incorporated into this Order pursuant to Paragraph 12, below. Until the RIP/OMM Plan has been approved and implemented, Respondent shall continue all operation, maintenance and monitoring required under the 1993 consent order under which Chevron performed the RCRA Facility Investigation/Corrective Measures Study at the Facility (“1993 RFI/CMS Order”).

The components of the selected remedy, and their associated performance measures, are:

a. Conduct periodic “high grade” pumping (as described in the Final Decision) to remove LNAPL from the smear zone located above and below the water table. Pumping will occur during periods of naturally occurring low water table elevation when LNAPL recovery can be maximized. High grade pumping will be undertaken as described and specified in the RIP, including the OMM Plan. Within two (2) years of the effective date of this Order, Respondent shall submit to U.S. EPA proposed criteria for determining that High Grade Pumping is no longer contributing to reducing the timeframe for reaching the groundwater cleanup standards in Table 1, and may be discontinued. U.S. EPA review of this submittal shall be in accordance with Paragraph 15 below. The approved criteria shall be incorporated by amendment into the OMM Plan.

b. Upon approval of the RIP/OMM Plan, the currently operating site-wide recovery well system will be shut down. The LNAPL and dissolved contaminant plumes shall be monitored, to verify that the plumes remain stable under natural gradient conditions. If the plumes do not remain stable under natural gradient conditions, Respondent shall implement corrective measures to prevent the LNAPL and dissolved contaminant plumes from migrating beyond their current boundaries.

b.1. A network of monitoring wells located at the current down-gradient boundary of the dissolved contaminant plume will constitute a sentinel monitoring system that will provide an early warning of potential down-gradient migration. A containment Point of Compliance (“POC”) shall be established down-gradient from the sentinel well system. If monitoring shows that groundwater in a sentinel well contains concentrations of a Contaminant of Concern (COC) listed in Table 1 exceeding the Safe Drinking Water Act Maximum Contaminant Level (MCL), which exceedance is not due to low water table conditions, the sentinel well shall be sampled again within two months. If resampling confirms an exceedance of the MCL, Respondent shall resume operation of the site-wide ground water recovery system. If such an exceedance is detected in a POC well, Respondent shall implement additional corrective measures as provided in Paragraph 14. Monitoring of the sentinel and POC wells shall be conducted as described and specified in the OMM Plan.

b.2. Rapid Optical Scanning Technology (ROST) wells shall be installed in

perpendicular transects across the distal edge of the LNAPL smear zone in the Southwest Quadrant. The detection of LNAPL in an inner ROST well located outside of the current smear zone boundary means that the LNAPL plume is migrating beyond the current boundary. Long term monitoring of the ROST wells and sentinel groundwater monitoring wells shall be conducted as specified in the OMM Plan.

b.3. Long term surface and groundwater monitoring shall be conducted along the Great Miami River, including at the river bank/smear zone interface, as specified in the OMM Plan, to verify and ensure that the plume is stable and not migrating toward the river under natural gradients.

c. Source removal of volatile petroleum constituents from the LNAPL smear zone beneath the town of Hooven through operation of the horizontal soil vapor extraction (HSVE) system, as described and specified in the RIP, including the OMM Plan. The HSVE system shall be operated during LNAPL high-grade recovery periods and/or periods of low water table when vapors are accessible, as defined in the OMM Plan. At any time, Respondent may submit to U.S. EPA for approval criteria for permanent shutdown of the HSVE system. The approved criteria shall be incorporated into the RIP/OMM Plan.

d. Long term monitoring of nested soil vapor wells beneath Hooven shall be conducted, as specified in the RIP/OMM Plan, to ensure that there is not a complete vapor inhalation pathway between the LNAPL plume and the ground surface beneath Hooven.

e. Respondent shall exercise best efforts to install vapor barriers in buildings in the Southwest Quadrant to prevent human exposure to any soil vapors reaching the ground surface exceeding the risk-based residential standards identified in the RIP/OMM Plan.

f. Achieve reduction of concentrations of COCs in the groundwater to MCLs through natural attenuation processes. Monitored natural attenuation (“MNA”), in conjunction with the implementation of the source removal components of the Selected Remedy, is expected to reduce concentrations of the COCs identified in Table 1 in the groundwater plumes to MCLs within 42 years (by 2048). Periodic long term monitoring of the plumes and five-year reviews of the progress of natural attenuation, as specified in the RIP/OMM Plan, shall be conducted by Respondent. Each five year review shall entail the interpretation of data on the extent and composition of the LNAPL plume, consistent with the U.S. EPA Region 5 Framework for Natural Attenuation Decisions for Groundwater (Appendix 1 to the Final Decision). If, based on a review of MNA parameters, U.S. EPA determines that MCLs will not be achieved in the groundwater by 2048, Respondent must implement additional measures to remove LNAPL from the subsurface, pursuant to Paragraph 14 below. If Respondent disputes U.S. EPA’s determination that MCLs will not be achieved in groundwater by 2048, the dispute shall be resolved in accordance with Section XI (Dispute Resolution).

g. Evaluate and implement remedial actions or install engineered controls as necessary to stabilize the bank of the Great Miami River at both the refinery and at Gulf Park to



prevent LNAPL-contaminated soils from sloughing into the river. A written evaluation of options for stabilizing the river bank, recommended option and proposed implementation schedule shall be submitted to U.S. EPA for approval within one hundred twenty (120) days of the effective date of this Order. Respondent shall design and implement the approved stabilization measure(s), as approved by U.S. EPA. The approved stabilization measures and schedule shall be incorporated into the approved RIP.

h. Implement institutional controls on the Facility property to prevent exposure to contaminants in groundwater and subsurface soils that exceed risk-based standards. Such institutional controls are specified in Paragraph 16, below.

i. Implement additional corrective measures if necessary to ensure that the performance measures set forth in the Final Decision and in this Paragraph will be achieved and maintained, pursuant to Paragraph 14, below.

12. Within one hundred twenty (120) days of the effective date of this Order, Respondent shall submit to U.S. EPA for review and approval, a detailed schedule and plan to implement the selected remedy. This Remedy Implementation Plan (RIP) shall include an Operation, Maintenance and Monitoring (OMM) Plan.

a. The proposed RIP shall address construction and implementation of all engineering and institutional controls described in Paragraphs 11 and 16 (except for those components related to stabilization of the Great Miami River Bank which shall be incorporated into the RIP following U.S. EPA approval as provided in Paragraph 11.g), including a schedule for implementation of the selected engineering and institutional controls.

b. The proposed OMM Plan shall specify requirements for operation and maintenance of all components of the selected remedy (except for those components related to the stabilization of the Great Miami River Bank which shall be incorporated into the OMM Plan following U.S. EPA approval as provided in Paragraph 11.g). The Quality Assurance Project Plan that was approved pursuant to the 1993 RFI/CMS Order, with any subsequent U.S. EPA-approved revisions, shall be incorporated into and made part of the OMM Plan. The OMM Plan shall specify well locations, monitoring parameters, pumping rates and sampling schedules necessary to conduct the monitoring described in Paragraph 11 and to verify whether the performance measures set forth in Paragraph 11 are (or will be timely) met and maintained. The OMM Plan shall incorporate any sampling schedules set forth in the Final Decision, or such revised schedules as U.S. EPA requires or approves.

c. The RIP/OMM Plan may be amended from time to time by agreement of the Parties' Project Managers in writing. The RIP/OMM shall be amended to include new or revised monitoring requirements and/or schedules if and when additional corrective measures are required to be implemented pursuant to Paragraph 14 or 18, below.

d. All sampling and analysis conducted under this Order must be performed in

accordance with the Region 5 RCRA Quality Assurance Project Plan Policy (as may be amended), as appropriate for the Facility, and be sufficient to identify and characterize the nature and extent of all releases as required by this Order. U.S. EPA may audit laboratories which Respondent selects, or require Respondent to purchase and have analyzed any performance evaluation samples selected by U.S. EPA which are compounds of concern. At the request of U.S. EPA, Respondent must provide or allow U.S. EPA or its authorized representative to take split or duplicate samples of all samples Respondent collects under this Order.

13. Respondent must implement the institutional and engineering controls, and monitoring, and achieve the performance measures selected in the Final Decision, as provided in the approved RIP and OMM Plans, and any amendments thereto, including the schedules contained therein. Review and approval of the RIP and OMM Plans, and any major modifications thereto, shall be in accordance with Paragraph 15 below.

14. In accordance with the Final Decision, Respondent shall implement additional (contingent) corrective measures as necessary to assure that performance measures shall be achieved and maintained, as further specified in Subparagraphs a. through f. below:

a. If monitoring indicates that any COC listed in Table 1 exceeds MCLs at any POC well, Respondent shall evaluate additional corrective measures to prevent migration of LNAPL and/or dissolved contaminants above MCLs beyond the Containment POC. Respondent shall submit a report to U.S. EPA for approval describing the measures evaluated and Respondent's recommended corrective measure(s), with supporting documentation, within six (6) months of the sampling event demonstrating the exceedance. Respondent shall implement the corrective measure(s), as approved by U.S. EPA, in accordance with the approved implementation schedule.

b. If ROST or fluid level monitoring detects LNAPL in an inner ROST well located outside of the current smear zone boundary, Respondent shall resume operation of the site-wide groundwater recovery system. In addition, Respondent shall evaluate additional corrective measures (including focused aggressive source removal technologies such as air sparging and solvent flushing) to ensure containment of the LNAPL plume at the current smear zone boundary. Respondent shall submit a report to U.S. EPA for approval describing the measures evaluated and Respondent's recommended corrective measure(s), with supporting documentation, within six (6) months of the sampling event indicating presence of LNAPL constituents. Respondent shall implement the corrective measures, as approved by U.S. EPA, in accordance with the approved implementation schedule.

c.1. If monitoring of the LNAPL along the Great Miami River indicates that LNAPL is migrating toward the river, indicated by fluid level data showing an LNAPL thickness in a monitoring well measuring more than a fifteen percent (15%) increase from the previous maximum observed thicknesses at similar water table elevations or a detection of more than 0.1-foot of LNAPL in the distal monitoring wells, where LNAPL has not been previously detected, Respondent shall design and construct engineered controls to prevent any discharge to the river.



If engineered barriers are not adequate to prevent any discharge of LNAPL to the river, Respondent shall evaluate additional corrective measures and submit a report describing the alternatives evaluated and Respondent's recommended measures(s), with supporting documentation, to U.S. EPA within six (6) months of the sampling event demonstrating that the LNAPL is migrating (defined by the metric above). Respondent shall implement the corrective measures, as approved by U.S. EPA, to prevent migration of LNAPL into the Great Miami River.

c.2. If hyporheic zone monitoring points located between the dissolved contamination on-site and the bank of the Great Miami River, as designated in the OMM Plan, show concentrations of dissolved COCs exceeding OEPA surface water quality standards, and the resampling of these points within a month shows the same result, Respondent shall evaluate and implement corrective measures to prevent site-derived contaminants in groundwater from discharging to the river. Respondent shall submit a report to U.S. EPA for approval, describing the alternatives evaluated and Respondent's recommended corrective measure(s), with supporting documentation, within three (3) months of the monitoring event documenting COCs exceeding OEPA surface water quality standards in a designated groundwater monitoring point. Respondent shall implement the corrective measure(s), as approved by U.S. EPA, in accordance with the approved implementation schedule.

d. If monitoring of the nested vapor wells in Hooven indicates that there is a complete pathway from the LNAPL plume to the ground surface, as defined in the RIP/OMM Plan, and that any COCs originating from the plume listed in Table 2 are seen at five or ten foot samples exceeding the residential standards set forth in the RIP/OMM Plan, Respondent shall notify U.S. EPA of the monitoring results within five (5) days of receipt of the qualified monitoring data. Respondent shall evaluate additional corrective measures to prevent vapors exceeding the residential standards from intruding into occupied buildings in Hooven. Within sixty (60) days of receipt of the qualified monitoring data, Respondent shall submit a report to U.S. EPA for approval describing the alternatives evaluated and Respondent's recommended corrective measure(s), with supporting documentation. Respondent shall implement the measure(s), as approved by U.S. EPA, in accordance with the approved implementation schedule.

e. If natural attenuation of LNAPL is not progressing at a rate which will result in achieving MCLs for the COCs in Table 1 throughout the groundwater plume by 2048, Respondent shall evaluate additional source removal measures to achieve the MCLs within this timeframe. Respondent shall submit a report to U.S. EPA for approval containing the evaluation of alternatives and their costs, and Respondent's recommended corrective measure(s), within six (6) months of Respondent's or U.S. EPA's determination, based on a review of MNA parameters, that MNA will not timely achieve MCLs in Table 1. This report shall include all data and information Respondent considered and relied on in selecting its recommended alternative(s). Respondent shall implement the corrective measures, as approved by U.S. EPA, in accordance with the approved implementation schedule.

f. U.S. EPA review and approval of any additional contingent corrective measures required by this Paragraph shall be in accordance with Paragraph 15, below.

15. For documents submitted by Respondent for U.S. EPA approval, U.S. EPA may provide Respondent with its written approval, its approval with conditions and/or modifications, disapproval, or disapproval with comments. U.S. EPA will provide a statement of reasons for any approval with conditions and/or modifications, disapproval or disapproval with comments. Respondent shall revise any such submittal in accordance with U.S. EPA's written comments and will submit to U.S. EPA the revised submittal within thirty (30) days after receiving U.S. EPA's written comments (or longer time if agreed to by the parties.) Revised submittals are subject to U.S. EPA approval, approval with conditions or modifications, or disapproval. Upon receipt of U.S. EPA's written approval, the submittal becomes an enforceable part of this Order.

16. Respondent shall execute and record an Environmental Covenant in accordance with Ohio Revised Code ("ORC") Sections 5301.80 to 5301.92 imposing the following activity and use limitations upon the refinery and land farm portions of the Facility:

- No use of groundwater
- No subgrade development
- No residential use
- No daycare or preschools

A model format of the environmental covenant shall be provided to Respondent following execution of this Order. Respondent shall submit a draft environmental covenant to U.S. EPA for review within 30 days of receipt of the model format from U.S. EPA. The schedule for executing and recording the Environmental Covenant, and for providing to U.S. EPA a file and date-stamped copy of the recorded Environmental Covenant shall be included in the RIP.

a. Respondent shall assure that the activity and use limitations set forth in the Environmental Covenant are continually maintained so long as Respondent owns the Facility.

b. If Respondent conveys any interest in any portion of the Facility identified in the Environmental Covenant, including but not limited to easements, deeds, leases and mortgages, Respondent must include, in the instrument of conveyance, that portion of the Environmental Covenant that describes the activity and use restrictions imposed on the portion of the Facility to be conveyed.

c. No later than sixty (60) days prior to executing any instrument conveying any interest in any portion of the Facility, including but not limited to deeds, leases and mortgages, Respondent shall provide written notice of the conveyance to U.S. EPA at the address set forth in Section XIV, and to OEPA at the following address:

Ohio Environmental Protection Agency  
Lazarus Government Center

Division of Hazardous Waste Management  
P.O. Box 1049  
Columbus, Ohio 43216-1049

17. Respondent shall take all necessary measures to restrict the use of the Facility in any manner that may interfere with operation and maintenance, monitoring or other measures necessary to assure the effectiveness and integrity of the remedy to be implemented pursuant to this Order. These measures shall be implemented through the OMM Plan.

18. Corrective Action for Newly Discovered Releases

If Respondent discovers a previously unidentified release of petroleum or other hazardous constituents or, if U.S. EPA receives information indicating there may be a release of petroleum or other hazardous constituents, at or from the Facility that was not discovered during the RFI/CMS, U.S. EPA may request Respondent to submit a plan and schedule for performing an investigation of the nature and extent of such release and the impact of the release on human health or the environment and for submitting a report of its investigation and proposed corrective measures ("Newly Discovered Release Report"). The Newly Discovered Release Report shall document the basis for Respondent's conclusion as to whether or not the release presents a threat to human health or the environment and, if Respondent concludes that it does, the Report shall also include an evaluation of corrective measures considered to address the release and Respondent's recommended corrective measure(s), with supporting documentation. U.S. EPA shall review the Report and either approve the Report or require revisions thereto, following the procedure set forth in Paragraph 15 above. U.S. EPA may request supplemental information from Respondent if necessary to fully evaluate the nature and extent of the release and/or corrective measures alternatives. Respondent shall provide timely any supplemental information that U.S. EPA requests in writing. During the remedy evaluation and selection process, Respondent shall implement interim measures as necessary to prevent exposure to contaminants above risk-based levels. The RIP/OMM Plan shall be amended to include a plan and schedule for implementation of corrective measures as approved by U.S. EPA. Respondent shall implement the selected corrective measures in accordance with the approved implementation schedule.

19. Notice and Reporting Requirements.

a. Respondent must continue to maintain a publicly accessible repository for information regarding site activities and conduct public outreach and involvement activities.

b. Respondent must provide quarterly progress reports to U.S. EPA by the fifteenth (15<sup>th</sup>) day of the month after the end of each quarter. The report must list work performed to date, data collected, problems encountered, status of meeting schedules, and provide notice and discussion of any issues or potential issues with achieving or maintaining performance measures for the selected remedy specified herein. The frequency of this report may be modified by agreement of the parties.

c. When Respondent believes that the criteria in the OMM Plan have been met for permanent cessation of high grade pumping or permanent shutdown of the HSVE system, Respondent shall submit a written report to U.S. EPA for approval demonstrating that the shutdown criteria have been met, including supporting data and analysis. If U.S. EPA disapproves the report because it does not agree that the shutdown criteria have been met this matter shall be resolved through the dispute resolution process set forth in Section XI, below.

d. Respondent shall provide written notice to U.S. EPA within five (5) days of its discovery of information indicating that: 1) LNAPL or dissolved contaminants are migrating toward or discharging to the Great Miami River; or 2) contaminants volatilized from the LNAPL layer or dissolved plume are in exceedance of the residential standards in the OMM Plan at the soil surface in Hooven.

e. Within thirty (30) days after Respondent has determined that the groundwater performance standards in Attachment 1 have been attained at the Facility, Respondent must submit a written report and certification to U.S. EPA for review and approval. A registered professional engineer and Respondent's Project Manager must state in the report that the groundwater performance standards have been attained in full satisfaction of the requirements of this Order.

f. The parties will communicate frequently and in good faith to assure successful completion of the requirements of this Order, and will meet on at least a semi-annual basis to discuss the work proposed and performed under this Order. The frequency of this meeting may be modified by agreement of the parties.

20. Project Managers can agree in writing to extend, for ninety (90) days or less, any deadline in this Section. However, extensions of greater than ninety (90) days require obtaining approval from the Chief of the Enforcement and Compliance Assurance Branch; Waste, Pesticides and Toxics Division.

## VII. ACCESS

21. U.S. EPA, its contractors, employees, and any designated U.S. EPA representatives may enter and freely move about the Facility to, among other things: interview Facility personnel and contractors; review Respondent's progress in carrying out the terms of this Order; conduct tests, sampling, or monitoring as U.S. EPA deems necessary; use a camera, sound recording, or other documentary equipment; and verify the reports and data Respondent submits to U.S. EPA. Respondent will permit such persons to inspect and copy all non-privileged photographs and documents, including all sampling and monitoring data, that pertain to work undertaken under this Order and that are within the possession or under the control of either Respondent or its contractors or consultants. Respondent may request split samples, or copies of all photographs, tapes, videos or other recorded evidence created by U.S. EPA and

releasable under the Freedom of Information Act, as determined by U.S. EPA. So long as U.S. EPA's right of access and entry under applicable law is not restricted, U.S. EPA will comply with Respondent's applicable site safety plan when it enters and moves about the Facility.

22. If Respondent must go beyond the Facility's boundaries to perform work required by this Order and an existing agreement is not already in place, Respondent shall notify U.S. EPA in writing within thirty (30) days after Respondent becomes aware of the need for such access. Respondent must use its best efforts to obtain the necessary access agreements from the present owner(s) of such property prior to the scheduled date to perform work on such property. Any such access agreement must provide for access by U.S. EPA and its representatives. If necessary to protect remedy components located beyond the Facility's boundaries, Respondent shall exercise best efforts to obtain an agreement with the property owner, enforceable by Respondent, to refrain from using the property in any manner that would interfere with or adversely affect the implementation, integrity or protectiveness of the remedy. Respondent must furnish U.S. EPA's Project Manager a copy of any access agreements obtained from other property owners. If Respondent does not obtain an agreement for access within thirty (30) days prior to the scheduled date for performing work on any off-site property, Respondent must notify U.S. EPA in writing of both the efforts undertaken to obtain access and the failure to obtain access agreements. U.S. EPA may, at its discretion, assist Respondent in obtaining access. For purposes of this paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of obtaining access and use restrictions from said property owner(s).

23. Nothing in this Section limits or otherwise affects U.S. EPA's right of access and entry under applicable law, including RCRA and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601-9675.

#### VIII. COST ESTIMATES AND ASSURANCES OF FINANCIAL RESPONSIBILITY FOR COMPLETING THE WORK

##### 24. Estimated Cost of the Work

a. Within 120 days after the Effective Date of this Order, Respondent shall submit to U.S. EPA for approval detailed written estimates, in current dollars, of the cost of hiring a third party to perform the Work to be Performed under Section VI of this Order (Cost Estimate). The term "third party" shall be defined as in 40 CFR 264.142. The Cost Estimate must account for the costs of all remaining long term operation, maintenance and monitoring in addition to all remaining construction work. The Cost Estimate calculation shall be consistent with the requirements of 40 C.F.R. Section 264.142.

b. Respondent shall annually adjust the Cost Estimate for inflation and for changes in



the scope of the Work to be Performed, within sixty days prior to the anniversary date of the establishment of the initial financial assurance instrument(s) pursuant to Paragraph 25.a (“Anniversary Date”), until the work required by this Order is completed. Respondent shall submit each annual Cost Estimate update to U.S. EPA for review.

c. If Respondent is required to implement any additional corrective measure(s) pursuant to Paragraph 14 or 18 of this Order, within forty-five days of U.S. EPA approval of an additional corrective measure(s), Respondent shall submit to U.S. EPA for approval a revised Cost Estimate for the Work to be Performed that includes the cost of implementing such additional corrective measure(s).

d. If at any time Respondent becomes aware of information indicating that any cost estimate provided pursuant to this Section is inadequate, Respondent shall notify U.S. EPA in writing of such information within thirty (30) days and submit a revised Cost Estimate for approval within thirty (30) days from the date of notification to U.S. EPA. If at any time U.S. EPA determines that a cost estimate provided pursuant to this Paragraph is inadequate, U.S. EPA shall notify Respondent in writing, stating the basis for its determination. Within fifteen (15) days of receipt of such notice of inadequacy, Respondent may submit to U.S. EPA additional information to demonstrate the adequacy of the Cost Estimate. If after review of this submission U.S. EPA still deems the Cost Estimate to be inadequate, it shall so notify Respondent in writing. Within thirty (30) days of the initial notification of inadequacy or, if additional information is provided by Respondent, within 30 days of its receipt of a second notice of inadequacy, Respondent shall submit to U.S. EPA a revised Cost Estimate for approval.

25. Assurances of Financial Responsibility for Completing the Work

a. After U.S. EPA approves the initial Cost Estimate under Paragraph 24.a above, Respondent shall establish and maintain financial assurance for the benefit of the U.S. EPA in the amount of the approved Cost Estimate within ninety (90) days of the end of Respondent’s fiscal year (by March 31<sup>st</sup>). In the event that U.S. EPA approval of Respondent’s initial Cost Estimate is not received within sixty (60) days of the close of Respondent’s fiscal year, Respondent shall establish and maintain the financial assurance in the amount of the draft initial Cost Estimate within ninety (90) days of the end of its fiscal year. In such event Respondent shall update the financial assurance instrument or financial test demonstration to reflect the approved initial cost estimate by the one year Anniversary Date. Respondent shall thereafter update the financial assurance to reflect changes to the Cost Estimate by the next Anniversary Date following U.S. EPA’s approval of the revised Cost Estimate. Respondent may use one or more of the financial assurance forms described in subparagraphs a.1 – a.6 below.

a.1. A trust fund established for the benefit of EPA, administered by a trustee;

a.2 . A surety bond unconditionally guaranteeing performance of the Work to be



Performed in accordance with this Order, or guaranteeing payment at the direction of U.S. EPA into a standby trust fund that meets the requirements of the trust fund in subparagraph a.1 above;

a.3. An irrevocable letter of credit, payable at the direction of the Director, Waste, Pesticides & Toxics Division, into a standby trust fund that meets the requirements of the trust fund in subparagraph a.1 above;

a.4. An insurance policy that provides U.S. EPA with rights as a beneficiary, issued for a face amount at least equal to the current Cost Estimate, except where costs not covered by the insurance policy are covered by another financial assurance instrument;

a.5. A corporate guarantee, executed in favor of the U.S. EPA by one or more of the following: (i) a direct or indirect parent company, or (ii) a company that has a “substantial business relationship” with Respondent (as defined in 40 C.F.R. § 264.141(h)), to perform the Work to Be Performed under Section VI of this Order or to establish a trust fund as permitted by subparagraph a.1 above; provided, however, that any company providing such a guarantee shall demonstrate to the satisfaction of the U.S. EPA that it satisfies the financial test requirements of 40 C.F.R. § 264.143(f) with respect to the portion of the Cost Estimate that it proposes to guarantee; or

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

b. If Respondent chooses to use mechanisms a.1, a.2, a.3, a.4 or a.5, the required financial instruments shall be submitted to U.S. EPA for review in draft form at least thirty (30) days before they are due to be executed or finalized as legally binding. The financial instruments shall meet the requirements of 40 C.F.R. Section 264.143 and shall be consistent in form and substance with the instruments specified in 40 C.F.R. Section 264.151. References in these regulations to closure and post closure care obligations pursuant to RCRA permits and closure and post-closure cost estimates shall mean the Work to be Performed under Section VI of this Order and the Cost Estimate for the Work to be Performed.

c. If Respondent provides financial assurance for completion of the Work to be Performed by means of a corporate guarantee or financial test, Respondent shall also comply with the other relevant requirements of 40 C.F.R. § 264.143(f), 40 C.F.R. § 264.151(f), and 40 C.F.R. § 264.151(h)(1) relating to these methods (including annual updated resubmissions), and will promptly provide any additional information requested by U.S. EPA from the Respondent or corporate guarantor at any time.

d. For purposes of the corporate guarantee or the financial test described above, references in 40 CFR 264.143(f) to “the sum of current closure and post-closure costs and the current plugging and abandonment cost estimates” shall mean “the sum of current closure, post-closure and corrective action under RCRA and the environmental remediation obligations under CERCLA, UIC, TSCA or their state equivalents, guaranteed by such company or for which such company is using the financial test as the mechanism to provide financial assurance.”

e. Respondent may combine more than one mechanism to demonstrate financial assurance for the Work to Be Performed under Section VI of this Order.

f. Respondent shall submit all original executed and/or otherwise finalized instruments to U.S. EPA’s Regional Comptroller (MF-10J), 77 W. Jackson Blvd., Chicago, IL 60604-3590, within thirty (30) days after date of execution or finalization as required to make the documents legally binding. Respondent shall also provide copies to the U.S. EPA Project Manager.

g. If at any time Respondent becomes aware of information indicating that any financial assurance mechanism provided pursuant to this Section is inadequate, whether due to an increase in the estimated cost of completing the Work to be Performed or for any other reason, Respondent shall notify U.S. EPA in writing of such information within thirty (30) days of receipt of such information. If at any time U.S. EPA determines that a financial assurance mechanism provided pursuant to this Paragraph is inadequate, U.S. EPA shall notify Respondent in writing, stating the basis for its determination. Within thirty (30) days of receipt of such notice of inadequacy, Respondent may submit to U.S. EPA additional information to demonstrate the adequacy of the financial assurance mechanism. If after review of this submission U.S. EPA still deems the financial assurance mechanism to be inadequate, it shall so notify Respondent in writing. Respondent shall implement a revised or alternate financial assurance mechanism listed in Paragraph 25 above that satisfies all requirements set forth or incorporated by reference in this Paragraph on the next Anniversary Date following Respondent’s becoming aware of the inadequacy, or of U.S. EPA’s final determination of inadequacy.

h. If Respondent is required to implement additional corrective measures pursuant to Paragraphs 14 or 18 of this Order, Respondent shall supplement its existing financial assurance or establish additional financial assurance for the benefit of U.S. EPA to equal the amount of the approved revised Cost Estimate required by Paragraph 24.c above, by the next Anniversary Date following U.S. EPA’s approval of the additional corrective measure(s).

i. Respondent’s inability or failure to establish or maintain financial assurance for completion of the Work shall in no way excuse performance of any other requirements of this Order.

26. Modification of Amount and/or Form of Performance Guarantee.

a. Reduction of Amount of Financial Assurance. If Respondent believes that the Cost Estimate has diminished below the amount covered by the existing financial assurance provided under this Order, Respondent may at any time submit a revised Cost Estimate and a written proposal to U.S. EPA for approval to reduce the amount of the financial assurance to equal the revised Cost Estimate. If U.S. EPA approves the revised Cost Estimate Respondent may reduce the amount of its financial assurance commensurate with the approved Cost Estimate at the next Anniversary Date. If the proposed reduction has been adequately demonstrated, U.S. EPA shall not unreasonably withhold its approval to reduce the financial assurance.

b. Change of Form of Financial Assurance. If Respondent desires to change the form or terms of financial assurance, Respondent may, at any time, establish an alternative form of financial assurance in the amount of the current Cost Estimate so long as it meets the applicable requirements of 40 C.F.R. Sections 264.143 and 264.151 and Paragraph 25 above. If the alternative form of financial assurance is 25.a.1, a.2, a.3, a.4 or a.5, Respondent shall submit the required financial instruments in draft form for U.S. EPA review at least sixty (60) days prior to the next Anniversary Date. Respondent shall submit all original executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding to the U.S. EPA Comptroller's Office, with copies to U.S. EPA's Project Manager, as provided in Paragraph 25.f. of this Order .

c. Release of Financial Assurance. Respondent may submit a written request to the Director, Waste, Pesticides & Toxics Division that U.S. EPA release Respondent from the requirement to maintain financial assurance under this Section once u.s. EPA and Respondent have both executed an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Right" pursuant to Section XIX (Termination and Satisfaction) of this Order. The Director, Waste, Pesticides & Toxics Division shall notify both the Respondent and the provider(s) of the financial assurance that Respondent is released from all financial assurance obligations under this Order.

27. Performance Failure

a. If U.S. EPA determines that Respondent (i) has ceased implementing any portion of the Work to be Performed, (ii) is significantly or repeatedly deficient or late in its performance of the Work to be Performed, or (iii) is implementing the Work to be Performed in a manner that may cause an endangerment to human health or the environment, U.S. EPA may issue a written notice ("Performance Failure Notice") to both the Respondent and the financial assurance provider of Respondent's failure to perform. The notice issued by U.S. EPA will specify the grounds upon which such a notice was issued and will provide the Respondent with a period of thirty (30) days within which to remedy the circumstances giving rise to the issuance of such

notice.

b. Failure by the Respondent to remedy the relevant Performance Failure to U.S. EPA's satisfaction before the expiration of the thirty-day notice period specified in Subparagraph a. above, shall trigger U.S. EPA's right to have immediate access to and benefit of the financial assurance provided pursuant to Paragraph 25.a.1, 25.a.2, 25.a.3, 25.a.4 or 25.a.5. If U.S. EPA is unable after reasonable efforts to secure payment of funds or performance of work from the financial assurance provider, then upon written notice from U.S. EPA, Respondent shall within thirty (30) days deposit into a trust fund approved by U.S. EPA, a cash amount equal to the Cost Estimate.

#### IX. RECORD PRESERVATION

28. Respondent must retain, during the pendency of this Order and for at least six (6) years after the Order terminates, all data and all final documents now in its possession or control or which come into its possession or control which relate to this Order. Respondent must notify U.S. EPA in writing ninety (90) days before destroying any such records, and give U.S. EPA the opportunity to take possession of any non-privileged documents before their destruction. Respondent's notice will refer to the effective date, caption, and docket number of this Order and will be sent to the address specified in Section XIV.

Respondent must also promptly give U.S. EPA's Project Manager a copy of the notice.

29. Within thirty (30) days of retaining or employing any agent, consultant, or contractor (Agents") to carry out the terms of this Order, Respondent will enter into an agreement with the agents to give Respondent a copy of all data and final non-privileged documents produced under this Order.

30. Respondent will not assert any privilege claim concerning any data gathered during any investigations or other actions required by this Order.

#### X. STIPULATED PENALTIES

31. Respondent must pay the following stipulated penalties to the United States for violations of this Order:

- a. For failure to timely submit for approval an initial plan, schedule, report or draft financial instrument, or to timely revise an initial plan, schedule report or draft

financial instrument in accordance with U.S. EPA's comments: two thousand dollars (\$2,000) per day for the first fourteen (14) days and four thousand dollars (\$4,000) per day thereafter.

- b. For failure to timely implement any corrective measures described in paragraph 11 or any additional contingent corrective measure required by Paragraph 14, in accordance with the requirements therein or in the approved RIP and OMM : two thousand (\$2,000) per day for the first fourteen (14) days and four thousand dollars (\$4,000) per day thereafter.
- c. For failure to conduct an investigation of a newly discovered release, or implement the corrective measures selected by U.S. EPA to address such newly discovered release, in accordance with Paragraph 18 and any plan and schedule approved pursuant thereto: two thousand (\$2,000) per day for the first fourteen (14) days and four thousand (\$4,000) per day thereafter.
- d. For failure to timely comply with any requirement of Paragraph 16 regarding the execution, recording and enforcement of an environmental covenant covering the refinery property and providing required notices to purchasers and U.S. EPA: one thousand dollars (\$1,000) for the first 14 days and three thousand (\$3,000) per day thereafter.
- e. For failure to submit quarterly progress reports by the dates scheduled in paragraph 19.b, above: seven hundred fifty dollars (\$750) per day for the first fourteen (14) days and one thousand five hundred dollars (\$1,500) per day thereafter.
- f. For failure to provide a timely written notification to U.S. EPA as required by Paragraph 14.d, 19.d, 24.c or 25.g: one thousand dollars (\$1,000) per day for the first five days, three thousand dollars (\$3,000) per day for the next five days, and seven thousand (\$7,000) per day thereafter.
- g. For failure to comply with any requirement of Paragraph 22 regarding exercising best efforts to obtain agreements for access and/or use limitations with off-site property owners, and providing timely notifications to U.S. EPA: seven hundred fifty (\$750) per day such failure continues.
- h. For failure to timely submit any Cost Estimate or revised Cost Estimate required by Paragraph 24; one thousand (\$1,000) per day for each day such failure continues.
- i. For failure to establish the initial or any revised financial assurance mechanism

required by and within the time period specified in Paragraph 25 of this Order: one thousand dollars (\$1,000) per day for the first fourteen (14) days and two thousand dollars (\$2,000) per day thereafter.

- j. For failure to submit a financial test (if Respondent demonstrates financial assurance by means of the financial test pursuant to 25a.5 or a.6) which complies with the provisions of Paragraph 25.c and 25.d of this Order: one thousand dollars (\$1,000) per day for the first fourteen (14) days and two thousand dollars (\$2,000) per day thereafter.
- k. For failure to provide all finalized financial instruments to U.S. EPA pursuant to Paragraph 25.f: five hundred (\$500) per day for each day such failure continues.
- l. For failure to deposit into a trust fund approved by U.S. EPA, a cash amount equal to the Cost Estimate within thirty (30) days of receipt of written notice from U.S. EPA pursuant to Paragraph 27.b of this Order: two thousand (\$2,000) per day for the first fourteen (14) days, and four thousand (\$4,000) per day thereafter.

32. Whether or not Respondent has received notice of a violation, stipulated penalties will begin to accrue on the day a violation occurs, and will continue to accrue until Respondent complies. Separate stipulated penalties for separate violations of this Order will accrue simultaneously.

33. Respondent must pay any stipulated penalties owed to the United States under this Section within thirty (30) days of receiving U.S. EPA's written demand to pay the penalties, unless Respondent invokes the dispute resolution procedures under Section X: Dispute Resolution. A written demand for stipulated penalties will describe the alleged violation with specificity and will indicate the amount of penalties due.

34. Interest will begin to accrue on any unpaid stipulated penalty balance beginning thirty-one (31) days after Respondent receives U.S. EPA's demand letter. Interest will accrue at the current value of funds rate established by the Secretary of the Treasury. Under 31 U.S.C. ' 3717, Respondent must pay an additional penalty of six percent (6%) per year on any unpaid stipulated penalty balance more than ninety (90) days overdue.

35. Respondent must pay all penalties by certified or cashier's check payable to the United States of America, or by wire transfer, and will send the check to:

U.S. Department of the Treasury  
Attention: U.S. EPA Region 5, Office of the Comptroller  
P.O. Box 70753  
Chicago, Illinois 60673.



A transmittal letter stating the name of the Facility, Respondent's name and address, and the U.S. EPA docket number of this action must accompany the payment. Respondent will simultaneously send a copy of the check and transmittal letters to the U.S. EPA Project Manager.

36. Respondent may dispute U.S. EPA's assessment of stipulated penalties by invoking the dispute resolution procedures under Section X: Dispute Resolution. The stipulated penalties in dispute will continue to accrue, but need not be paid, during the dispute resolution period. Respondent must pay stipulated penalties and interest, if any, according to the dispute resolution decision or agreement. Respondent must submit such payment to U.S. EPA within thirty (30) days after receiving the resolution according to the payment instructions of this Section. The accrual of stipulated penalties will be suspended sixty (60) days after the date of submission of the dispute resolution to the Region 5 Director of the Waste, Pesticides and Toxics Division if a decision has not been issued by the Director within that time period.

37. Neither invoking dispute resolution nor paying penalties will affect Respondent's obligation to comply with the terms of this Order not directly in dispute.

38. The stipulated penalties set forth in this Section do not preclude U.S. EPA from pursuing any other remedies or sanctions which may be available to U.S. EPA for Respondent's violation of any terms of this Order. However, U.S. EPA will not seek both a stipulated penalty under this Section and a statutory penalty for the same violation.

## XI. DISPUTE RESOLUTION

39. The parties will use their best efforts to informally and in good faith resolve all disputes or differences of opinion.

40. If any party disagrees, in whole or in part, with any decision made or action taken under this Order, that party will notify the other party's Project Manager of the dispute. The Project Managers will attempt to resolve the dispute informally.

41. If the Project Managers cannot resolve the dispute informally, any party may pursue the matter formally by placing its objections in writing to the other party's Project Manager and such Project Manager's direct supervisor. A written objection must state the specific points in dispute, the basis for that party's position, and any matters which it considers necessary for determination. Such a formal written objection submitted under this paragraph shall clearly state that it is invoking the provisions of this Paragraph.

42. The parties will in good faith attempt to resolve the dispute through formal negotiations within twenty-one (21) days, or a longer period if agreed in writing by the parties. During formal negotiations, any party may request a conference with appropriate senior management of the other party to discuss the dispute.

43. If the parties are unable to reach an agreement through formal negotiations, within fourteen (14) business days after any formal negotiations end, the parties may submit additional written information to the Director of the Waste, Pesticides and Toxics Division, U.S. EPA Region 5. U.S. EPA will maintain a record of the dispute, which will contain all statements of position and any other documentation submitted pursuant to this Section. U.S. EPA will allow submission of relevant supplemental statements of position by the parties to the dispute within twenty-one (21) days from the end of formal negotiations. Based on the record, U.S. EPA will respond to Respondent's arguments and evidence and provide a detailed written decision on the dispute signed by the Director of the Waste, Pesticides and Toxics Division, U.S. EPA Region 5 ("EPA Dispute Decision").

## XII. FORCE MAJEURE AND EXCUSABLE DELAY

44. Force Majeure, for purposes of this Order, is any event arising from causes not foreseen and beyond Respondent's control that delays or prevents the timely performance of any obligation under this Order despite Respondent's best efforts. "Force Majeure" includes, but is not limited to, the Respondent's inability to meet a deadline for performance under this Order because a state or Federal permit required to perform the work was not timely issued, and Respondent in no way contributed to any such delay in issuing a permit.

45. If any event occurs or has occurred that may delay the performance of any obligation under this Order, whether or not caused by a force majeure event, Respondent must notify U.S. EPA within three (3) business days after learning that the event may cause a delay. If Respondent wishes to claim a force majeure event, within fifteen (15) business days thereafter Respondent must provide to U.S. EPA in writing all relevant information relating to the claim, including a proposed revised schedule.

46. If U.S. EPA determines that a delay or anticipated delay is attributable to a force majeure event, U.S. EPA will extend in writing the time to perform the obligation affected by the force majeure event for such time as U.S. EPA determines is necessary to complete the obligation.

## XIII. MODIFICATION

47. This Order may be modified only by mutual agreement of U.S. EPA and Respondent (except as set forth in Paragraphs 48 and 49 below). Any agreed modifications will be in writing, will be signed by both parties, will be effective on the date of signature by U.S. EPA, and will be incorporated into this Order.

48. If Respondent seeks approval to modify any approved work plan or schedule, the

Respondent's Project Coordinator will submit a written request to U.S. EPA's Project Coordinator for approval by U.S. EPA outlining the proposed modification(s) and its basis. Respondent shall not proceed with a proposed modification until U.S. EPA has provided oral or written approval of the modification. If an oral approval of a requested modification is provided by U.S. EPA, a written approval of the modification will be provided by U.S. EPA.

49. The RIP/OMM Plan shall be amended in writing to incorporate new or revised construction, monitoring requirements and/or schedules approved by U.S. EPA pursuant to this Order.

#### XIV. NOTICES AND SUBMISSIONS.

50. Whenever, under the terms of this Order, written notice is required to be given or a report or other document is required to be sent by one party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other parties in writing. All notices and submissions shall be considered effective upon receipt, unless otherwise provided.

U.S. EPA:

Christopher Black  
EPA Project Manager  
Waste Pesticides and Toxics Division  
U.S. EPA, Region 5  
77 W. Jackson Blvd.  
Chicago, IL 60604-3590

RESPONDENT:

Randall W. Jewett  
Cincinnati Facility Site Manager  
5000 State Route 128  
Clevs, Ohio 45002

#### XV. RESERVATION OF RIGHTS

51. Nothing in this Order restricts U.S. EPA's authority to seek Respondent's compliance with the Order and applicable laws and regulations. U.S. EPA's issuance of a

determination of Construction Complete with Controls pursuant to Section XX shall not preclude U.S. EPA from requiring further corrective action for soils or other media pursuant to Paragraphs 14 and 18 of this Order or in a later proceeding. For violations of this Order, U.S. EPA reserves its rights to bring an action to enforce the Order, to assess penalties under Section 3008(h)(2) of RCRA, 42 U.S.C. § 6928(h)(2), and to issue an administrative order to perform corrective actions or other response measures. In any later proceeding, Respondent shall not assert or maintain any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon a contention that the claims raised by the United States in the later proceeding were or should have been raised here. This Order is not a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers, or authorities of U.S. EPA.

52. U.S. EPA reserves all of its rights to perform any portion of the work consented to here or any additional site characterization, feasibility study, and remedial work as it deems necessary to protect human health or the environment.

53. If U.S. EPA determines that Respondent's actions related to this Order have caused or may cause a release of hazardous waste or hazardous constituent(s), or a threat to human health or the environment, or that Respondent cannot perform any of the work ordered, U.S. EPA may order Respondent to stop implementing this Order for the time U.S. EPA determines may be needed to abate the release or threat and to take any action that U.S. EPA determines is necessary to abate the release or threat.

54. Respondent does not admit any of U.S. EPA's factual or legal determinations. Except for the specific waivers in this Order, Respondent reserves all of its rights, remedies and defenses, including but not limited to all rights and defenses it may have: (a) to challenge U.S. EPA's performance of work; (b) to challenge U.S. EPA's stop work orders; and (c) regarding liability or responsibility for conditions at the Facility, except for its right to contest U.S. EPA's jurisdiction to issue or enforce this Order. Respondent has entered into this Order in good faith without trial or adjudication of any issue of fact or law. Respondent reserves its right to seek judicial review of U.S. EPA actions taken under this Order, including a proceeding brought by the United States to enforce the Order or to collect penalties for violations of the Order.

#### XVI. OTHER CLAIMS

55. Respondent waives any claims or demands for compensation or payment under Section 106(b), 111, and 112 of CERCLA against the United States or the Hazardous Substance Superfund established by 26 U.S.C. § 9507 for, or arising out of, any activity performed or expense incurred under this Order. Additionally, this Order is not a decision on preauthorization of funds under Section 111(a)(2) of CERCLA.

#### XVII. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT

56. Respondent indemnifies, saves and holds harmless the United States, its agencies, departments, agents, and employees, from all claims or causes of action arising from or on account of acts or omissions of Respondent or its officers, employees, agents, independent contractors, receivers, trustees, and assigns in carrying out activities required by this Order. This indemnification will not affect or limit the rights or obligations of Respondent or the United States under their various contracts. This indemnification will not create any obligation on the part of Respondent to indemnify the United States from claims arising from the acts or omissions of the United States.

#### XVIII. SEVERABILITY

57. If any judicial or administrative authority holds any provision of this Order to be invalid, the remaining provisions will remain in force and will not be affected.

#### XIX. TERMINATION AND SATISFACTION

58. Acknowledgement of Termination. After the report described in Paragraph 19.e has been approved, and all other requirements of this Order have been satisfied, Respondent and U.S. EPA may execute an Acknowledgement of Termination and Agreement on Record Preservation and Reservation of Rights, consistent with U.S. EPA's Model Scope of Work. Respondent's and U.S. EPA's execution of the Acknowledgment will affirm Respondent's continuing obligation to preserve all records as required by Section IX, to maintain any necessary institutional controls or other long terms measures, and to recognize U.S. EPA's reservation of rights as required in Section XV.

59. On the effective date of this Order, the provisions of the RFI/CMS Consent Order entered into by the parties in 1993 will be deemed completed and satisfied and will terminate.

#### XX. CONSTRUCTION COMPLETION DETERMINATION

60. Completion of Construction. Respondent may request that U.S. EPA issue a determination that Respondent has met the requirements of this Order for all or a portion of the Facility that involve construction and installation of required remedial actions defined in the Final Decision and Response to Comments document dated August 30, 2006.

61. Completion of Construction of Sludges and Soils Remedy with Controls. Pursuant to U.S. EPA's Final Guidance on Completion of Corrective Action Activities at RCRA Facilities, 68 Fed. Reg. 8757-8764, Respondent may request U.S. EPA to issue a determination that the Sludges and Contaminated Soils remedy construction is "complete with controls." Respondent shall submit documentation that it has completed the Work to be Performed under

the Performance Agreement entered into by the parties in spring, 2004 to implement the January 2004 Selected Remedy for Sludges and Contaminated Soils at the Facility ("2004 Performance Agreement"). In addition, Respondent shall demonstrate that it has executed and recorded the Environmental Covenant required by Paragraph 16 of this Order, to prohibit residential uses of the Facility, potable use of the groundwater on the Facility and construction of basements or other sub-grade areas for human occupancy on the Facility. U.S. EPA will review Respondent's submission and will determine whether the soil cleanup objectives set forth in the January 2004 Selected Remedy have been met and that the enforceable land use restrictions are in place. If U.S. EPA agrees that the Work to be Performed under the 2004 Performance Agreement is complete and the soil cleanup objectives have been achieved, and that the required restrictive covenants have been executed and properly recorded, it will make a Corrective Action Complete with Controls Determination as described in the above guidance and shall issue a Ready for Reuse certificate relating to the soils at the Facility. This documentation and determination process may be done for the whole Facility or on a SWMU or Area basis to facilitate reuse of portions of the Facility.

XXI. EFFECTIVE DATE

62. This Order is effective on the date that U.S. EPA signs the Order.

IT IS SO AGREED:

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

BY: \_\_\_\_\_

Chevron USA, Inc., Respondent

IT IS SO ORDERED:

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

BY: \_\_\_\_\_

Margaret Guerriero, Director  
Waste, Pesticides and Toxics Division  
U.S. Environmental Protection Agency, Region 5



In re: Chevron USA, Inc.  
U.S. EPA Docket No.  
Hooven, Ohio

**ATTACHMENT 1****TABLE 1****CONTAMINANTS OF CONCERN for GROUNDWATER**

Groundwater COCs	Groundwater Cleanup Level (mg/l)
Arsenic	0.010
Benzene	0.005
Chlorobenzene	0.100
Ethylbenzene	0.700
Lead	0.015
Toluene	1.00
Xylenes (Total)	10

**TABLE 2**  
**CONTAMINANTS OF CONCERN for SOIL VAPOR**

Soil Vapor COCs
Benzene
n-Butylbenzene
sec- Butylbenzene
Ethylbenzene
n-Hexane
Isopropylbenzene
Napthalene
Propylbenzene
1,2,4 trimethylbenzene
1,3,5 trimethylbenzene
2,2,4 trimethylpentane
Toluene
Xylene

**APPENDIX 1**

U.S. EPA Final Decision and Response to Comments Selection of Remedial Alternative for  
Groundwater for the Chevron facility near Hooven, Ohio