THIRD FIVE-YEAR REVIEW REPORT

FOR THE

CLEVE REBER SUPERFUND SITE
ASCENSION PARISH, LOUISIANA

September 2008

PREPARED BY:

United States Environmental Protection Agency
Region 6
Dallas, Texas

September 11, 2008

MEMORANDUM

SUBJECT: Concurrence with the Third Five-year Review
Cleve Reber Superfund site
EPA ID# LAD980501456,

FROM: Bartolome J. Cañellas
Remedial Project Manager (6SF-RL)

THROUGH: Charles Faultry, Director
Remedial Branch (6SF-R)

TO: Sam Coleman, P.E., Director
Superfund Division (6SF)

This memorandum recommends the United States Environmental Protection Agency (EPA) approval of the third Five-year review for the Cleve Reber Superfund site. This review was made in consideration of all applicable requirements to protect human health and the environment from potential releases of hazardous substances.

Summary of Review Findings

Federal and state regulators, the Louisiana Department of Environmental Quality (LDEQ), conducted a site inspection and reviewed site documents. No major deficiencies or concerns were identified that will affect the short term protectiveness of the remedy. A deed notice will be placed in the conveyance records to ensure the long term protectiveness.

The LDEQ concurs with the report findings.

EPA Headquarters (OSRTI) reviewed the report and commented the report was well written and appears to covers the main points with no major issues.

Concurrence

The EPA and state project managers concur with the findings of the document and recommend signing the approval and concurrence page that will be part of the report. The draft report was reviewed by LDEQ, the EPA site attorneys, EPA risk assessors and EPA Headquarters.

CONCURRENCES:

THIRD FIVE-YEAR REVIEW REPORT
CLEVE REBER SUPERFUND SITE
EPA ID No. LAD980501456
ASCENSION PARISH, LOUISIANA

Document Reviewed By:

Date: 9/11/08

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Remedial Project Manager

Concur By: _____ Date: 9/11/08

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THIRD FIVE-YEAR REVIEW REPORT
CLEVE REBER SUPERFUND SITE
EPA ID No. LAD980501456
ASCENSION PARISH, LOUISIANA

This memorandum documents the U.S. Environmental Protection Agency's (EPA's) performance of the Cleve Reber Superfund Site Third Five-Year Review Report under Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9621(c).

Background

In March 1987, the EPA signed the Record of Decision outlining the selected remedy for the site. The remedy included the following: (1) excavation of contaminated soil, industrial wastes, and drums; (2) incineration of contaminated soil using a transportable incineration system; (3) draining of on-site ponds and treatment of pond water; (4) backfilling of drained ponds using ash from incinerated soil and clean backfill; (5) ground water monitoring; (6) placement of a Resource Conservation and Recovery Act (RCRA)-type cap over the landfill; and (7) post-closure care and monitoring for 30 years. Remedial action activities began in September 1993, and were completed in May 1996. The site was deleted from the National Priorities List in December 1997. In September 1998, the EPA published the first five-year review for the Cleve Reber Superfund Site. In September 2003, the EPA published the second five-year review. The EPA's findings during the previous reviews have determined that the selected remedy remained protective of human health and the environment.

Semi-annual operation and maintenance (O&M) ground water monitoring is currently being performed. Ground water samples are being analyzed for the following contaminants of concern: carbon tetrachloride, tetrachloroethylene, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, hexachlorocyclopentadiene, and mercury. Since O&M ground water monitoring began, concentrations of the contaminants of concern listed above have consistently been below detection limits.

Summary of Third Five-Year Review Findings

This third five-year review includes the following components: (1) document review, (2) data review, (3) applicable or relevant and appropriate requirements (ARARs) review, (4) site inspection, and (5) interviews. Documents reviewed for this five-year review included, but were not limited to, the following documents: (1) Record of Decision (ROD), (2) Remedial Action Report, (3) Closeout Report, (4) Post-Closure Plan, (5) Post-Closure Monitoring Reports, and (6) Previous Five-Year Review Reports. This third five-year review focuses on the data obtained during routine inspections and ground water monitoring events conducted at the site during 2003 through 2008.

During this third five-year review, the following issues are noted:

- **Notice on property deed**—The property owner has indicated interest in reusing the property to the EPA and Cleve Reber Group (CRG). (The CRG is the group of companies that performed the remedial action at the site under an EPA order.) The CRG is currently discussing options for reuse of the property with the property owner. The EPA has stated that any reuse of the land may not disturb the encapsulated ("capped") waste. The EPA has also stated that any reuse of the site must be compatible with the O&M activities conducted by the CRG. Any change in land use requires approval by the EPA and Louisiana Department of Environmental Quality (LDEQ). The existing "Servitude of Access and Right of Use" agreement between the property owner and the CRG was primarily intended to provide access to the companies who undertook site remediation. It does not restrict excavation or other intrusive activities that could compromise the integrity of

the cap and affect the protectiveness of the remedy. A notice, as required in the Post-Closure Plan, should be recorded in the Parish property records with the deed(s) for the site property. This issue does not affect the current protectiveness of the remedy, but could affect the long-term protectiveness if the notice was not filed and the cap was damaged by incompatible uses.

- **Damage to perimeter fence**—The inspection team observed damage to the perimeter fence along the southern property line caused by a fallen tree on the adjacent property. The fence was still standing, but was leaning inward. It is important to ensure structural integrity of the perimeter fence remains intact. Any breaches in the site perimeter fence could result in unauthorized site access. The cap provides a barrier against exposure to contamination; therefore, an unacceptable exposure risk would not exist. This issue was noted to ensure the use restrictions on the property are followed and the long-term integrity of the cap is maintained. This issue was addressed with the repair of the fence and removal of fallen trees and branches in September 2008 after Hurricane Gustav.

- **Post-Closure Plan**—Changes have occurred regarding post-closure procedures and documentation. Two elements are associated with this issue:

  — **Upgraded Gas Vent System**—In February 2008, the CRG requested EPA approval of a proposed upgrade to the existing gas vent system. With approval from EPA and LDEQ in March 2008, the CRG implemented a new design that uses smaller carbon vessels for the passive vent system.

  — **Updated Trigger Levels**—Hexachlorobutadiene and hexachloroethane do not have Maximum Contaminant Levels. The Post-Closure Plan listed EPA Region III Risk-Based Concentrations for these chemicals. However, since these low results were not achievable, the Project Required Quantitation Limit (PRQL) of 1 microgram per liter (µg/L) was used. Since that time, the EPA Region III Risk-Based Concentrations have been superseded by the EPA Regional Screening Levels. The risk-based concentration for hexachloroethane has increased to 4.8 µg/L, which is above the PRQL. The risk-based concentration for hexachlorobutadiene has also increased to 0.86 µg/L, but is still below the PRQL. At the PRQL, the calculated excess lifetime cancer risk level is 1.2×10^{-6} or 1.2 in one million.

Recommendations and Follow-Up Actions

The following actions are needed in response to the above issues:

- **Notice on Property Deed**—Place a notation on the property deed in the Parish property records to notify any potential purchaser of the property that: (1) the land has been used to manage hazardous wastes; and (2) the land's use is restricted under 40 Code of Federal Regulations Part 264, Subpart G. The purpose of the land use restriction is to maintain integrity of the cap by eliminating the possibility of certain land uses which could result in subsequent damage to the cap and affect the protectiveness of the remedy. A copy of the notice filed on the property deed needs to be provided to the EPA. This notice is a requirement under RCRA Section 264, an ARAR under the ROD, and a requirement of the 1996 Post-Closure Plan for the Cleve Reber Superfund Site.

- **Damage to perimeter fence**—Remove the fallen tree and any other vegetation affecting the integrity of the perimeter fence. Repair all damaged areas of the site's perimeter fencing. These actions were completed in September 2008 after Hurricane Gustav.

- **Post-Closure Plan**—Provide an addendum to the Post-Closure Plan that documents the approved modification to the gas vent system. Provide an addendum to the Post-Closure Plan that documents the revised trigger levels and establishes whether lower detection limits for hexachloroebutadiene are achievable.

Determinations

Based on the information available during the third five-year review, the selected remedy for the Cleve Reber Superfund Site is considered protective of human health and the environment in the short-term. The remedy is functioning as intended by the ROD. The exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of remedy selection are still valid. The ARARs cited in the ROD have been met. The cap is currently in good condition, and a good vegetative growth is present to prevent erosion. The ongoing O&M activities at the site are being sufficiently implemented. Since O&M began, concentrations of the contaminants of concern have consistently been below detection limits. There have been no changes in the physical conditions of the site that would affect the current protectiveness of the remedy.

In order for the remedy to remain protective of human health and the environment in the long-term, a notice as required by RCRA Section 264, an ARAR, and as required by the Post-Closure Plan, needs to be filed with the Parish and placed on the property deed. The purpose of the land use restriction is to maintain integrity of the cap by eliminating the possibility of certain land uses which could result in subsequent damage to the cap and affect the protectiveness of the remedy. A copy of the notice needs to be placed in the administrative record file for the site.

It is recommended that all follow-up actions identified in this Third Five-Year Review Report be implemented within one year of the date of this report.

By: Pamela Phillips, Acting
Samuel A. Coleman, P.E.
U.S. EPA, Region 6
Director, Superfund Division

Date 9/18/08

CONTENTS

Attachments

LIST OF TABLES

LIST OF ACRONYMS

ARAR	Applicable or Relevant and Appropriate Requirement
bgs	Below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	Contaminant of concern
CRG	Cleve Reber Group
°F	Degrees Fahrenheit
EA	EA Engineering, Science, and Technology, Inc.
ECCO	Environmental Controls Company
EPA	(U.S.) Environmental Protection Agency Region 6
FS	Feasibility study
GVS	Gas vent system
LDEQ	Louisiana Department of Environmental Quality
MCL	Maximum contaminant level
µg/L	Microgram per liter
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
O&M	Operation and maintenance
Protech	Professional Technical Support Services, Inc.
PRP	Potentially Responsible Party(ies)
PRQL	Project Required Quantitation Limit
RA	Remedial action
RAO	Remedial action objective
RCRA	Resource Conservation and Recovery Act
RI	Remedial investigation
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
site	Cleve Reber Superfund Site
UAO	Unilateral Administrative Order

EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency (EPA) Region 6 has conducted the third five-year review of the remedial action (RA) implemented at the Cleve Reber Superfund Site (site) in Ascension Parish, Louisiana. The purpose of this third five-year review is to determine whether the selected remedy for the site continues to protect human health and the environment. This statutory review was conducted from February to September 2008, and its findings and conclusions are documented in this report. The Second Five-Year Review Report of the RA was signed on September 29, 2003; this established the third five-year review period of 2003-2008.

Background

The Cleve Reber Superfund Site occupies approximately 25 acres. The site is surrounded by predominantly agricultural land and is scarcely populated. Swampy areas are located adjacent to the site to the east, south, and west. The nearest residence is located immediately north of the site, and additional residential properties are located further to the north. The Town of Sorrento is located approximately 2 miles to the northeast of the site.

The Cleve Reber Superfund Site was originally used as a borrow pit for fill material used in the construction of Highway 70 and the Sunshine Bridge. After the bridge and highway were completed, the site was used as a disposal area for municipal waste. The site also accepted industrial waste from chemical plants located in the Ascension Parish area. A Louisiana court ordered the site to stop receiving waste in 1974; the site was abandoned later the same year. The EPA conducted an emergency cleanup in 1983 and removed numerous drums and surface piles. A temporary cap was also constructed over the former landfill area to prevent infiltration of surface water.

Surface soil and surface water samples collected during the remedial investigation (RI) showed elevated levels of chlorinated organic compounds. In particular, surface soils contained elevated concentrations of hexachlorobenzene (5,100 milligrams per kilogram). A supplemental RI indicated that site-related contaminants had not migrated laterally beyond the site boundaries. However, contaminants had migrated to the Shallow Sand aquifer underlying the site. Information indicates that contaminants have not migrated to deeper aquifers in which local domestic wells are commonly screened.

In March 1987, the EPA signed the Record of Decision outlining the selected remedy for the site. The remedy included the following: (1) excavation of contaminated soil, industrial wastes, and drums; (2) incineration of contaminated soil using a transportable incineration system; (3) draining of on-site ponds and treatment of pond water; (4) backfilling of drained ponds using ash from incinerated soil and clean backfill; (5) ground water monitoring; (6) placement of a Resource Conservation and Recovery Act (RCRA)-type cap over the landfill; and (7) post-closure care and monitoring for 30 years. RA activities began in September 1993, and were completed in May 1996. The site was deleted from the National Priorities List in December 1997. In September 1998, the EPA published the first five-year review for the Cleve Reber Superfund Site. In September 2003, the EPA published the second five-year review. The EPA's findings during the previous reviews have determined that the selected remedy remained protective of human health and the environment.

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Summary of Third Five-Year Review Findings

The EPA Region 6 has conducted the third five-year review of the RA implemented at the Cleve Reber Superfund Site. The purpose of this third five-year review was to determine whether the selected remedy for the site continues to protect human health and the environment.

This third five-year review includes the following components: (1) document review, (2) data review, (3) applicable or relevant and appropriate requirements (ARARs) review, (4) site inspection, and (5) interviews. Documents reviewed for this five-year review included, but were not limited to, the following documents: (1) Record of Decision (ROD), (2) RA Report, (3) Closeout Report, (4) Post-Closure Plan, (5) Post-Closure Monitoring Reports, and (6) Previous Five-Year Review Reports. This third five-year review focuses on the data obtained during routine inspections and ground water monitoring events conducted at the site during 2003 through 2008.

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  — **Upgraded Gas Vent System**—In February 2008, the CRG requested EPA approval of a proposed upgrade to the existing gas vent system. With approval from EPA and LDEQ in March 2008, the CRG implemented a new design that uses smaller carbon vessels for the passive vent system.

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Recommendations and Follow-Up Actions

The following actions are needed in response to the above issues:

- **Notice on Property Deed**—Place a notation on the property deed in the Parish property records to notify any potential purchaser of the property that: (1) the land has been used to manage hazardous wastes; and (2) the land's use is restricted under 40 Code of Federal Regulations (CFR) Part 264, Subpart G. The purpose of the land use restriction is to maintain integrity of the cap by eliminating the possibility of certain land uses which could result in subsequent damage to the cap and affect the protectiveness of the remedy. A copy of the notice filed on the property deed needs to be provided to the EPA. This notice is a requirement under RCRA Section 264, an ARAR under the ROD, and a requirement of the 1996 Post-Closure Plan for the Cleve Reber Superfund Site.

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Determinations

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It is recommended that all follow-up actions identified in this Third Five-Year Review Report be implemented within one year of the date of this report.

Five-Year Review Summary Form

SITE IDENTIFICATION

Site Name (from WasteLAN): Cleve Reber Superfund Site

EPA ID (from WasteLAN): LAD980501456

Region: 6	**State:** LA	**City/County:** Ascension Parish

SITE STATUS

NPL Status: ☐ Final ☒ Deleted ☐ Other (specify) _____

Remediation Status (choose all that apply): ☐ Under Construction ☐ Operating ☒ Complete

Multiple OUs?* ☐ YES ☒ NO **Construction Completion Date:** May 1996

Has site been put into reuse? ☐ YES ☒NO

REVIEW STATUS

Reviewing Agency: ☒ EPA ☐ State ☐ Tribe ☐ Other Federal Agency _____

Author Name: Bartolome Cañellas

Author Title: Remedial Project Manager	**Author Affiliation:** U.S. EPA Region 6

Review Period:** September 2003 to September 2008

Date(s) of Site Inspection: July 15, 2008

Type of Review:
☒ Statutory
☐ Policy ☐ Post-SARA ☐ Pre-SARA ☐ NPL-Removal only
☐ Non-NPL Remedial Action Site ☐ NPL State/Tribe-lead
☐ Regional Discretion

Review Number: ☐ 1 (first) ☐ 2 (second) ☒ 3 (third) ☐ Other (specify) _____

Triggering Action:
☐ Actual RA On-site Construction at OU ☐ Actual RA Start
☐ Construction Completion ☒ Previous Five-Year Review Report
☐ Other (specify)_____

Triggering Action Date (from WasteLAN): September 29, 2003

Due Date (Five Years After Triggering Action Date): September 29, 2008

* "OU" refers to operable unit.

** The review period refers to the period during which the five-year review was conducted.

Five-Year Review Summary Form (Continued)

Issues:

- **Notice on property deed**—The property owner has indicated interest in reusing the property to the EPA and CRG. (The CRG is the group of companies that performed the remedial action at the site under an EPA order.) The CRG is currently discussing options for reuse of the property with the property owner. The EPA has stated that any reuse of the land may not disturb the encapsulated ("capped") waste. The EPA has also stated that any reuse of the site must be compatible with the O&M activities conducted by the CRG. Any change in land use requires approval by the EPA and LDEQ. The existing "Servitude of Access and Right of Use" agreement between the property owner and the CRG was primarily intended to provide access to the companies who undertook site remediation. It does not restrict excavation or other intrusive activities that could compromise the integrity of the cap and affect the protectiveness of the remedy. A notice, as required in the Post-Closure Plan, should be recorded in the Parish property records with the deed(s) for the site property. This issue does not affect the current protectiveness of the remedy, but could affect the long-term protectiveness if the notice was not filed and the cap was damaged by incompatible uses.

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- **Post-Closure Plan**—Changes have occurred regarding post-closure procedures and documentation. Two elements are associated with this issue:

  — **Upgraded Gas Vent System**—In February 2008, the CRG requested EPA approval of a proposed upgrade to the existing gas vent system. With approval from EPA and LDEQ in March 2008, the CRG implemented a new design that uses smaller carbon vessels for the passive vent system.

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Five-Year Review Summary Form (Continued)

Recommendations and Follow-Up Actions:

- **Notice on Property Deed**—Place a notation on the property deed in the Parish property records to notify any potential purchaser of the property that: (1) the land has been used to manage hazardous wastes; and (2) the land's use is restricted under 40 CFR Part 264, Subpart G. The purpose of the land use restriction is to maintain integrity of the cap by eliminating the possibility of certain land uses which could result in subsequent damage to the cap and affect the protectiveness of the remedy. A copy of the notice filed on the property deed needs to be provided to the EPA. This notice is a requirement under RCRA Section 264, an ARAR under the ROD, and a requirement of the 1996 Post-Closure Plan for the Cleve Reber Superfund Site.

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Protectiveness Statement:

Based on the information available during the third five-year review, the selected remedy for the Cleve Reber Superfund Site is considered protective of human health and the environment in the short-term. The remedy is functioning as intended by the ROD. The exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of remedy selection are still valid. The ARARs cited in the ROD have been met. The cap is currently in good condition, and a good vegetative growth is present to prevent erosion. The ongoing O&M activities at the site are being sufficiently implemented. Since O&M began, concentrations of the contaminants of concern have consistently been below detection limits. There have been no changes in the physical conditions of the site that would affect the current protectiveness of the remedy.

Long-Term Protectiveness:

In order for the remedy to remain protective of human health and the environment in the long-term, a notice as required by RCRA Section 264, an ARAR, and as required by the Post-Closure Plan, needs to be filed with the Parish and placed on the property deed. The purpose of the land use restriction is to maintain integrity of the cap by eliminating the possibility of certain land uses which could result in subsequent damage to the cap and affect the protectiveness of the remedy. A copy of the notice needs to be placed in the administrative record file for the site.

It is recommended that all follow-up actions identified in this Third Five-Year Review Report be implemented within one year of the date of this report.

1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) Region 6 has conducted a third five-year review of the remedial action (RA) implemented at the Cleve Reber Superfund Site (site) in Ascension Parish, Louisiana. The purpose of a five-year review is to determine whether the remedy at a site remains protective of human health and the environment and to document the methods, findings, and conclusions of the five-year review process in a Five-Year Review Report. Five-Year Review Reports identify issues found during each review, if any, and make recommendations to address the issues. This Third Five-Year Review Report documents the results of the review for the Cleve Reber Superfund Site, conducted in accordance with EPA guidance (EPA 2001) on five-year reviews.

The five-year review process is required by federal statute. The EPA must implement five-year reviews consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA Section 121(c), 42 U.S.C. § 9621(c), states the following:

> "If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented."

NCP Section 300.430(f)(4)(ii) states the following:

> "If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action."

Because hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure, a statutory five-year review is required.

This is the third five-year review for the Cleve Reber Superfund Site. The period addressed by this five-year review extended from 2003 to 2008. The triggering action for this review was the Second Five-Year Review Report completed in September 2003. This third five-year review was conducted from February through September 2008; its methods, findings, conclusions, and recommendations are documented in this report.

This report documents the five-year review for the Cleve Reber Superfund Site by providing the following information: site chronology (Section 2.0), background information (Section 3.0), overview of the RAs (Section 4.0), progress since the second five-year review (Section 5.0), discussion of the third five-year review process (Section 6.0), technical assessment of the site (Section 7.0), institutional controls (Section 8.0), issues (Section 9.0), recommendations and follow-up activities (Section 10.0), protectiveness statement (Section 11.0), and discussion of the next review (Section 12.0). Attachment 1 provides the site location map, site layout map, and aerial photograph. Attachment 2 provides a list of documents reviewed. Attachment 3 provides the site inspection report. Attachment 4 provides the site inspection checklist. Attachment 5 provides the site inspection photographs. Attachment 6 provides the interview records. Attachment 7 provides the "Servitude of Access and Right of Use" agreement. Attachment 8 provides the public notices. Attachment 9 provides the site inspection photographs after Hurricane Gustav.

2.0 SITE CHRONOLOGY

Table 1 presents a chronology of significant events for the Cleve Reber Superfund Site. Additional site summary information is available online at: http://www.epa.gov/region6/6sf/pdffiles/0600512.pdf (EPA 2008b).

TABLE 1

CHRONOLOGY OF SITE EVENTS

Date	Event
1970 to 1974	The site received industrial and municipal waste.
July 1974	The Louisiana State Court determined the site was in violation of the State Sanitary Code.
1974	The site was abandoned.
June 1981	The Louisiana Department of Natural Resources conducted sampling to determine site contaminants.
July 14-29, 1983	The EPA performed emergency cleanup activities, which included removing drums and chemical piles.
1984	The EPA placed the site on the NPL.
May 1985	The EPA issued the RI/FS.
September 1986	The EPA completed a supplemental RI/FS.
March 1987	The EPA issued the ROD.
September 1988	The EPA issued the UAO.
February 1989	The EPA issued a Design Investigation Report.
September 1989	The EPA issued a Post-Closure Plan.
February 1990	The EPA issued a Draft Final Design Report.
February 1991	The EPA issued an amended UAO, which included the Final Design Report.

TABLE 1 (Continued)

CHRONOLOGY OF SITE EVENTS

Date	Event
June 1992	The CRG initiated ambient air monitoring.
March 1993	The CRG completed pre-construction studies.
June 1993	The CRG selected OHM Remediation Services Corporation as the remedial action contractor.
September 1993	The CRG began remediation activities.
May 1996	The CRG completed remediation activities and began post-closure care. The CRG conducted quarterly ground water sampling through October 1998.
July 1996	The CRG completed a Post-Closure Plan.
December 1997	The site was deleted from the NPL.
September 1998	The EPA published the First Five-Year Review Report.
April 1999 – October 2003	The CRG began conducting semi-annual ground water sampling. Ground water monitoring reports were submitted during the first and third quarters (April and October).
September 2003	The EPA published the Second Five-Year Review Report.
April 2004	The CRG submitted the 2004 Post-Closure Monitoring First Semi-Annual Report.
September 2004	The CRG submitted the 2004 Post-Closure Monitoring Second Semi-Annual Report.
April 2005	The CRG submitted the 2005 Post-Closure Monitoring First Semi-Annual Report
August 29, 2005	Hurricane Katrina made landfall in southeast Louisiana.
September 24, 2005	Hurricane Rita made landfall near the Louisiana/Texas border.
October 12, 2005	The EPA conducted a post-hurricane evaluation of the site, including a site inspection and collection of ground water samples, to assess any impacts to the remedy.
December 14, 2005	The EPA issued a report documenting no impacts to the remedy were caused by the hurricanes.
September 2006	The CRG submitted the 2006 Post-Closure Monitoring First Semi-Annual Report.
January 2007	The CRG submitted the 2006 Post-Closure Monitoring Second Semi-Annual Report.
March 2007	The CRG submitted the 2007 Post-Closure Monitoring First Semi-Annual Report.
October 2007	The CRG submitted the 2007 Post-Closure Monitoring Second Semi-Annual Report.
February 15, 2008	The CRG submitted a proposal to upgrade the post-closure gas vent system.
March 2008	The CRG submitted the 2008 Post-Closure Monitoring First Semi-Annual Report.
March 18, 2008	The LDEQ approved CRG's request to upgrade the post-closure gas vent system.
March 20, 2008	The EPA approved CRG's request to upgrade the post-closure gas vent system.
September 1, 2008	Hurricane Gustav made landfall in southern Louisiana.
September 5, 2008	The CRG O&M contractor, Protech, conducted a site inspection and repaired the minor damages that were caused by Hurricane Gustav.

Notes:

CRG Cleve Reber Group
EPA U.S. Environmental Protection Agency
FS Feasibility study
LDEQ Louisiana Department of Environmental Quality
NPL National Priorities List
RI Remedial investigation
ROD Record of Decision
UAO Unilateral Administrative Order

Sources: CRG 2008b; EPA 1998, 2003; Vulcan Chemicals 2003b, 2004a, 2004b, 2005; Vulcan Materials Company 2006, 2007a, 2007b, and 2007c.

3.0 BACKGROUND

This section discusses the site's physical characteristics, land and resource use near the site, history of site contamination, initial response to the site, and the basis for the response.

3.1 PHYSICAL CHARACTERISTICS

The Cleve Reber Superfund Site is located in Section 36, Township 10 South, Range 3 East, approximately 2 miles southwest of the Town of Sorrento in Ascension Parish, Louisiana (approximately 50 miles northwest of New Orleans). The site is approximately 1 mile south of Highway 22, on the east side of Highway 70 (see site location map and aerial photograph in Attachment 1).

3.2 LAND AND RESOURCE USE

Swampy areas are located adjacent to the site to the east and south. The areas to the north and west are primarily agricultural and residential. These residential areas are scarcely populated. The nearest residence is located immediately north of the site, and approximately 10 additional residential properties are located further to the north. The Town of Sorrento has a population of approximately 1,000 residents (CH2M Hill 2005).

The 25-acre plot originally consisted of four ponds and a landfill area. The majority of the site was covered with dense vegetative growth. As part of the RA, the ponds were drained and backfilled; the landfill area was excavated, backfilled and capped; and the dense vegetative growth was cleared. The former landfill area is located in the center of the site. The landfill cap is approximately 1,200 feet long and approximately 500 feet wide. An elevated flood berm is located along the northern and western perimeter of the site. The site is essentially flat with elevations ranging from approximately 5 to 8 feet above mean sea level. The perimeter of the site is secured by a 7-foot high chain-link fence (CH2M Hill 2005).

On-site surface water flow is diverted around the landfill cap to the east and south. The Panama Canal is the nearest surface water body and is located approximately 1,500 feet south of the site. The canal flows to the east and empties into Blind River, which then empties into Lake Maurepas and Lake Pontchartrain. The site is located approximately 15 miles from Lake Maurepas and approximately 26 miles from Lake Pontchartrain (CH2M Hill 2005).

The site is underlain by approximately 250 feet of very plastic clays, with low hydraulic conductivity. Within this clay formation is a clayey/silty sand formation located 30-50 feet below ground surface (bgs). The formation, referred to as the Shallow Sand Aquifer, varies from 3 to 10 feet in thickness. At approximately 200 feet bgs is another sand formation, approximately 30-feet thick, that is referred to as the Deep Sand Aquifer. The drinking water aquifer is called the Norco Aquifer, and it is separated from the overlying Deep Sand Aquifer by 10 feet of clay. The Norco is an artesian aquifer that is free-flowing most of the year. The Shallow Sand Aquifer is not used as a water supply by any known users in the vicinity of the site. The Norco is not contaminated, and the potential for contamination is considered negligible (CH2M Hill 2005).

The Louisiana Department of Transportation and Development Water Well Registration Data File (http://www.dotd.la.gov/intermodal/wells/select_wells.asp) was reviewed for water wells in the vicinity of the site. Twelve unplugged water wells were identified within 0.5 mile of on-site monitoring well P-7. These wells are located between 0.23 and 0.46 miles from well P-7 and the total depth ranges between 270 and 345 feet.

3.3 HISTORY OF CONTAMINATION

The Cleve Reber Superfund Site was originally used as a borrow pit for fill material during the construction of Highway 70 and the Sunshine Bridge. After construction of the highway and bridge were completed, the Environmental Controls Company (ECCO), with Mr. Cleve Reber as President, leased the land in 1970. The site was used as a disposal area for municipal waste. The site also accepted industrial waste from chemical plants located in the Ascension Parish area. In July 1974, a Louisiana court determined that the site was in violation of the state's sanitary code and directed ECCO to stop receiving waste; the site was abandoned later the same year (EPA 2003).

3.4 INITIAL RESPONSE

In 1983, the EPA conducted an emergency cleanup and removed more than 1,100 drums and numerous waste piles. A temporary clay cap was placed over the area to prevent infiltration. In 1984, a remedial investigation (RI) indicated that site-related contaminants had migrated to the Shallow Sand aquifer underlying the site. Based on these findings, an expanded shallow ground water investigation was conducted in March 1985. The results of the investigation indicated that contamination was minimal and

did not appear to pose a significant health concern. In July 1985, a study was conducted that involved sampling monitoring wells screened in the Shallow Sand aquifer for chlorinated organic compounds. The study used low method detection limits to analyze for chlorinated organic compounds. The primary contaminants of concern (COCs)—hexachlorobenzene, hexachlorobutadiene, and hexachloroethane—were detected in ground water samples collected from the Shallow Sand aquifer; however, none of the site-related contaminants were detected in nearby residential wells screened in deeper aquifers. An additional field investigation conducted in 1986 confirmed that there was no significant contamination of the Shallow Sand aquifer. This supplemental RI/feasibility study (FS) was completed in September 1986. A public health evaluation report was also written in September 1986 (EPA 1987).

In March 1987, the EPA issued the Record of Decision (ROD) for the site. The ROD documented the EPA's selection of an RA to address the contamination on the site. The ROD also listed remediation goals, and applicable or relevant and appropriate requirements (ARARs) (EPA 1987).

In September 1988, the EPA issued a CERCLA Section 106, 42 U.S.C. § 9606, Unilateral Administrative Order (UAO) to potentially responsible parties (PRPs). In February 1991, the EPA issued an amended UAO. The UAO and the amended UAO ordered the PRPs to conduct the RA as outlined in the ROD (EPA 2003).

RA mobilization occurred in September 1993, and the remedy was completed in May 1996. The site was deleted from the National Priorities List in December 1997 (EPA 2003).

3.5 BASIS FOR TAKING ACTION

Based on the data collected during the RI, it was determined that if the remedies selected in the ROD were not implemented, hazardous substances could be released from the Cleve Reber Superfund Site and endanger public health, welfare, or the environment. Environmental sampling had revealed contamination present on-site in surface soils, subsurface soils, sediments, surface water, and ground water. In addition, contamination was presumed to be present in aquatic organisms on-site, as estimated from measured surface water contamination levels and published bioconcentration factors. However, no sample analysis of aquatic organisms was conducted. Contamination was found in subsurface soils directly beneath the waste site to a depth of 30 feet, the greatest depth at which samples were taken. All four on-site surface ponds and surface pond sediments were found to be contaminated. Low level surface

soil contamination was found to the east of the site. The ground water in the Shallow Sand aquifer beneath the site was found to be contaminated at levels exceeding a 1×10^{-6} excess lifetime cancer risk (EPA 1987).

The potential human exposure pathway on-site was dermal absorption and ingestion of contaminated soil and ingestion of contaminated aquatic organisms. The exposed population was small, consisting only of regulatory/monitoring personnel and trespassers. The off-site exposure pathway, consisting of dermal absorption and ingestion of contaminated soil, was considered not to be a potential public health concern because surface contamination was low and identified only in an unpopulated area east of the site. The exposure route of most concern was the Shallow Sand aquifer. Although hazardous substances had reached this zone, they had not migrated beyond the general site boundaries. The reason contamination did not quickly spread through the ground water was because of the low mobility of the COCs (hexachlorobenzene, hexachlorobutadiene, and hexachloroethane) in the local geologic formations. The possibility existed that the Shallow Sand aquifer could be used as a potable water source in the future. Continued contaminant migration coupled with the installation of a shallow or poorly cased water well adjacent to the site could cause a future exposure scenario that would be unacceptable (EPA 1987).

4.0 REMEDIAL ACTIONS

This section discusses the selected remedy, remedy implementation, and operation and maintenance (O&M) activities/costs.

4.1 SELECTED REMEDY

The selected remedy identified in the ROD included the following components: (1) excavation of contaminated soil, industrial wastes, and drums; (2) incineration of contaminated soil using a transportable incineration system; (3) draining of on-site ponds and treatment of pond water; (4) backfilling of drained ponds using ash from incinerated soil and clean backfill; (5) ground water monitoring; (6) placement of a Resource Conservation and Recovery Act (RCRA)-type cap over the landfill; and (7) post-closure care and monitoring for a period of 30 years (EPA 1987).

The remedial action objectives (RAOs) of the selected remedy were based on the findings of the RI activities and the human health concerns identified by the EPA. In order to address the long-term effectiveness of the RAs, the EPA considered the following (EPA 1987):

- Long-term uncertainties of land disposal;
- Goals and requirements of Resource Conservation and Recovery Act;
- Persistence, toxicity, mobility and bioaccumulation of the hazardous substances of concern;
- Short and long-term potential for adverse human health effects;
- Long-term maintenance costs; and
- Potential threat to human health and the environment from the excavation, transportation, and redisposal, or containment of hazardous substances or pollutants or contaminants.

Based on these public health concerns, the RAOs of the Cleve Reber Superfund Site RA were as follows (EPA 1987):

- Protect the Norco Aquifer from contamination from the site;
- Ensure that water users affected by potential contaminant migration from the site have a potable water supply;
- Minimize adverse effects from contaminated shallow ground water;
- Minimize the effects of contaminated surface water run-off from the site;
- Prevent human or animal contact with contaminated on-site surface water;
- Prevent human or animal contact with contaminated soil and sediment and with on-site wastes; and
- Minimize the potential of an air discharge that would adversely affect humans – during either investigative or remedial activities.

4.2 REMEDY IMPLEMENTATION

The RA activities conducted at the Cleve Reber Superfund Site, in response to the RAOs outlined in the ROD, are discussed in the following sections (EPA 2003).

4.2.1 Soil Excavation and Incineration

According to the ROD, excavated material was to be incinerated on-site using a transportable incineration system. A temporary structure that housed the incinerator was built on top of the landfill area to prevent fugitive emissions from escaping during the excavation and incineration phases. Approximately 26,000 tons of excavated waste was incinerated on-site; residual ash from the incinerated soil was then used as backfill. Fill material from a nearby borrow area was used in areas requiring additional backfilling. Major components of the incineration system included the waste staging area, the excavation building, and the incineration unit.

The waste staging area was divided into a feed preparation area and an ash storage area. The ash was reprocessed to meet clean-up criteria for organic compounds, and stored in bins until analytical results verified that the ash was "clean" and could be used as backfill material.

The excavation building was designed to hold materials from the landfill area for temporary storage prior to incineration. Material was then transported to the incinerator building via a conveyor infeed system.

A temporary building was constructed to house the incineration unit. The incineration process consisted of two phases. During the first phase, soil was heated to temperatures of up to 1,400 degrees Fahrenheit (°F). In the second phase, vapor from the soil combustion was heated to temperatures of up to 2,300 °F. The second phase was designed to break down organic compounds into water and carbon dioxide. The resulting off gases were treated in a tandem scrubber air pollution control system where the gas stream was cooled to approximately 180 °F and scrubbed to remove any fine particulates, aerosols, submicron heavy metals, and acidic gases. The scrubber water was treated off-site to meet National Pollution Discharge Elimination System (NPDES) discharge criteria and discharged to the Mississippi River.

4.2.2 Drainage and Backfilling of Ponds

Approximately 63 million gallons of water were drained from the four on-site ponds (Ponds A, B, C, and D). Approximately 38 million gallons were removed from Pond A alone, the largest of the four ponds. Pond water was treated off-site via a physical/chemical treatment system and discharged to the Mississippi River. The effluent met standards set by the EPA and Louisiana Department of Environmental Quality (LDEQ). After the ponds were completely drained, they were backfilled with

sand transported from the Mississippi River.

4.2.3 Landfill Cap Construction

After contaminated soil and drums were excavated and the landfill area was backfilled, a permanent cap was constructed over the landfill area to reduce infiltration and promote drainage. From bottom to top, the cap consists of the following components: (1) a gravel bed; (2) a gas venting layer; (3) 2 feet of compacted clay; (4) a sealed, high-density polyethylene liner; (5) a rainwater collection layer; (6) 18 inches of compacted clay; and (7) 6 inches of topsoil. The rainwater collection layer and gas venting layer are discussed below.

The rainwater collection layer is essentially a drainage network designed to divert infiltrated rainwater off of the cap. Any rainwater that percolates through the upper compacted clay layer becomes "trapped" in the rainwater collection layer and is diverted to a series of pipes located along the perimeter of the cap.

The gas vent layer includes a passive gas vent system (GVS) designed to relieve gas pressure generated during the natural decomposition of landfill waste. The GVS consists of a series of gas vents placed in the gravel bed layer directly above the ash and fill material. Originally, the vents were connected to steel pipes that routed gas through two 55-gallon drums containing activated carbon. The first drum was used to remove and collect condensate from the gas, and the second drum was used to remove organic compounds from the gas. In February 2008, the Cleve Reber Group (CRG) requested approval to modify the GVS. The existing GVS had been in operation for over 15 years and needed repair (CRG 2008a). The modification was approved by the EPA and LDEQ (EPA 2008a, LDEQ 2008a). The drums were removed and replaced with smaller carbon vessels that are designed for a passive GVS.

Gases emitted from the GVS are monitored during routine O&M procedures with a photoionization detector for organic compounds before entering the atmosphere. The activated carbon in the vessels is replaced if photoionization detector readings exceed 5 parts per million.

4.2.4 Stormwater Drainage System

A stormwater drainage system was constructed along the outer edge of the cap to prevent the accumulation of stormwater and to improve site drainage. The land elevation of the site is sloped to

promote stormwater runoff. Stormwater runoff is diverted off-site through conduits to the adjacent swampy areas.

4.2.5 Ground Water Monitoring Network

To monitor ground water quality in the Shallow Sand aquifer, eight ground water monitoring wells were installed along the perimeter of the site (see site layout map in Attachment 1 for monitoring well locations). Upgradient monitoring well P-7 is located along the western border of the site. Monitoring well P-6 is located along the northern site boundary. Monitoring wells P-9, P-10, and P-20 are located along the southern site boundary. Monitoring wells P-21, P-22, and P-23 are intended to serve as the downgradient monitoring wells. All of the wells were screened within the Shallow Sand aquifer (30-40 feet bgs).

4.3 OPERATION AND MAINTENANCE

O&M activities are conducted to ensure the effectiveness, protectiveness, and integrity of the remedy. The O&M activities include routine inspections and maintenance of the cap, the site stormwater drainage system, the site roads, and the site monitoring wells, as well as long-term ground water monitoring.

Semi-annual O&M ground water monitoring is currently being performed. Ground water samples are being analyzed for the following COCs: carbon tetrachloride, tetrachloroethylene, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, hexachlorocyclopentadiene, and mercury.

4.3.1 Monitoring Program

The Post-Closure Plan was prepared to describe the type and frequency of monitoring and maintenance activities to be performed at the Cleve Reber Superfund Site following completion of remedial activities and site closure. The revised Post-Closure Plan was submitted to the EPA in 1996 to update sampling and analysis procedures and to redefine the monitoring and maintenance activities (CRG 1996).

The CRG began post-closure care in May 1996. Quarterly monitoring was conducted until the second quarter of 1998. Semi-annual ground water sampling and site inspections began in 1999 and are typically performed during the first and third quarters. According to the Post-Closure Plan (CRG 1996), the cap

and the cap infiltration drainage system were to be inspected every two weeks during the first two months following completion of site cap construction, monthly for the next four months, quarterly for the following six months, and then semi-annually after the first year. The site drainage system, site roadways, and the site fence were to be inspected semi-annually. Ground water monitoring wells were to be inspected during each sampling event. Completed semi-annual site inspection forms and semi-annual ground water monitoring results are submitted to the EPA Remedial Project Manager.

Samples collected from the monitoring well network are analyzed for hexachlorobenzene, hexachlorobutadiene, hexachloroethane, hexachlorocyclopentadiene, carbon tetrachloride, tetrachloroethylene, and mercury. Ground water monitoring results are presented in semi-annual ground water monitoring reports. Data trends are discussed in Section 6.4.

4.3.2 Hurricanes Katrina and Rita Review

Hurricane Katrina made landfall on the coast of Louisiana, near the City of New Orleans, on August 29, 2005, resulting in severe damage from wind and flooding in southeastern Louisiana. On September 24, 2005, Hurricane Rita made landfall near the Texas/Louisiana border approximately 185 miles west of the Cleve Reber Superfund Site, resulting in wind and flood damage in southwestern Louisiana. The EPA conducted assessment activities for the site to determine if the hurricanes caused any damage, affected the effectiveness of the remedy, and/or led to an increase in contamination levels following hurricane-related flooding.

On October 12, 2005, a site inspection including ground water sampling was conducted. No evidence of damage at the site associated with the hurricanes was reported. There was no standing water or evidence of flooding or erosion which might have disturbed the ground surface area. No damage to the perimeter security fencing was observed (CH2M Hill 2005).

Ground water samples were collected from two shallow monitoring wells, P-10 and P-22, located in the far down gradient side of the property. Both samples were analyzed for volatiles, semivolatiles, hydrocarbons, and total metals. The EPA analysis detected bis(2-ethylhexyl)phthalate in slightly elevated levels in the two ground water samples (U.S. Department of Health and Human Services 2006).

The nearest drinking water well is located on a residential property approximately 100 feet away from the northern property line of the site. The ground water at the site flows to the east and south and is not likely to be consumed by the local population. The shallow ground water is also not used as a water supply. No contaminant migration has been recorded from the site ground water to domestic ground water sources. Therefore, it was determined that no adverse health effects were expected (U.S. Department of Health and Human Services 2006).

It was determined during the post-hurricane evaluation that trespassing and/or recreational usage was not expected because the perimeter fencing is intact. It was also concluded that the remedy instituted to protect the public against site-related health hazards was not compromised by the hurricanes. Only one elevated contaminant was detected and no evidence was found that the storm had increased the likelihood of public exposure to site-related contaminants (U.S. Department of Health and Human Services 2006).

The EPA determined that ground water sampling will continue under the current O&M plan to monitor the implemented remedy (EPA 2005).

4.4 OPERATION AND MAINTENANCE COST

O&M activities are crucial for the proper upkeep and monitoring of a site and are an important remedy component to ensure the remedy remains protective of human health and the environment as intended. Accordingly, the costs associated with O&M activities can be used as an indicator that these activities are progressing as intended.

According to the CRG representative, the average O&M cost per year during this review period has been $29,000. The costs include, but are not limited to (1) O&M of the site, (2) ground water sampling and analysis, and (3) consulting and reporting activities. The CRG also incurred an additional, one-time cost of $35,000 in 2008 to upgrade the GVS (EA 2008).

The O&M costs estimated in the ROD were approximately $100,000 (EPA 1987). The current O&M costs are less than the estimate presented in the ROD, but are reasonable considering the current level-of-activity, e.g., number of wells being sampled, parameters being analyzed, and frequency of sampling (as discussed in Section 4.3.1).

5.0 PROGRESS SINCE THE SECOND FIVE-YEAR REVIEW

This is the third five-year review for the Cleve Reber Superfund Site. The second five-year review was completed in September 2003. The site appears to have been properly maintained during the period between reviews. The scheduled date for the fourth five-year review will be five years from the signature date of this third report.

5.1 PROTECTIVENESS STATEMENT FROM THE SECOND FIVE-YEAR REVIEW

The Second Five-Year Review Report (EPA 2003) concluded that the selected remedy at the Cleve Reber Superfund Site was protective of human health and the environment.

5.2 SECOND FIVE-YEAR REVIEW RECOMMENDATIONS AND FOLLOW-UP ACTIONS

No deviations from the requirements stated in the ROD or issues of non-compliance were noted in the Second Five-Year Review Report. The following suggestion for improvement was identified (EPA 2003):

- The detection limit for all of the COCs should be below or equal to the Maximum Contaminant Levels (MCLs) and target levels.

It was noted that the quantitation limit used to detect the analyte hexachlorobenzene was greater than the MCL established under the Safe Drinking Water Act, and the quantitation limits used to detect the analytes hexachlorobutadiene and hexachloroethane were greater than the target concentration levels established in the closure plan. The reason that higher quantitation limits were used to detect these analytes is that method SW-8120, which had been used in the past, was no longer available. Under the quantitation methods that were used to detect these analytes, no analytes were detected. Moreover, in the past, none of these analytes have been detected; therefore, the EPA had no reason to believe that these analytes were present in tested ground water. In the future, the companies that are performing O&M at the site have agreed to use quantitation limits that are equal to or less than the MCL for hexachlorobenzene, and less than or equal to the target levels for hexachlorobutadiene and hexachloroethane, respectively.

5.3 STATUS OF RECOMMENDED ACTIONS

The findings from the previous five-year review recommended using laboratory quantitation limits that are less than or equal to the MCL for hexachlorobenzene and that are less than or equal to the target levels established in the Post-Closure Plan for hexachlorobutadiene and hexachloroethane. This recommendation has been implemented (Vulcan Chemicals 2003a).

During this five-year review period, the quantitation limit for hexachlorobenzene has been 1.0 microgram per liter (µg/L), which is equal to the MCL. The quantitation limits for hexachlorobutadiene and hexachloroethane were also at 1.0 µg/L. These chemicals do not have MCLs so the Post-Closure Plan (CRG 1996) set the "trigger level" at 1.0 µg/L. This value is above the EPA Region III Risk-Based Concentrations for hexachlorobutadiene and hexachloroethane (0.14 and 0.75 µg/L, respectively), which were listed in the Post-Closure Plan. The Region III Risk-Based Concentrations have been superseded by the EPA Regional Screening Levels (Oak Ridge National Laboratory 2008). The current screening levels for hexachlorobutadiene and hexachloroethane are 0.86 and 4.8 µg/L, respectively, calculated on 1×10^{-6} target carcinogenic risk levels.

The quantitation limit for hexachloroethane was below the current screening level. Hexachlorobutadiene was not detected at a quantitation limit of 1.0 µg/L, which is above the 0.86 µg/L target carcinogenic risk level. However, this concentration would represent a 1.2×10^{-6} target carcinogenic risk level, which is within the allowable range.

6.0 THIRD FIVE-YEAR REVIEW PROCESS

This section presents the process and findings of the third five-year review. Specifically, this section presents the findings of the document review, data review, ARAR review, site inspection, and interviews.

6.1 ADMINISTRATIVE COMPONENTS

This five-year review was led by Mr. Bartolome J. Cañellas, EPA Remedial Project Manager. LDEQ and EA Engineering, Science, and Technology, Inc. (EA) assisted in the review process. LDEQ's representative was Ms. Regina A. Philson, Environmental Manager. EA's team members included Ms. Lynette Collins and Ms. Kimberly Wallace-Wymore. EA notified the CRG representative,

Mr. Carleton Degges of Vulcan Materials Company, at the start of the five-year review process.

In February 2008, the review team established the review schedule, which included the following components:

- Document review;
- Data review;
- ARARs review;
- Site inspection; and
- Interviews.

6.2 COMMUNITY INVOLVEMENT

A public notice announcing the initiation of the five-year review for the site was published in the local newspaper, *The Gonzales Weekly Citizen*. Another public notice will be placed in the local newspaper upon completion of the five-year review process, and local contacts will be notified by letter. The public notices are presented in Attachment 8.

Upon signature, a copy of the Third-Five Year Review Report will be available online at http://www.epa.gov/superfund/cleanup/postconstruction/5yr.htm and at the following information repositories: (1) EPA Region 6, 1445 Ross Avenue, Dallas, Texas; and (2) LDEQ, Public Records Center, 602 N. Fifth Street, Baton Rouge, Louisiana.

6.3 DOCUMENT REVIEW

This five-year review included a review of relevant decision documents, implementation documents, remedy performance documents, O&M documents, and legal documents. The review included, but was not limited to, the (1) Record of Decision, (2) Remedial Action Report, (3) Closeout Report, (4) Post-Closure Plan, (5) Post-Closure Monitoring Reports, and (6) Previous Five-Year Review Reports. Complete references for all the documents reviewed are provided in Attachment 2.

6.4 DATA REVIEW

Ground water monitoring events have been conducted semi-annually by CRG since the second five-year review, except in the latter part of 2005 when post-hurricane sampling was conducted by the EPA. Ground water samples are typically analyzed for the following COCs: carbon tetrachloride, tetrachloroethylene, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, hexachlorocyclopentadiene, and mercury. During the post-hurricane sampling, only monitoring wells P-10 and P-22 were sampled. These samples were analyzed for volatiles by EPA SW-846 Method 8260B, semivolatiles by EPA SW-846 Method 8270C, hydrocarbons by EPA SW-846 Method 8121, and metals by EPA SW-846 Method 6010B.

Review of post-closure ground water analytical data indicates that concentrations of all COCs have typically been below detection limits with two exceptions. During the post-hurricane sampling event conducted by the EPA on October 12, 2005, estimated concentrations of hexachlorobenzene and hexachlorobutadiene were reported in monitoring well P-10 at 0.021 and 0.018 µg/L, respectively. The detected concentrations were below the trigger levels. These compounds were not detected during previous or subsequent sampling events conducted during this five-year review period, but the detection limit during the other events was higher (1.0 µg/L). During the sampling event conducted by CRG in May 2006, mercury was detected in four wells (P-7, P-21, P-22, and P-23) at concentrations ranging from 0.21 to 0.27 µg/L. Detected mercury concentrations were less than the MCL of 2.0 µg/L. The mercury concentrations in the four previous and four subsequent sampling events conducted during this five-year review period were below the detection limit of 0.20 µg/L.

6.5 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENT REVIEW

As part of this five-year review, ARARs identified in the ROD (EPA 1987) were reviewed to determine if any newly promulgated or modified requirements of federal and state environmental laws have significantly changed the protectiveness of the remedies implemented at the Cleve Reber Superfund Site since the last five-year review was conducted. No changes to ARARs were identified in either of the previous five-year reviews, and no new ARARs were found during this review. This conclusion was confirmed by the LDEQ in a letter dated March 2008 (LDEQ 2008b).

The ROD divided ARARs pertaining to remedial activities at the Cleve Reber Superfund Site into chemical-, location-, and action-specific categories, which are discussed below.

6.5.1 Chemical-Specific Applicable or Relevant and Appropriate Requirements

Chemical-specific ARARs are usually health or risk-based numerical values or methodologies used to determine acceptable concentrations of chemicals that may be found in or discharged to the environment. The chemical-specific ARARs specified in the ROD for the Cleve Reber Superfund Site are EPA MCLs for drinking water. The post-closure monitoring analyzes ground water samples for the following COCs: carbon tetrachloride, tetrachloroethylene, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, hexachlorocyclopentadiene, and mercury.

Hexachlorobutadiene and hexachloroethane do not have MCLs. A review of current MCLs indicates that MCLs for the other COCs have not changed since RA activities began at the site. In addition, no newly promulgated chemical-specific ARARs apply to the site. Therefore, all chemical-specific ARARs are currently being met, and the original cleanup levels remain protective of human health and the environment.

6.5.2 Location-Specific Applicable or Relevant and Appropriate Requirements

Location-specific ARARs restrict actions or contaminant concentrations in certain environmentally sensitive areas. Examples of areas regulated under various Federal regulations include floodplains, wetlands, and locations where endangered species or historically significant cultural resources are present (EPA 1989). The ROD identified only one location-specific ARAR pertaining to the Cleve Reber Superfund Site, as follows:

- **Flood plain Management Order, Executive Order No. 11988**—This Executive Order (40 Code of Federal Regulations [CFR] 6 Appendix A) dictates that federally funded or authorized actions within the 100-year flood plain avoid, to the maximum extent possible, adverse impacts associated with development of a flood plain. A facility located in a 100-year flood plain must be designed, constructed, operated, and maintained to prevent wash out of any hazardous waste by a 100-year flood, unless the owner or operator can demonstrate to the Regional Administrator's satisfaction that waste can be removed before flood waters arrive and that no adverse health hazards are at risk if flooding occurs.

The northeast portion of the site was originally below the 100-year flood plain of Lake Maurepas and was frequently flooded. As part of the RA, the surface elevation of the site was increased to be above the 100-year flood plain, and a flood berm with a minimum elevation of 7 feet above mean sea level was built along the northern and western perimeter of the site. Louisiana Administrative Code 33, Chapter 7, Section 711, Subsection B3(b) states that perimeter levees designed to protect a facility against a 100-year flood shall: (1) be engineered to minimize wind and water erosion, (2) have a grass cover or other protective cover to preserve the structural integrity, and (3) provide adequate protection against a 100-year flood (LDEQ 2008c). The flood berm was constructed in apparent agreement with the above requirements. During the site inspection, the flood berm appeared to be good condition.

A wetland assessment conducted by the U.S. Army Corps of Engineers confirmed that the Cleve Reber Superfund Site is not characterized as a wetland area. This designation would remove the site from the guidelines promulgated by Section 404 of the Clean Water Act (EPA 1987). Review of the ARARs indicates that no newly promulgated ARARs apply to the site and that all location-specific ARARs are currently being met.

6.5.3 Action-Specific Applicable or Relevant and Appropriate Requirements

Action-specific ARARs are usually technology- or activity-based requirements or limitations on actions or conditions involving specific substances. These requirements are triggered by the particular remedial activities that are selected to accomplish the remedy.

The ROD calls for the following action-specific ARARs to be met, based on the requirements of 40 CFR Part 264: (1) conduct and maintain post-closure care for 30 years; (2) maintain the integrity and effectiveness of any final cover, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover; (3) maintain and operate a leachate collection system unless leachate is deemed to be no longer a threat to human health and the environment; (4) monitor ground water and adequately maintain the ground water recovery system; (5) develop a written post-closure plan that describes monitoring and maintenance activities and provides the name, address, and telephone number of the person or office to contact at the facility during the post-closure period; and (6) document a description of the planned uses of the property during the post-closure period (EPA 1987). The PRPs

have complied with the requirements specified in the ROD. Neither the leachate collection system nor the ground water recovery system was part of the selected remedy.

The RA at this site has been completed, and the current operations at the site involve only O&M activities related to site maintenance. No hazardous waste treatment or disposal facilities remain at the site. ARARs that are related to post-closure care and maintenance of the clay cap are specified in 40 CFR §§ 264.117 through 264.120. These sections state that the integrity and effectiveness of the cap must be maintained. This includes making necessary repairs to correct settling, subsidence, erosion, and preventing erosion from damaging the final cover. In addition, use of the property must not be allowed to disturb the integrity of the final cover. No significant applicable changes have been made to these regulations that affect the remedy's protectiveness.

6.6 SITE INSPECTIONS

July 15, 2008

A site inspection was conducted on July 15, 2008, to assess the condition of the site and the effectiveness of measures employed to protect human health and the environment from the contaminants still present at the site. Attendees included: Bartolome Cañellas (EPA), Regina Philson (LDEQ), Kim Wallace-Wymore (EA), Carleton Degges (Vulcan Materials Company), and Scott Bergeron (Professional Technical Support Services, Inc. [Protech]). The site inspection report is provided in Attachment 3. The site inspection checklist is provided in Attachment 4. The site inspection photographs are provided in Attachment 5.

Cap

The landfill cap appeared to be in good condition at the time of the site inspection. The grass cover has been established on the cap. No cracking, settlement, or holes were observed in the cap. The CRG contractor, Protech, stated that any animal burrows observed are plugged with bentonite to prevent damage to the cap. Protech also recently repaired minor surface water erosion on the cap to the east of the GVS (Photograph 15). The site was mowed, clean, and appeared well maintained.

Gas Vent System

The site is equipped with a passive GVS. A total of 21 vent units are located on the landfill cap. The GVS was upgraded by the CRG to a carbon vent system in 2008. The new vent units are constructed of polyvinyl chloride and contain activated carbon, which can be easily removed and replaced as needed (Photographs 7, 8, and 9). The vent units are protected by wooden guard posts to prevent damage by lawn mowing equipment.

Monitoring Wells

All monitoring wells were visually inspected and appeared in good condition. The monitoring wells were clearly labeled and securely encased (lock and cover). Drums of purge water associated with CRG ground water sampling were staged beside each monitoring well pending disposal (Photograph 11). The inspection team observed two additional empty 55-gallon drums stored adjacent to monitoring well P-22, which were associated with the 2005 Hurricane Katrina Response sampling activities conducted by the EPA (Photograph 14).

Fence

The site is secured by a chain-link perimeter fence with barbed wire on top. Warning signs are posted at various locations along the northern, southern, eastern, and western property boundaries. A warning sign is also posted at the entrance gate (Photograph 2). The entrance gate is closed and locked when the site is unattended. During the site inspection, the perimeter fence was inspected for damage. The inspection team observed damage to the perimeter fence along the southern property line caused by a fallen tree on the adjacent property (Photograph 4). The fence was still standing, but was leaning inward.

September 5, 2008

Hurricane Gustav made landfall in Louisiana on September 1, 2008. On September 5, 2008, the CRG O&M contractor, Protech, conducted a site inspection to assess damages from the hurricane.

Repairs after Hurricane Gustav

Protech provided site inspection photographs documenting the minor damage to the site, e.g., a few fallen trees and branches (see Attachment 9). During this site inspection, Protech completed repairs to the fence, removed fallen branches, and removed the leaning tree noted during the site inspection on July 15, 2008.

6.7 SITE INTERVIEWS

In accordance with the requirements of the five-year review process, the EPA conducted interviews to gain additional information about site status. The EPA identified key individuals to be interviewed. The inspection team visited three residences located to the north of the site to determine if the residents had any comments or questions concerning the RA at the site. One of the residents, Ms. Renee Theriot, was home at the time and completed a site survey. Ms. Theriot stated that she had no concerns or complaints regarding the RA. She also stated that she would leave a copy of the survey form and postage-paid envelopes for the other two nearby residents. Table 2 lists the six individuals that completed interview records for the third five-year review.

TABLE 2

LIST OF INTERVIEWEES

Name	Title/Position	Organization	Date of Interview
Bartolome Cañellas	Remedial Project Manager	U.S. Environmental Protection Agency	March 19, 2008
Regina Philson	Project Manager	Louisiana Department of Environmental Quality	April 18, 2008
Kathleen Golden	Environmental Health Scientist Supervisor	Louisiana Department of Health and Hospitals	March 16, 2008
Carleton Degges	Environmental Remediation Manager	Vulcan Materials Company	April 10, 2008
Scott Bergeron	President	Professional Technical Support Services, Inc.	April 15, 2008
Renee Theriot	Adjacent Resident	--	July 15, 2008

The responses received by the interviewees were very favorable. The remedial work has been completed and the CRG continues to provide good care through the O&M activities. The ground water monitoring shows that no COCs have been detected. There have been no community health concerns or complaints identified related to the site's O&M activities. Post-hurricane evaluations found no damage and no releases that impacted public exposure to site-related contaminants. Transfer of monitoring results and other site information to EPA has been prompt. Routine communications are in place between agencies and CRG representatives that allow for information regarding site developments, activities, and progress to be disseminated. A suggestion that was identified through the interview process is highlighted as follows:

- **Scott Bergeron (Protech)**—He suggested discontinuing the process of temporarily containerizing the purge water from the monitoring wells, as the drums tend to be an eyesore at the site. He would rather change the method to dispersing the purge water on the ground surface while sampling unless the sampler observes an anomaly or site conditions change.

To review the interviewees' complete answers to the interview questions, please refer to Attachment 6.

7.0 TECHNICAL ASSESSMENT

The conclusions presented in this section support the determination that the selected remedy for the Cleve Reber Superfund Site is currently protective of human health and the environment. EPA guidance indicates that to assess the protectiveness of a remedy, three questions (Questions A, B, and C) shall be answered.

7.1 QUESTION A: IS THE REMEDY FUNCTIONING AS INTENDED BY THE DECISION DOCUMENTS?

The results of the site inspection and review of the ARARs and site data indicate that the remedy is functioning as intended by the ROD.

- **RA Performance**—Based on review of documents, ARARs, and the site visit, the selected remedy is functioning as intended by the ROD. The landfill cap has been well maintained, and the results of the ground water sampling activities indicate contamination is not migrating from the site. RAOs were achieved as documented by the closeout report.

- **Cost of System and O&M**—According to information provided by the CRG, the average cost for O&M and semi-annual ground water monitoring has been approximately $29,000 per year. The CRG also incurred a one-time additional cost of $35,000 in 2008 to upgrade the GVS. The O&M costs estimated in the ROD were approximately $100,000 (EPA 1987). The current O&M costs are less than the estimate presented in the ROD, but are reasonable considering the current level-of-activity, e.g., number of wells being sampled, parameters being analyzed, and frequency of sampling.

- **Opportunities for Optimization**—No opportunities for optimization were identified during this review. The current O&M activities are sufficient to monitor site conditions and the integrity of the cap.

- **Early Indicators of Potential Issues**—During the site inspection, the site appeared to be well maintained. The cap at the site is currently in good condition, and a good vegetative growth is present to prevent erosion. The inspection team observed damage to the perimeter fence along the southern property line caused by a fallen tree on the adjacent property. The fence was still standing, but was leaning inward. It is important to ensure structural integrity of the perimeter fence remains intact. Any breaches in the site perimeter fence could result in unauthorized site

access. The cap provides a barrier against exposure to contamination; therefore, an unacceptable exposure risk would not exist. This issue was noted to ensure the use restrictions on the property are followed and the long-term integrity of the cap is maintained. This issue was addressed with the repair of the fence and removal of fallen trees and branches in September 2008 after Hurricane Gustav.

- **Implementation of Institution Controls and Other Measures**—The PRPs entered a 45-year "Servitude of Access and Right of Use" agreement with the property owner on May 20, 1992. The CRG has the right to access the site and to take any "action deemed necessary to remediate the environmental conditions in, on, under, and around the property." The property owner is not allowed to "interfere with any remediation facilities occurring on the property" or "grant any hunting or other rights to third parties to enter or use the property." The property owner has indicated interest in reusing the property to the EPA and CRG. The CRG is currently discussing options for reuse of the property with the property owner. The EPA has stated that any reuse of the land is not allowed to disturb the cap or the O&M activities conducted by the CRG and that any change in land use requires approval by the EPA and LDEQ. However, there are no provisions in the agreement specifically identifying and restricting excavation or other intrusive activities that could compromise the integrity of the cap and affect the protectiveness of the remedy. Additionally, the agreement will expire in 2037. This does not affect the current protectiveness of the remedy but could affect the long-term protectiveness.

7.2 QUESTION B: ARE THE ASSUMPTIONS USED AT THE TIME OF REMEDY SELECTION STILL VALID?

- **Changes in Standards, Newly Promulgated Standards, and To-Be-Considered**—No changes to ARARS were identified and no newly-promulgated ARARs were identified. This was confirmed by the LDEQ (LDEQ 2008b).

- **Changes in Exposure Pathways**—No new additional human health exposure pathways were indentified. It does not appear that, at the time of the removal cleanup, there were ecological risk-based values used; however, after removal of the ponds and implementation of the remedy selected in the ROD, the exposure pathways for ecological receptors are likely incomplete.

- **Changes in Toxicity and Other Contaminant Characteristics**—During this five-year review period, the quantitation limits for hexachlorobutadiene and hexachloroethane were at 1.0 µg/L. These chemicals do not have MCLs so the Post-Closure Plan (CRG 1996) set the "trigger level" at 1.0 µg/L. This value is above the EPA Region III Risk-Based Concentrations for hexachlorobutadiene and hexachloroethane (0.14 and 0.75 µg/L, respectively), which were listed in the Post-Closure Plan. The Region III Risk-Based Concentrations have been superseded by the EPA Regional Screening Levels (Oak Ridge National Laboratory 2008). The current screening levels for hexachlorobutadiene and hexachloroethane are 0.86 and 4.8 µg/L, respectively, calculated on 1×10^{-6} target carcinogenic risk levels. The quantitation limit for hexachloroethane was below the current screening level. Hexachlorobutadiene was not detected at a quantitation limit of 1.0 µg/L, which is above the 0.86 µg/L target carcinogenic risk level. However, this concentration would represent a 1.2×10^{-6} target carcinogenic risk level, which is within the allowable range.

- **Changes in Land Use**—No changes in land use were identified. The property owner may discuss options for potential reuse of the property with the PRPs. As stated in the attached

"Servitude of Access and Right of Use" agreement, the EPA, the State of Louisiana, and the PRPs have an access agreement with the property owner, Mr. Vernon Schexnaydre, to perform the required RA activities at the site. The PRPs have the right to access the site and to take any "action deemed necessary to remediate the environmental conditions in, on, under, and around the property." The property owner is not allowed to "interfere with any remediation facilities occurring on the property" or "grant any hunting or other rights to third parties to enter or use the property." The EPA has stated that any reuse of the land is not allowed to disturb the cap or the O&M activities conducted by the PRPs. The ROD indicates that future site development would be restricted to ensure the integrity of the RA, thus perpetual maintenance of the cap is required. Any change in land use requires approval by the EPA and LDEQ.

- **New Contaminants and/or Contaminant Sources**—No new contaminants or contaminant sources have been identified.

- **Changes in Risk Assessment Methods**—The human health risk evaluation was conducted prior to generally accepted risk assessment guidance, e.g., EPA Risk Assessment Guidance for Superfund, Volume 3, Part A. However, these changes in methodologies would not have any significant impacts on the risk estimates provided in the Public Health Evaluation (EPA 1986).

- **Expected Progress Toward Meeting RAOs**—According to the closeout report the RAOs relating to contaminated soil, sediment, surface water, and air were achieved during the RA (CRG 1995). Ground water monitoring during this five-year review period indicates that the RAOs associated with ground water have also been achieved.

7.3 QUESTION C: HAS ANY OTHER INFORMATION COME TO LIGHT THAT COULD CALL INTO QUESTION THE PROTECTIVENESS OF THE REMEDY?

On August 29, 2005, Hurricane Katrina made landfall on the coast of Louisiana, near the City of New Orleans, resulting in severe damage from wind and flooding in southeastern Louisiana. On September 24, 2005, Hurricane Rita made landfall near the Texas/Louisiana border approximately 185 miles west of the Cleve Reber Superfund Site, resulting in wind and flood damage in southwestern Louisiana. On October 12, 2005, the EPA conducted assessment activities for the site to determine if the hurricanes caused any damage, affected the effectiveness of the remedy, and/or led to an increase in contamination levels following hurricane-related flooding. It was determined during the post-hurricanes' evaluation that trespassing and/or recreational usage was not expected because the perimeter fencing is intact. It was also concluded that the remedy instituted to protect the public against site-related health hazards was not compromised by the hurricanes. Only one elevated contaminant was detected and no evidence was found that the storm had increased the likelihood of public exposure to site-related contaminants (U.S. Department of Health and Human Services 2006).

Hurricane Gustav made landfall in Louisiana on September 1, 2008. On September 5, 2008, the CRG

O&M contractor, Protech, conducted a site inspection to access damages from the hurricane. Minor damage to the site (e.g., a few fallen trees and branches) was documented. The fallen trees and branches have been removed and repairs to the fence have been completed.

No other information has come to light as part of this Third Five-Year Review for the site that would call into question the protectiveness of the site remedy.

7.4 TECHNICAL ASSESSMENT SUMMARY

After documents and data were reviewed, and the site visit and interviews were completed, it appears that the remedy is functioning as intended by the ROD (EPA 1987). The exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of remedy selection are still valid. The ARARs cited in the ROD have been met. The cap is currently in good condition, and a good vegetative growth is present to prevent erosion. The CRG is sufficiently implementing the necessary O&M at the site. Since O&M began, concentrations of the COCs have consistently been below detection limits. There have been no changes in the physical conditions of the site that would affect the current protectiveness of the remedy. There is no other information that calls into question the current protectiveness of the remedy.

The property owner has indicated interest in reusing the property to the EPA and CRG. The CRG is currently discussing options for reuse of the property with the property owner. The EPA has stated that any reuse of the land is not allowed to disturb the cap or the O&M activities conducted by the CRG and that any change in land use requires approval by the EPA and LDEQ. The existing "Servitude of Access and Right of Use" agreement was primarily intended to provide access to the PRPs for site remediation. It does not restrict excavation or other intrusive activities that could compromise the integrity of the cap and affect the protectiveness of the remedy. Additionally, the agreement extends for 45 years from when it was signed in 1992, and will expire in 2037. This issue does not affect the current protectiveness of the remedy but could affect the long-term protectiveness.

The inspection team observed damage to the perimeter fence along the southern property line caused by a fallen tree on the adjacent property. The fence was still standing, but was leaning inward. It is important to ensure structural integrity of the perimeter fence remains intact. Any breaches in the site perimeter fence could result in unauthorized site access. The cap provides a barrier against exposure to contamination; therefore, an unacceptable exposure risk would not exist. This issue was noted to ensure

the use restrictions on the property are followed and the long-term integrity of the cap is maintained. This issue was addressed with the repair of the fence and removal of fallen trees and branches in September 2008 after Hurricane Gustav.

The Post-Closure Plan should be amended to include information regarding the (1) approved modification to the GVS, and (2) revised trigger levels for hexachlorobutadiene and hexachloroethane. Also, a determination should be made if lower detection limits for hexachlorobutadiene are achievable.

8.0 INSTITUTIONAL CONTROLS

Institutional controls are generally defined as non-engineered instruments such as administrative and legal tools that do not involve construction or physically changing the site, and that help minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Institutional controls can be used for many reasons including restriction of site use, modifying behavior, and providing information to individuals. Institutional controls may include easements, covenants, restrictions or other conditions on deeds, and/or ground water, and/or land use restriction documents (EPA 2000). The following sections describe the institutional controls implemented at the site, the potential effect of future land use plans on institutional controls, and any plans for changes to site contamination status.

8.1 TYPES OF INSTITUTIONAL CONTROLS IN PLACE AT THE SITE

The PRPs entered a 45-year "Servitude of Access and Right of Use" agreement with the property owner, Mr. Vernon Schexnaydre, on May 20, 1992. The PRPs have the right to access the site and to take any "action deemed necessary to remediate the environmental conditions in, on, under, and around the property." The property owner is not allowed to "interfere with any remediation facilities occurring on the property" or "grant any hunting or other rights to third parties to enter or use the property." Additionally, the property owner "cannot and will not attempt to direct the manner or method in which such remediation activities shall be performed." Attachment 7 provides the "Servitude of Access and Right of Use" agreement.

8.2 EFFECT OF FUTURE LAND USE PLANS ON INSTITUTIONAL CONTROLS

The property owner has indicated interest in reusing the property to the EPA and CRG. The CRG is

currently discussing options for reuse of the property with the property owner. The EPA has stated that no reuse of the land that would disturb the cap or the O&M activities conducted by the CRG will be allowed. Any change in land use requires approval by the EPA and LDEQ. At this time, no future land uses have been formally established for the site that would require an adjustment to the institutional controls currently being implemented.

8.3 PLANS FOR CHANGES TO SITE CONTAMINATION STATUS

No changes to the status of the contamination at the site are anticipated.

9.0 ISSUES

Based on this third five-year review, it appears that the remedy at the Cleve Reber Superfund Site has been implemented as planned and is functioning in accordance with the requirements stated in the ROD. No deficiencies or concerns with the remedy or O&M procedures were identified for the site.

During this third five-year review, the following issues are noted:

- **Notice on property deed**—The property owner has indicated interest in reusing the property to the EPA and CRG. The CRG is currently discussing options for reuse of the property with the property owner. The EPA has stated that any reuse of the land may not disturb the encapsulated ("capped") waste. The EPA has also stated that any reuse of the site must be compatible with the O&M activities conducted by the CRG. Any change in land use requires approval by the EPA and LDEQ. The existing "Servitude of Access and Right of Use" agreement between the property owner and the CRG was primarily intended to provide access to the companies who undertook site remediation. It does not restrict excavation or other intrusive activities that could compromise the integrity of the cap and affect the protectiveness of the remedy. A notice, as required in the Post-Closure Plan, should be recorded in the Parish property records with the deed(s) for the site property. This issue does not affect the current protectiveness of the remedy, but could affect the long-term protectiveness if the notice was not filed and the cap was damaged by incompatible uses.

- **Damage to perimeter fence**—The inspection team observed damage to the perimeter fence along the southern property line caused by a fallen tree on the adjacent property. The fence was still standing, but was leaning inward. It is important to ensure structural integrity of the perimeter fence remains intact. Any breaches in the site perimeter fence could result in unauthorized site access. The cap provides a barrier against exposure to contamination; therefore, an unacceptable exposure risk would not exist. This issue was noted to ensure the use restrictions on the property are followed and the long-term integrity of the cap is maintained. This issue was addressed with the repair of the fence and removal of fallen trees and branches in September 2008 after Hurricane Gustav.

- **Post-Closure Plan**—Changes have occurred regarding post-closure procedures and documentation. Two elements are associated with this issue:

  — **Upgraded Gas Vent System**—In February 2008, the CRG requested EPA approval of a proposed upgrade to the existing gas vent system. With approval from EPA and LDEQ in March 2008, the CRG implemented a new design that uses smaller carbon vessels for the passive vent system.

  — **Updated Trigger Levels**—Hexachlorobutadiene and hexachloroethane do not have Maximum Contaminant Levels. The Post-Closure Plan listed EPA Region III Risk-Based Concentrations for these chemicals. However, since these low results were not achievable, the PRQL of 1 µg/L was used. Since that time, the EPA Region III Risk-Based Concentrations have been superseded by the EPA Regional Screening Levels. The risk-based concentration for hexachloroethane has increased to 4.8 µg/L, which is above the PRQL. The risk-based concentration for hexachlorobutadiene has also increased to 0.86 µg/L, but is still below the PRQL. At the PRQL, the calculated excess lifetime cancer risk level is 1.2×10^{-6} or 1.2 in one million.

Table 3 provides a summary table of issues identified, and if they currently affect the remedy protectiveness.

TABLE 3

ISSUES IDENTIFIED

Issue	Affects Remedy Protectiveness	
	Short-Term	**Long-Term**
Notice on property deed	No	Yes
Damage to perimeter fence	No	No
Post-Closure Plan	No	No

10.0 RECOMMENDATIONS AND FOLLOW-UP ACTIONS

No deviations from the requirements in the ROD were noted during the review. Based on a review of post-closure care ground water monitoring data and O&M activities, the selected remedy and original cleanup levels remain protective of human health and the environment. O&M activities for the site need to continue. The following recommendations are provided to address the issues identified during the third five-year review process:

- **Notice on Property Deed**—Place a notation on the property deed in the Parish property records to notify any potential purchaser of the property that: (1) the land has been used to manage hazardous wastes; and (2) the land's use is restricted under 40 CFR Part 264, Subpart G. The

purpose of the land use restriction is to maintain integrity of the cap by eliminating the possibility of certain land uses which could result in subsequent damage to the cap and affect the protectiveness of the remedy. A copy of the notice filed on the property deed needs to be provided to the EPA. This notice is a requirement under RCRA Section 264, an ARAR under the ROD, and a requirement of the 1996 Post-Closure Plan for the Cleve Reber Superfund Site.

- **Damage to perimeter fence**—Remove the fallen tree and any other vegetation affecting the integrity of the perimeter fence. Repair all damaged areas of the site's perimeter fencing. These actions were completed in September 2008 after Hurricane Gustav.

- **Post-Closure Plan**—Provide an addendum to the Post-Closure Plan that documents the approved modification to the gas vent system. Provide an addendum to the Post-Closure Plan that documents the revised trigger levels and establishes whether lower detection limits for hexachlorobutadiene are achievable.

Table 4 summarizes the recommendations and follow-up actions for the Cleve Reber Superfund Site.

11.0 PROTECTIVENESS STATEMENT

Based on the information available during the third five-year review, the selected remedy for the Cleve Reber Superfund Site is considered protective of human health and the environment in the short-term. The remedy is functioning as intended by the ROD. The exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of remedy selection are still valid. The ARARs cited in the ROD have been met. The cap is currently in good condition, and a good vegetative growth is present to prevent erosion. The ongoing O&M activities at the site are being sufficiently implemented. Since O&M began, concentrations of the COCs have consistently been below detection limits. There have been no changes in the physical conditions of the site that would affect the current protectiveness of the remedy.

In order for the remedy to remain protective of human health and the environment in the long-term, a notice as required by RCRA Section 264, an ARAR, and as required by the Post-Closure Plan, needs to be filed with the Parish and placed on the property deed. The purpose of the land use restriction is to maintain integrity of the cap by eliminating the possibility of certain land uses which could result in subsequent damage to the cap and affect the protectiveness of the remedy. A copy of the notice needs to be placed in the administrative record file for the site.

It is recommended that all follow-up actions identified in this Third Five-Year Review Report be implemented within one year of the date of this report.

TABLE 4

RECOMMENDATIONS AND FOLLOW-UP ACTIONS

Issue	Recommendations and Follow-Up Actions	Party Responsible	Oversight Agency	Milestone Date	Follow-Up Actions: Affects Remedy Protectiveness (Yes/No)	
					Short-Term	Long-Term
Notice on property deed	Place a notation on the property deed in the Parish property records to notify any potential purchaser of the property that: (1) the land has been used to manage hazardous wastes; and (2) the land's use is restricted under 40 CFR Part 264, Subpart G. Provide a copy of the notice to EPA.	PRPs	EPA, LDEQ	Within 1 year of Final Third Five-Year Review Report	No	Yes
Damage to perimeter fence	Remove fallen tree and other vegetation affecting the integrity of the perimeter fence. Repair all damaged areas of the site's perimeter fencing.	PRPs	EPA	Within 1 year of Final Third Five-Year Review Report (Completed September 2008)	No	No
Post-Closure Plan	Provide an addendum to the Post-Closure Plan that documents the approved modification to the gas vent system. Provide an addendum to the Post-Closure Plan that documents the revised trigger levels and establishes whether lower detection limits for hexachlorobutadiene are achievable.	PRPs	EPA	Within 1 year of Final Third Five-Year Review Report	No	No

Notes:

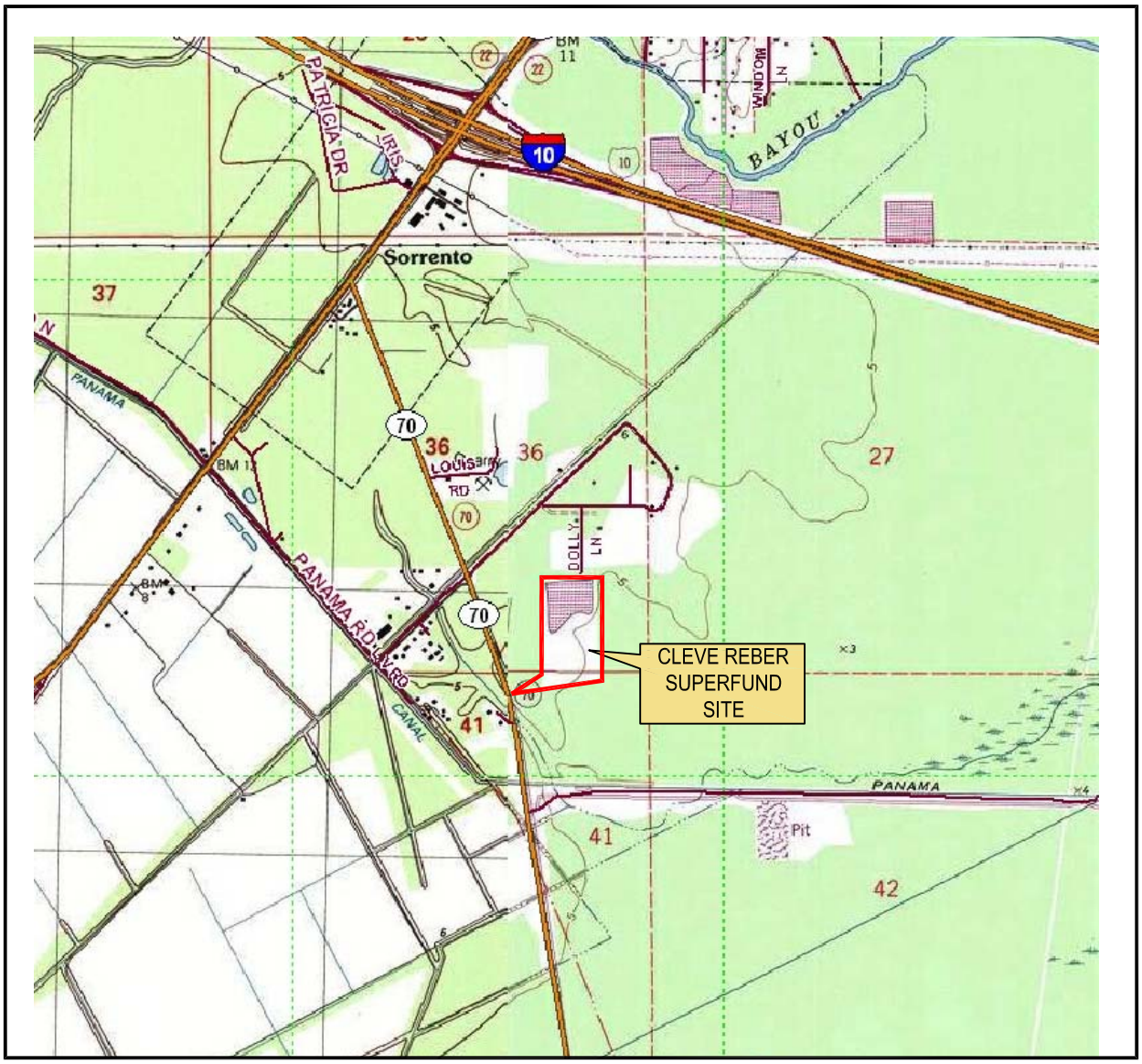
CFR Code of Federal Regulations
EPA U.S. Environmental Protection Agency
LDEQ Louisiana Department of Environmental Quality
PRP Potentially responsible party(ies)

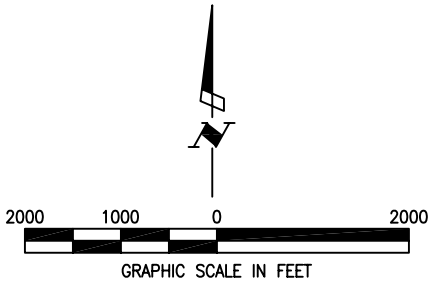
12.0 NEXT REVIEW

The Cleve Reber Superfund Site requires ongoing five-year reviews. The next review will be conducted within the next five years, but no later than September 2013.

Attachment 1

Site Location Map, Site Layout Map, and Aerial Photograph





Referenced From: U.S. Geological Survey 1989

PREPARED FOR:	DESIGNED BY	CLEVE REBER SUPERFUND SITE ASCENSION PARISH, LOUISIANA					SITE LOCATION MAP
	–						
	PROJECT MGR L. COLLINS						
BY EA ENGINEERING, SCIENCE, AND TECHNOLOGY	DRAWN BY L. HORNE	CHECKED BY KWW	SCALE AS SHOWN	DATE SEPTEMBER 2008	PROJECT NO 1434229	FIGURE 1	

Modified From: EPA 2003

PREPARED FOR: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY	DESIGNED BY –	CLEVE REBER SUPERFUND SITE ASCENSION PARISH, LOUISIANA				SITE LAYOUT MAP	
	PROJECT MGR L. COLLINS						
BY EA ENGINEERING, SCIENCE, AND TECHNOLOGY	DRAWN BY L. HORNE	CHECKED BY KWW	SCALE AS SHOWN	DATE SEPTEMBER 2008	PROJECT NO 1434229	FIGURE 2	

Referenced From: GOOGLE EARTH

PREPARED FOR:	DESIGNED BY –	CLEVE REBER SUPERFUND SITE ASCENSION PARISH, LOUISIANA				AERIAL PHOTOGRAPH	
	PROJECT MGR L. COLLINS						
BY EA ENGINEERING, SCIENCE, AND TECHNOLOGY	DRAWN BY L. HORNE	CHECKED BY KWW	SCALE AS SHOWN	DATE SEPTEMBER 2008	PROJECT NO 1434229	FIGURE 3	

Attachment 2

Documents Reviewed

DOCUMENTS REVIEWED

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Attachment 3

Site Inspection Report

THIRD FIVE-YEAR REVIEW
SITE INSPECTION REPORT

CLEVE REBER SUPERFUND SITE
ASCENSION PARISH, LOUISIANA

July 2008

PREPARED BY:

United States Environmental Protection Agency
Region 6
Dallas, Texas

1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) Region 6 has conducted the third five-year review of the remedial action (RA) implemented at the Cleve Reber Superfund Site (site) in Ascension Parish, Louisiana. The purpose of this third five-year review was to determine whether the selected remedy for the site continues to protect human health and the environment.

A site inspection was conducted to verify that all components of the remedies are operating in accordance with criteria established in the Record of Decision (ROD). This report summarizes the results of the site inspection.

2.0 BACKGROUND SUMMARY

The site was originally used as a borrow pit for fill material used in the construction of Highway 70 and the Sunshine Bridge. After the bridge and highway were completed, the site was used as a disposal area for municipal waste. The site also accepted industrial waste from chemical plants located in the Ascension Parish area. A Louisiana court ordered the site to stop receiving waste in 1974; the site was abandoned later that same year. EPA conducted an emergency cleanup in 1983 and removed numerous drums and surface piles. A temporary cap was put over the former landfill area to prevent infiltration of surface water. Surface soil and surface water samples collected during a remedial investigation at the site showed elevated levels of chlorinated organic compounds.

In March 1987, EPA signed a ROD outlining the following selected remedy for the site: (1) excavation of contaminated soil, industrial wastes, and drums; (2) incineration of contaminated soil using a transportable incineration system; (3) draining of on-site ponds and treatment of pond water; (4) backfilling of drained ponds using ash from incinerated soil and clean backfill; (5) ground water monitoring; (6) placement of a cap over the landfill; and (7) post-closure care and monitoring for 30 years. RA activities began in September 1993 and were completed in May 1996. The site was deleted from the National Priorities List in December 1997.

Semi-annual operation and maintenance (O&M) and ground water monitoring are currently being performed. Ground water samples are being analyzed for the following contaminants of concern:

carbon tetrachloride, tetrachloroethane, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, hexachlorocyclopentadiene, and mercury. Since routine ground water monitoring began, concentrations of the contaminants of concern listed above have consistently been below the maximum contaminant levels.

3.0 SITE INSPECTION ACTIVITIES

On July 15, 2008, a site inspection was conducted to assess the condition of the site and the protective measures employed to protect human health and the environment from the contaminants still present at the site. The inspection evaluated the condition of the monitoring wells, condition of the landfill cap, postings, and site fencing. The weather conditions during the inspection were sunny and humid with temperatures in the mid-90s.

The following individuals attended the site inspection:

- Bart Cañellas, EPA
- Regina Philson, Louisiana Department of Environmental Quality (LDEQ)
- Kim Wallace-Wymore, EA Engineering, Science, and Technology, Inc.
- Carleton Degges, Vulcan Materials Company, Potentially Responsible Party (PRP) Representative
- Scott Bergeron, Professional Technical Support Services, Inc. (Protech), PRP contractor.

Cap

The landfill cap appeared to be in good condition at the time of the site inspection. The grass cover has been established on the cap. No cracking, settlement, or holes were observed in the cap. The PRP contractor, Protech, stated that any animal burrows observed are plugged with bentonite to prevent damage to the cap. Protech also recently repaired minor surface water erosion on the cap to the east of the gas vent system (Photograph 15). The site was mowed, clean, and appeared well maintained.

Gas Vent System

The site is equipped with a passive gas vent system. A total of 21 vent units are located on the landfill cap. The gas vent system was upgraded by the PRP to a carbon vent system in 2008. The new vent units are constructed of polyvinyl chloride and contain activated carbon, which can be easily removed and replaced as needed (Photographs 7 and 9). The vent units are protected by wooden guard posts to prevent damage by lawn mowing equipment.

Monitoring Wells

All monitoring wells were visually inspected and appeared in good condition. The monitoring wells were clearly labeled and securely encased (lock and cover). Drums of purge water associated with PRP ground water sampling were staged beside each monitoring well pending disposal (Photograph 11). The inspection team observed two additional 55-gallon drums stored adjacent to monitoring well P-22, which were associated with the 2005 Hurricane Katrina Response sampling activities conducted by EPA (Photograph 14).

Fence

The site is secured by a chain-link perimeter fence with barbed wire on top. Warning signs are posted at various locations along the northern, southern, eastern, and western property boundaries. A warning sign is also posted at the entrance gate (Photograph 2). The entrance gate is closed and locked when the site is unattended. During the site inspection, the perimeter fence was inspected for damage. The inspection team observed damage to the perimeter fence along the southern property line caused by a fallen tree on the adjacent property (Photograph 4). The fence is still standing, but is leaning inward.

Resident Interviews

After the site inspection was completed, the inspection team visited three residences located to the north of the site to determine if the residents had any comments or questions concerning the RA at the site. One of the residents, Ms. Renee Theriot, was home at the time and completed a site survey. Ms. Theriot stated that she had no concerns or complaints regarding the RA. She also stated that she would leave a copy of the survey form and postage-paid envelopes for the other two nearby residents. Interview questionnaires will be included in the Five-Year Review Report.

Land Reuse

As stated in the deed notice, the EPA, the State of Louisiana, and the PRP have a Grant of Servitude from the property owner, Mr. Vernon Schexnaydre, to perform the required RA activities at the site. The PRP has the right to access the site and to take any "action deemed necessary to remediate the environmental conditions in, on, under, and around the property." The property owner is not allowed to "interfere with any remediation facilities occurring on the property" or "grant any hunting or other rights to third parties to enter or use the property." The

property owner may discuss options for potential reuse of the property with the PRP. The EPA has stated that any reuse of the land is not allowed to disturb the cap or the O&M activities conducted by the PRP. The ROD, signed on March 31, 1987, indicates that future site development would be restricted to ensure the integrity of the RA and thus perpetual maintenance of the cap is required. Any change in land use would require approval by the EPA and LDEQ.

4.0 FINDINGS

The following issues were identified during the site inspection:

- The inspection team observed damage to the perimeter fence along the southern property line caused by a fallen tree on the adjacent property (Photograph 4). The fence is still standing, but is leaning inward. This issue should be addressed, but it does not affect the protectiveness of the remedy because the cap is functioning as intended.

- The property owner may discuss potential reuse of the property with the PRP. To ensure that the current protectiveness of the remedy is not affected, EPA has stated that any reuse of the property cannot disturb the integrity of the cap and cannot interfere with the O&M activities conducted by the PRP.

Attachment 4

Site Inspection Checklist

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

I. SITE INFORMATION

Site Name: Cleve Reber Superfund Site	**Date of Inspection:** July 15, 2008
Location and Region: Ascension Parish, Louisiana	**EPA ID:** LAD980501456
Agency, office, or company leading the five-year review: EPA Region 6	**Weather/temperature:** 96º F, 80% humidity

Remedy Includes: (Check all that apply)

- ☒ Landfill cover/containment
- ☒ Access controls
- ☒ Institutional controls
- ☐ Ground water pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other (Monitored natural attenuation)

Attachments: ☒ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (Check all that apply)

1. O&M Site Manager Carleton Degges (Name) Environmental Remediation Manager, Vulcan Materials (Title)

Interviewed: ☒ by mail ☐ at office ☐ by phone Phone no. (205) 298-3063
Problems, suggestions: ☐ Report attached

Mr. Degges was an inspection team member on July 15, 2008.

2. O&M Staff Scott Bergeron (Name) President, Professional Technical Support Services, Inc. (Protech) (Title)

Interviewed: ☒ by mail ☐ at office ☐ by phone Phone no. (225) 293-0136
Problems, suggestions: ☐ Report attached

Mr. Bergeron was an inspection team member on July 15, 2008.

3. Local regulatory authorities and response agencies (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency Louisiana Department of Environmental Quality
Contact Regina Philson (Name) Environmental Scientist (Title)

Interviewed: ☒ by mail ☐ at office ☐ by phone Phone no. (225) 219-3210
Problems, suggestions: ☐ Report attached

Ms. Philson was an inspection team member on July 15, 2008.

Agency Louisiana Department of Health and Hospitals
Contact Kathleen Golden (Name) Environmental Health Scientist Supervisor (Title)

Interviewed: ☒ by mail ☐ at office ☐ by phone Phone no. (888) 293-7020
Problems, suggestions: ☐ Report attached

4. Other interviews (optional): ☐ Reports attached

Renee Theriot, one of the adjacent residents, completed an interview form during the site visit. The inspection team attempted to contact two additional residents, but they were not at home. Ms. Theriot stated that she would give a copy of the interview form to the other nearby residents to complete.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. O&M Documents				
☐ O&M manual (O&M Work Plan)	☐ Readily available	☐ Up to date	☒ N/A	
☐ As-built drawings	☐ Readily available	☐ Up to date	☒ N/A	
☒ Maintenance logs	☐ Readily available	☒ Up to date	☐ N/A	
Remarks: Maintenance logs are kept at Protech's office.				
2. Site-Specific Health and Safety Plan	☐ Readily available	☐ Up to date	☒ N/A	
☐ Contingency plan/emergency response plan	☐ Readily available	☐ Up to date	☐ N/A	
Remarks: Protech uses a generic health and safety plan because the site has reached post-closure status.				
3. O&M and OSHA Training Records	☐ Readily available	☒ Up to date	☐ N/A	
Remarks: Records are kept at Protech's office.				
4. Permits and Service Agreements				
☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A	
☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A	
☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A	
☐ Other permits _____	☐ Readily available	☐ Up to date	☒ N/A	
Remarks:				
5. Gas Generation Records	☐ Readily available	☐ Up to date	☒ N/A	
6. Settlement Monument Records	☐ Readily available	☐ Up to date	☒ N/A	
7. Ground Water Monitoring Records	☒ Readily available	☒ Up to date	☐ N/A	
8. Leachate Extraction Records	☐ Readily available	☐ Up to date	☒ N/A	
9. Discharge Compliance Records				
☐ Air	☐ Readily available	☐ Up to date	☒ N/A	
☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A	
Remarks:				
10. Daily Access/Security Logs	☐ Readily available	☐ Up to date	☒ N/A	
Remarks: The security gate is locked when the site is unattended.				

IV. O&M COSTS

1. O&M Organization

☐ State in-house ☐ Contractor for State ☒ PRP in-house

☐ Contractor for PRP ☐ Other _____

2. O&M Cost Records

☐ Readily available ☒ Up to date ☐ Funding mechanism/agreement in place

☐ Original O&M cost estimate ☐ Breakdown attached

Total annual cost by year for review period

Date	Date	Total Cost (Average)		
From 2003	to 2004	$29,000	-	☐ Breakdown attached
From 2004	to 2005	$29,000	-	☐ Breakdown attached
From 2005	to 2006	$29,000	-	☐ Breakdown attached
From 2006	to 2007	$29,000	-	☐ Breakdown attached
From 2007	to 2008	$29,000	-	☐ Breakdown attached
From	to		-	☐ Breakdown attached
From	to		-	☐ Breakdown attached
From	to		-	☐ Breakdown attached

These costs represent the average cost per year of operation and maintenance and ground water monitoring. (provided by Carleton Degges, PRP Representative)

3. Unanticipated or Unusually High O&M Costs During Review Period

The PRP accrued an additional $35,000 in cost for the 2008 gas vent system upgrade.

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. Fencing damaged ☐ Location shown on site map ☒ Gates secured ☐ N/A

Remarks: Tree has damaged a portion of the perimeter fence to the east of monitoring well P-10.

B. Other Access Restrictions

1. Signs and other security measures ☐ Location shown on site map ☐ N/A

Remarks: Signs are posted at the front gate and along the perimeter fence. Monitoring wells are closed and locked.

C. Institutional Controls

1. Implementation and enforcement

Site conditions imply ICs not properly implemented ☐ Yes ☒ No ☐ N/A

Site conditions imply ICs not being fully enforced ☐ Yes ☒ No ☐ N/A

Type of monitoring (e.g., self-reporting, drive by) Ground water monitoring

Frequency Semi-annual

Responsible party/agency Vulcan Materials Company

Contact Carleton Degges (Name) Environmental Remediation Manager (Title) 205-298-3063 (Phone no.)

Reporting is up-to-date ☒ Yes ☐ No ☐ N/A

Reports are verified by the lead agency ☒ Yes ☐ No ☐ N/A

Specific requirements in deed or decision documents have been met ☒ Yes ☐ No ☐ N/A

Violations have been reported ☐ Yes ☐ No ☒ N/A

Other problems or suggestions: ☐ Report attached

2. Adequacy ☒ ICs are adequate ☐ ICs are inadequate ☐ N/A

Remarks: Deed restriction restricts any use of the property that interferes with the remediation activities.

D. General

1. Vandalism/trespassing ☐ Location shown on site map ☒ No vandalism evident

Remarks:

2. Land use changes onsite ☒ N/A

Remarks:

3. Land use changes offsite ☒ N/A

Remarks:

VI. GENERAL SITE CONDITIONS

A. Roads ☒ Applicable ☐ N/A

1. Roads damaged ☐ Location shown on site map ☒ Roads adequate ☐ N/A

Remarks:

B. Other Site Conditions

Remarks: Site was in good condition during site visit. The cap was in good condition at the time of the site visit. There is some damage to the perimeter fence, but it does not affect the overall protectiveness of the remedy.

VII. LANDFILL COVERS ☒ Applicable ☐ N/A

A. Landfill Surface

1. Settlement (Low spots) ☐ Location shown on site map ☒ Settlement not evident
Areal extent _____ Depth _____
Remarks: _____

2. Cracks ☐ Location shown on site map ☒ Cracking not evident
Lengths _____ Widths _____ Depths _____
Remarks: _____

3. Erosion ☐ Location shown on site map ☒ Erosion not evident
Areal extent _____ Depth _____
Remarks: _____

4. Holes ☐ Location shown on site map ☒ Holes not evident
Areal extent _____ Depth _____
Remarks: Any burrows identified are plugged with bentonite by the PRP.

5. Vegetative Cover ☒ Grass ☐ Cover properly established ☒ No signs of stress
☐ Trees/Shrubs (indicate size and locations on a diagram)
Remarks: Grass is mowed by the PRP 4-5 times per year.

6. Alternative Cover (armored rock, concrete, etc.) ☐ N/A
Remarks: _____

7. Bulges ☐ Location shown on site map ☒ Bulges not evident
Areal extent _____ Depth _____
Remarks: _____

8. Wet Areas/Water Damage ☒ Wet areas/water damage not evident

☐ Wet areas	☐ Location shown on site map	☐ Areal extent _____
☐ Ponding	☐ Location shown on site map	☐ Areal extent _____
☐ Seeps	☐ Location shown on site map	☐ Areal extent _____
☐ Soft subgrade	☐ Location shown on site map	☐ Areal extent _____

Remarks: _____

9. Slope Instability ☐ Slides ☐ Location shown on site map
☒ No evidence of slope instability Areal extent _____
Remarks: _____

B. Benches ☐ Applicable ☒ N/A
(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)

1. Flows Bypass Bench ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

2. Bench Breached ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

3. Bench Overtopped ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

C. Letdown Channels ☐ Applicable ☒ N/A

(Channel lined with erosion control mats, rip rap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. Settlement ☐ Location shown on site map ☐ No evidence of settlement

Areal extent _____ Depth _____

Remarks: _____

2. Material Degradation ☐ Location shown on site map ☐ No evidence of degradation

Material type _____ Areal extent _____

Remarks: _____

3. Erosion ☐ Location shown on site map ☐ No evidence of erosion

Areal extent _____ Depth _____

Remarks: _____

4. Undercutting ☐ Location shown on site map ☐ No evidence of undercutting

Areal extent _____ Depth _____

Remarks: _____

5. Obstructions Type _____

☐ No obstructions ☐ Location shown on site map

Areal extent _____ Size _____

Remarks: _____

6. Excessive Vegetative Growth Type _____

☐ No evidence of excessive growth ☐ Vegetation in channels does not obstruct flow

☐ Location shown on site map Areal extent _____

Remarks: _____

D. Cover Penetrations ☒ Applicable ☐ N/A

1. Gas Vents ☐ Active ☒ Passive

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☒ Good condition

☐ Evidence of leakage at penetration ☐ Needs O&M ☐ N/A

Remarks: New gas vent system installed by the PRP in 2008.

2. Gas Monitoring Probes

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs O&M ☒ N/A

Remarks: _____

3. Monitoring Wells (within surface area of landfill)

☐ Evidence of leakage at penetration ☐ Needs O&M ☐ N/A

Remarks: No evidence of leakage at monitoring wells.

4. Leachate Extraction Wells

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs O&M ☒ N/A

Remarks: _____

5. Settlement Monuments ☐ Located ☐ Routinely surveyed ☒ N/A

Remarks: _____

E. Gas Collection and Treatment ☐ Applicable ☒ N/A

1. Gas Treatment Facilities

☐ Flaring ☐ Thermal destruction ☐ Collection for reuse

☐ Good condition ☐ Needs O&M

Remarks: _____

2. Gas Collection Wells, Manifolds, and Piping ☐ Good condition ☐ Needs O&M
Remarks: _____

3. Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings)
☐ Good condition ☐ Needs O&M ☐ N/A
Remarks: _____

F. Cover Drainage Layer ☐ Applicable ☒ N/A

1. Outlet Pipes Inspected ☐ Functioning ☐ N/A
Remarks: _____

2. Outlet Rock Inspected ☐ Functioning ☐ N/A
Remarks: _____

G. Detention/Sedimentation Ponds ☐ Applicable ☒ N/A

1. Siltation Areal extent _____ Size _____
☐ N/A ☐ Siltation not evident
Remarks: _____

2. Erosion Areal extent _____ Depth _____
☐ N/A ☐ Erosion not evident
Remarks: _____

3. Outlet Works ☐ Functioning ☐ N/A
Remarks: _____

4. Dam ☐ Functioning ☐ N/A
Remarks: _____

H. Retaining Walls ☐ Applicable ☒ N/A

1. Deformations ☐ Location shown on site map ☐ Deformation not evident
Horizontal displacement _____ Vertical displacement _____
Rotational displacement _____
Remarks: _____

2. Degradation ☐ Location shown on site map ☐ Degradation not evident
Remarks: _____

I. Perimeter Ditches/Off-Site Discharge ☐ Applicable ☒ N/A

1. Siltation ☐ Location shown on site map ☐ Siltation not evident
Areal extent _____ Depth _____
Remarks: _____

2. Vegetative Growth ☐ Location shown on site map ☐ N/A
☐ Vegetation does not impede flow
Areal extent _____ Type _____
Remarks: _____

3. Erosion ☐ Location shown on site map ☐ Erosion not evident
Areal extent _____ Depth _____
Remarks: _____

4. Discharge Structure ☐ Functioning ☐ N/A

Remarks: _____

VIII. VERTICAL BARRIER WALLS ☐ Applicable ☒ N/A

1. Settlement ☐ Location shown on site map ☐ Settlement not evident

Areal extent _____ Depth _____

Remarks: _____

2. Performance Monitoring Type of monitoring _____

☐ Performance not monitored Frequency _____ ☐ Evidence of breaching

Head differential _____

Remarks: _____

IX. GROUND WATER/SURFACE WATER REMEDIES ☐ Applicable ☒ N/A

A. Ground Water Extraction Wells, Pumps, and Pipelines ☐ Applicable ☐ N/A

1. Pumps, Wellhead Plumbing, and Electrical

☐ Good condition ☐ All required wells located ☐ Needs O&M ☐ N/A

Remarks: _____

2. Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances

☐ Good condition ☐ Needs O&M

Remarks: _____

3. Spare Parts and Equipment

☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

B. Surface Water Collection Structures, Pumps, and Pipelines ☐ Applicable ☐ N/A

1. Collection Structures, Pumps, and Electrical

☐ Good condition ☐ Needs O&M

Remarks: _____

2. Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances

☐ Good condition ☐ Needs O&M

Remarks: _____

3. Spare Parts and Equipment

☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

C. Treatment System ☐ Applicable ☐ N/A

1. Treatment Train (Check components that apply)

☐ Metals removal ☐ Oil/water separation ☐ Bioremediation
☐ Air stripping ☐ Carbon absorbers
☐ Filters _____
☐ Additive (e.g., chelation agent, flocculent) _____
☐ Others _____
☐ Good condition ☐ Needs O&M
☐ Sampling ports properly marked and functional
☐ Sampling/maintenance log displayed and up to date
☐ Equipment properly identified
☐ Quantity of ground water treated annually _____
☐ Quantity of surface water treated annually _____

Remarks: _____

2. Electrical Enclosures and Panels (Properly rated and functional)

☐ N/A ☐ Good condition ☐ Needs O&M

Remarks: _____

3. Tanks, Vaults, Storage Vessels

☐ N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs O&M

Remarks: _____

4. Discharge Structure and Appurtenances

☐ N/A ☐ Good condition ☐ Needs O&M

Remarks: _____

5. Treatment Building(s)

☐ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair
☐ Chemicals and equipment properly stored

Remarks: _____

6. Monitoring Wells (Pump and treatment remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
☐ All required wells located ☐ Needs O&M ☐ N/A

Remarks: _____

D. Monitored Natural Attenuation ☐ Applicable ☐ N/A

1. Monitoring Wells (Natural attenuation remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled (quarterly) ☐ Good condition
☐ All required wells located ☐ Needs O&M ☐ N/A

Remarks: _____

X. OTHER REMEDIES

If there are remedies applied at the site that are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

The purpose of the remedy was to (1) eliminate the potential of unauthorized personnel to come in contact with site contaminants, (2) reduce the potential for future migration of contaminants to shallow ground water, and (3) eliminate the potential contamination of aquatic organisms. Based on the observations made during the site inspection, the remedy appears to be effective and functioning as designed.

B. Adequacy of O&M

There were no O&M issues identified during the site visit. O&M appears to be adequate. The site was mowed, clean, and appeared well maintained.

C. Early Indicators of Potential Remedy Failure

None identified.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.
Gas vent system was recently upgraded by the PRP.

INSPECTION TEAM ROSTER

Name	Organization	Title
Bartolome Cañellas	EPA Region 6	Remedial Project Manager
Kim Wallace-Wymore	EA Engineering, Science, and Technology, Inc.	Site Coordinator
Regina Philson	Louisiana Department of Environmental Quality	Environmental Scientist
Carleton Degges	Vulcan Materials Company	Environmental Remediation Manager
Scott Bergeron	Professional Technical Support Services, Inc.	President

Attachment 5

Site Inspection Photographs

Photograph 1 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: View of the front gate (facing east).

Photograph 2 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: Signage on front gate (facing east).

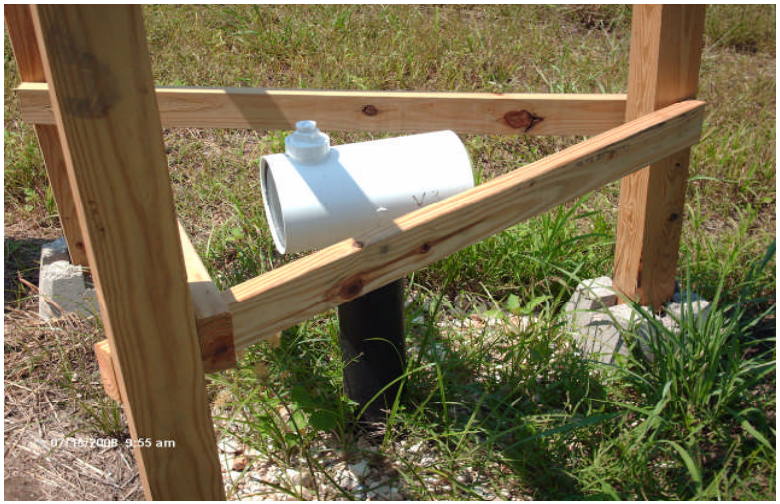
Photograph 3 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: Monitoring well P-20 (facing south).

Photograph 4 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: Fence damage due to fallen tree, located east of monitoring well P-10 (facing south).

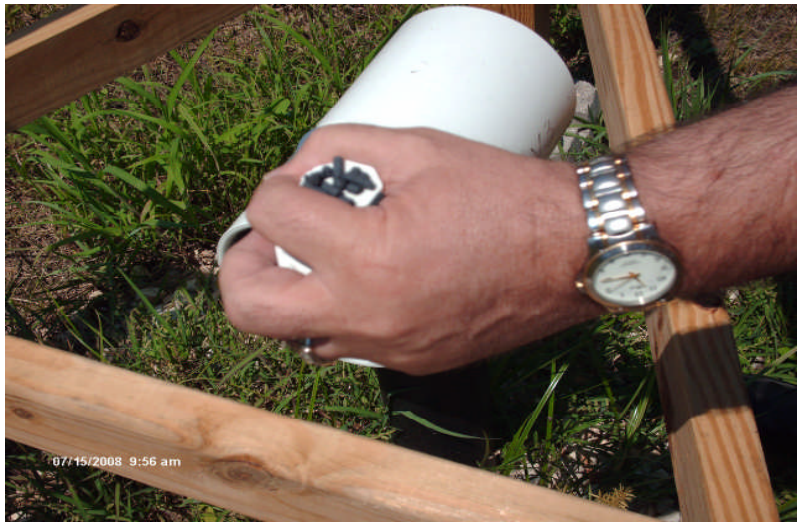
Photograph 5 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: Monitoring well P-10 (facing south).

Photograph 6 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: View of site with gas vent system (facing west).

Photograph 7 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: Gas venting system point V-3 (facing west).



Photograph 8 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: Close-up of gas vent system point V-3 (facing west).



Photograph 9 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: View of carbon pellets inside V-3.

Photograph 10 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: View of site (facing southwest).

Photograph 11 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: View of monitoring well P-23 (facing east).

Photograph 12 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: View of monitoring well P-21 (facing east).

Photograph 13 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: View of monitoring well P-22 (facing east).

Photograph 14 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: View of drums adjacent to monitoring well P-22 (the two black empty 55-gallon drums are left from the 2005 EPA Hurricane Katrina assessment).

Photograph 15 Date: July 15, 2008
Site: Cleve Reber Superfund Site
Description: Repair of surface water erosion (facing south).

Attachment 6

Interview Records

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY		
Site Name: Cleve Reber Superfund Site	**EPA ID No.:** LAD980501456	
Location: Ascension Parish, Louisiana	**Date:** 3/19/2008	
Contact Made By:		
Name: Bartolome Canellas	**Title:** Task Order Monitor	**Organization:** U.S. EPA
Telephone No.: (214) 665-6662 **E-Mail:** Canellas.Bart@epamail.epa.gov	**Street Address:** 1455 Ross Avenue, Suite 1200 **City, State, Zip:** Dallas, Texas 75202	
Name: Kimberly Wallace-Wymore	**Title:** Site Coordinator	**Organization:** EA
Telephone No.: (972) 315-3922 **E-Mail:** kwymore@eaest.com	**Street Address:** 405 S. Highway 121, Building C, Suite 100 **City, State, Zip:** Lewisville, Texas 75067	
Individual Contacted:		
Name: Bartolome Canellas	**Title:** Task Order Monitor	**Organization:** U.S. EPA
Telephone No.: (214) 665-6662 **E-Mail Address:** Canellas.Bart@epamail.epa.gov	**Street Address:** 1455 Ross Avenue, Suite 1200 **City, State, Zip:** Dallas, Texas 75202	

Survey Questions

The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions that have been performed at the site. This interview is being conducted as a part of the third five-year review for the Cleve Reber Superfund Site. The period covered by this five-year review is from the completion of the second five-year review in September 2003 to the current completion of this review. Should you choose to respond, please return your interview form to Kimberly Wallace-Wymore at EA Engineering via e-mail or postal service by April 18, 2008.

1. What is your overall impression of the work conducted at the site since initiation of the Remedial Action?

Response:

- The remedial work was completed and the potential responsible parties (PRPs) continue to provide good care through the operation and maintenance (O&M) activities.
- Past site inspections and previous Five Year Reviews have shown that the fence was in good condition, the cap is inspected and kept in good condition. The groundwater monitoring shows that no contaminants of concern have been detected.

2. From your perspective, what effect has the remedial action at the site had on the surrounding community? Are you aware of any ongoing community health concerns regarding the site or its operation and maintenance?

Response:

- I am not aware of any community health concerns or complaints related to the site current operation and maintenance (O&M).
- The remedial action effect was transforming this site from an old abandoned dump, with surface impoundments and scattered drums, into a properly close facility that no longer threatens the environment.

3. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe purpose and results.

Response:

- The U.S. EPA, in coordination with the State, the Louisiana Department of Environmental Quality (LDEQ), conducts reviews of the implemented remedy at least every five years.
- As part of these reviews, EPA and LDEQ attend site inspections of the site.
- Between these reviews, the potentially responsible parties conduct operation and maintenance activities that include groundwater monitoring and the results are submitted and reviewed by the EPA and LDEQ.

4. Have there been any complaints or other comments related to the site that required a response by your office? If so, please summarize the events and result.

Response:

- No complaints or comments brought to the attention of the EPA Remedial Project Manager.

5. Do you feel well-informed about the site's activities and progress?

Response:

- Yes. Copy of the monitoring results are promptly provided by the responsible parties to the EPA and LDEQ.
- Groundwater monitoring results show no detection of contaminants of concern at this moment.
- With the recent Rita and Katrina hurricanes, the EPA investigated the site and found no damage or releases of contaminants of concern.

6. Do you have any comments, suggestions, or recommendations regarding the site?

Response:

- Prior to completion of the third Five Year Remedy review, the responsible parties, with the approval of EPA and the State, will replace/upgrade the gas venting system for the landfill cap with new vents.
- This replacement was needed because the previous gas vent system has been in place and exposed to the elements for over 15- years and was in need of repair due to external weathering.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY		
Site Name: Cleve Reber Superfund Site		**EPA ID No.:** LAD980501456
Location: Ascension Parish, Louisiana		**Date:** April 18, 2008
Contact Made By:		
Name: Bartolome Canellas	**Title:** Task Order Monitor	**Organization:** U.S. EPA
Telephone No.: (214) 665-6662 **E-Mail:** Canellas.Bart@epamail.epa.gov	**Street Address:** 1455 Ross Avenue, Suite 1200 **City, State, Zip:** Dallas, Texas 75202	
Name: Kimberly Wallace-Wymore	**Title:** Site Coordinator	**Organization:** EA
Telephone No.: (972) 315-3922 **E-Mail:** kwymore@eaest.com	**Street Address:** 405 S. Highway 121, Building C, Suite 100 **City, State, Zip:** Lewisville, Texas 75067	
Individual Contacted:		
Name: Regina Atterberry Philson	**Title:** Environmental Scientist	**Organization:** Louisiana Department of Environmental Quality
Telephone No.: (225) 219-3210 **E-Mail Address:** regina.philson@la.gov	**Street Address:** Post Office Box 4314 **City, State, Zip:** Baton Rouge, LA 70821-4314	

Survey Questions

The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions that have been performed at the site. This interview is being conducted as a part of the third five-year review for the Cleve Reber Superfund Site. The period covered by this five-year review is from the completion of the second five-year review in September 2003 to the current completion of this review. Should you choose to respond, please return your interview form to Kimberly Wallace-Wymore at EA Engineering via e-mail or postal service by April 18, 2008.

1 What is your overall impression of the work conducted at the site since initiation of the Remedial Action?

Response: My overall impression of the work conducted at the site since initiation of the Remedial Action is that the work was very thorough and complete. Once the confirmatory samples were collected, it was determined that the site posed no risk to human health or the environment.

2. From your perspective, what effect has the remedial action at the site had on the surrounding community? Are you aware of any ongoing community health concerns regarding the site or its operation and maintenance?

Response: I am not aware of any community health concerns or complaints related to the current operation and maintenance (O&M) activities at the site.

3. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe purpose and results.

Response: The LDEQ coordinates with the U.S. EPA to conduct reviews of the implemented remedy at least every five years.

As part of this review, LDEQ conducts joint site inspections of the site with the U.S. EPA.

4. Have there been any complaints or other comments related to the site that required a response by your office? If so, please summarize the events result.

Response: No complaints or comments brought to the attention of the LDEQ Remedial Project Manager.

5. Do you feel well-informed about the site's activities and progress?

Response: Yes. Copies of the monitoring results were promptly provided by the responsible parties to the LDEQ and EPA.

Groundwater monitoring result show no detection of contaminants of concern at this moment.

With the recent Rita and Katrina Hurricanes, the LDEQ investigated the site and found no damage or releases of contaminants of concern.

6. Do you have any comments, suggestions, or recommendations regarding the site?

Response: Prior to completion of the third Five Year Remedy review, the responsible parties, with the approval of LDEQ and the EPA, will replace/upgrade the gas venting system for the landfill cap with new vents.

This replacement was needed because the previous gas vent system has been in place and exposed to the elements for over 15-years and was in need of repair due to external weathering.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY		
Site Name: Cleve Reber Superfund Site	**EPA ID No.:** LAD980501456	
Location: Ascension Parish, Louisiana	**Date:**	
Contact Made By:		
Name: Bartolome Canellas	**Title:** Task Order Monitor	**Organization:** U.S. EPA
Telephone No.: (214) 665-6662 **E-Mail:** Canellas.Bart@epamail.epa.gov	**Street Address:** 1455 Ross Avenue, Suite 1200 **City, State, Zip:** Dallas, Texas 75202	
Name: Kimberly Wallace-Wymore	**Title:** Site Coordinator	**Organization:** EA
Telephone No.: (972) 315-3922 **E-Mail:** kwymore@eaest.com	**Street Address:** 405 S. Highway 121, Building C, Suite 100 **City, State, Zip:** Lewisville, Texas 75067	
Individual Contacted:		
Name: Kathleen Golden	**Title:** Environmental Health Scientist Supervisor	**Organization:** Louisiana Department of Health and Hospitals
Telephone No.: (888) 293-7020 **E-Mail Address:** kaubin@dhh.la.gov	**Street Address:** 1450 L & A Road **City, State, Zip:** Metairie, LA 70001	

Survey Questions

The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions that have been performed at the site. This interview is being conducted as a part of the third five-year review for the Cleve Reber Superfund Site. The period covered by this five-year review is from the completion of the second five-year review in September 2003 to the current completion of this review. Should you choose to respond, please return your interview form to Kimberly Wallace-Wymore at EA Engineering via e-mail or postal service by April 18, 2008.

1. What is your overall impression of the work conducted at the site since initiation of the Remedial Action?

Response: My overall impression of the work conducted at the site since initiation of the Remedial Action is that the work was very thorough and complete. Once the confirmatory samples were collected, it was determined that the site posed no apparent public health hazard.

2. From your perspective, what effect has the remedial action at the site had on the surrounding community? Are you aware of any ongoing community health concerns regarding the site or its operation and maintenance?

Response: I am not aware of any ongoing community health concerns regarding the site or its operation and maintenance.

3. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe purpose and results.

Response: There have not been any communications or activities conducted by our office since our work on the November 2006 Health Consultation. The purpose of this Health Consultation was to evaluate groundwater at the site post-hurricane. Upon evaluation, we found no evidence that the storm had increased the likelihood of public exposure to site-related contaminants. Groundwater sampled from the Cleve Reber site by EPA during its post-hurricane investigation suggested that there was no public health hazard to the community around the site.

4. Have there been any complaints or other comments related to the site that required a response by your office? If so, please summarize the events and result.

Response: We have received no complaints or comments related to the Cleve Reber site.

5. Do you feel well-informed about the site's activities and progress?

Response: We have monthly meetings with LDEQ and are well-informed about the site's activities and progress.

6. Do you have any comments, suggestions, or recommendations regarding the site?

Response: Routine groundwater monitoring of the wells should continue in the future.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY		
Site Name: Cleve Reber Superfund Site	**EPA ID No.:** LAD980501456	
Location: Ascension Parish, Louisiana	**Date:** April 10, 2008	
Contact Made By:		
Name: Bartolome Canellas	**Title:** Task Order Monitor	**Organization:** U.S. EPA
Telephone No.: (214) 665-6662 **E-Mail:** Canellas.Bart@epamail.epa.gov	**Street Address:** 1455 Ross Avenue, Suite 1200 **City, State, Zip:** Dallas, Texas 75202	
Name: Kimberly Wallace-Wymore	**Title:** Site Coordinator	**Organization:** EA
Telephone No.: (972) 315-3922 **E-Mail:** kwymore@eaest.com	**Street Address:** 405 S. Highway 121, Building C, Suite 100 **City, State, Zip:** Lewisville, Texas 75067	
Individual Contacted:		
Name: Carleton Degges	**Title:** Environmental Remediation Manager	**Organization:** Vulcan Materials Company
Telephone No.: (205) 298-3063 **E-Mail Address:** deggesc@vmcmail.com	**Street Address:** 1200 Urban Center Drive **City, State, Zip:** Birmingham, AL 35242	
Survey Questions		

The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions that have been performed at the site. This interview is being conducted as a part of the third five-year review for the Cleve Reber Superfund Site. The period covered by this five-year review is from the completion of the second five-year review in September 2003 to the current completion of this review. Should you choose to respond, please return your interview form to Kimberly Wallace-Wymore at EA Engineering via e-mail or postal service by April 18, 2008.

1. What is your overall impression of the work conducted at the site since initiation of the Remedial Action?

Response: Good, the site is stable and the remedy is mature.

2. From your perspective, what effect has the remedial action at the site had on the surrounding community? Are you aware of any ongoing community health concerns regarding the site or its operation and maintenance?

Response: Minimal, no known concerns.

3. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe purpose and results.

Response: Yes, a contractor conducts routine site visits, inspections, etc. The purpose of the activities is to maintain the site (security, maintenance, repairs) and conduct periodic sampling. Results are routinely reported to EPA.

4. Have there been any complaints or other comments related to the site that required a response by your office? If so, please summarize the events and result.

Response: None.

5. Do you feel well-informed about the site's activities and progress?

Response: Yes, the EPA project manager keeps of apprised of expectations and developments regarding the site.

6. Do you have any comments, suggestions, or recommendations regarding the site?

Response: None, at this time.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY		
Site Name: Cleve Reber Superfund Site	**EPA ID No.:** LAD980501456	
Location: Ascension Parish, Louisiana	**Date:**	
Contact Made By:		
Name: Bartolome Canellas	**Title:** Task Order Monitor	**Organization:** U.S. EPA
Telephone No.: (214) 665-6662 **E-Mail:** Canellas.Bart@epamail.epa.gov	**Street Address:** 1455 Ross Avenue, Suite 1200 **City, State, Zip:** Dallas, Texas 75202	
Name: Kimberly Wallace-Wymore	**Title:** Site Coordinator	**Organization:** EA
Telephone No.: (972) 315-3922 **E-Mail:** kwymore@eaest.com	**Street Address:** 405 S. Highway 121, Building C, Suite 100 **City, State, Zip:** Lewisville, Texas 75067	
Individual Contacted:		
Name: Scott Bergeron, P.E.	**Title:** President	**Organization:** Professional Technical Support Services, Inc.
Telephone No.: (225) 293-0136 **E-Mail Address:** smbergeron@envirodepot.com	**Street Address:** P.O. Box 3414 **City, State, Zip:** Baton Rouge, LA 70821	
Survey Questions		

The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions that have been performed at the site. This interview is being conducted as a part of the third five-year review for the Cleve Reber Superfund Site. The period covered by this five-year review is from the completion of the second five-year review in September 2003 to the current completion of this review. Should you choose to respond, please return your interview form to Kimberly Wallace-Wymore at EA Engineering via e-mail or postal service by April 18, 2008.

1. What is your overall impression of the work conducted at the site since initiation of the Remedial Action?

Response: Quite favorable during the term and scopes of our involvement. THE SITE LOOKS GREAT AND THE RESULTS OF THE GROUNDWATER MONITORING ARE FAVORABLE.

2. From your perspective, what effect has the remedial action at the site had on the surrounding community? Are you aware of any ongoing community health concerns regarding the site or its operation and maintenance?

Response: The remedial action had a favorable outcome on the community: an "old dump" has been cleaned up and I suspect most or all of the community doesn't even think of the site anymore. All they see when they pass by is a large grassy field that is routinely tended to.

3. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe purpose and results.

Response: YES. OUR FIRM COMMUNICATES WITH THE VULCAN MATERIALS representative periodically. WE KEEP THEM APPRAISED OF SITE CONDITIONS AND OUR SUGGESTIONS FOR UPKEEP (MOWING, CLEAR FENCE OF DEBRIS, REPAIR VOIDS, ETC). UPKEEP OF THE SITE GROUNDS ARE ONGOING.

4. Have there been any complaints or other comments related to the site that required a response by your office? If so, please summarize the events and result.

Response: NONE.

5. Do you feel well-informed about the site's activities and progress?

Response: ABSOLUTELY. THE PRESENT AND PRIOR CONTACTS HAVE ALWAYS KEPT US "IN THE LOOP" AND HAVE BEEN TIMELY & RESPONSIVE TO ANY INQUIRIES WE'VE MADE.

6. Do you have any comments, suggestions, or recommendations regarding the site?

Response: I WOULD CHARACTERIZE THE CONDITION OF THE SITE AT THIS POINT AS BEING "MATURE". IT IS MY OPINION THAT PRP GROUP SHOULD CONTINUE WITH WHAT THEY ARE DOING, AND THE WAY THEY ARE DOING IT. LASTLY, I SUGGEST "DOING AWAY WITH" TEMPORARILY CONTAINERIZING THE PURGE WATER FROM THE MONITORING WELLS, AS THE PRESENCE OF THE DRUMS TENDS TO BE AN EYESORE. I SUGGEST DISPERSING IT ON THE GROUND SURFACE WHILE SAMPLING (UNLESS THE SAMPLER OBSERVES AN ANOMALY OR SITE CONDITIONS CHANGE).

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY		
Site Name: Cleve Reber Superfund Site	**EPA ID No.:** LAD980501456	
Location: Ascension Parish, Louisiana	**Date:**	
Contact Made By:		
Name: Bartolome Canellas	**Title:** Task Order Monitor	**Organization:** U.S. EPA
Telephone No.: (214) 665-6662 **E-Mail:** Canellas.Bart@epamail.epa.gov	**Street Address:** 1455 Ross Avenue, Suite 1200 **City, State, Zip:** Dallas, Texas 75202	
Name: Kimberly Wallace-Wymore	**Title:** Site Coordinator	**Organization:** EA
Telephone No.: (972) 315-3922 **E-Mail:** kwymore@eaest.com	**Street Address:** 405 S. Highway 121, Building C, Suite 100 **City, State, Zip:** Lewisville, Texas 75067	
Individual Contacted:		
Name: Renee Theriot	**Title:**	**Organization:**
Telephone No.: **E-Mail Address:**	**Street Address:** 6169 Dollys Lane **City, State, Zip:** Sorrento, La 70778	

Survey Questions

The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions that have been performed at the site. This interview is being conducted as a part of the third five-year review for the Cleve Reber Superfund Site. The period covered by this five-year review is from the completion of the second five-year review in September 2003 to the current completion of this review. Should you choose to respond, please return your interview form to Kimberly Wallace-Wymore at EA Engineering via e-mail or postal service by 1 August 2008.

1. What is your overall impression of the work conducted at the site since initiation of the Remedial Action?

Response: Looks fine

2. From your perspective, what effect has the remedial action at the site had on the surrounding community? Are you aware of any ongoing community health concerns regarding the site or its operation and maintenance?

Response: Looks Better – No

3. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe purpose and results.

Response: N/A

4. Have there been any complaints or other comments related to the site that required a response by your office? If so, please summarize the events and result.

Response: N/A

5. Do you feel well-informed about the site's activities and progress?

Response: Yes

6. Do you have any comments, suggestions, or recommendations regarding the site?

Response: NO

Attachment 7

Servitude of Access and Right of Use Agreement

302541

SERVITUDE OF ACCESS AND RIGHT OF USE

BY: VERNON J. SCHEXNAYDRE AND BARBARA BOURGEOIS SCHEXNAYDRE

TO: VULCAN MATERIALS COMPANY, ET AL

UNITED STATES OF AMERICA

STATE OF LOUISIANA

PARISH OF ASCENSION

Planavy

BE IT KNOWN, that on this 20th day of May, in the year of Our Lord One Thousand Nine Hundred and Ninety-Two.

BEFORE US, the undersigned authorities, duly commissioned and qualified in and for the County or Parish and States, therein residing in the presence of the witnesses hereinafter named and undersigned:

PERSONALLY CAME AND APPEARED:

VERNON J. SCHEXNAYDRE (S/S#437-44-5956) AND BARBARA BOURGEOIS SCHEXNAYDRE (S/S#435-42-1880), his wife, both persons of the full age of majority, residents of and domiciled in Gonzales, State of Louisiana, who declare that they are married but once and then to each other (hereinafter collectively referred to as "Grantors"),

AND

VULCAN MATERIALS COMPANY (TAX I.D# 63-0366371), a corporation organized under the laws of the State of New Jersey and doing business in the State of Louisiana, appearing herein through its undersigned agent, John A. Waupsh, Plant Manager, duly authorized; and

MONOCHEM, INC. (TAX I.D.#72-0545612), a corporation organized under the laws of the State of Louisiana and doing business in the State of Louisiana, appearing herein through its undersigned agent, Joseph M. Saggese, Officer, duly authorized; and

STAUFFER CHEMICAL COMPANY THROUGH STAUFFER MANAGEMENT COMPANY (TAX I.D.#51-0301988), a corporation, organized under the laws of the State of Delaware and doing business in the State of Louisiana, appearing herein through its undersigned agent, J. Kent Riegel, Vice President, duly authorized; and

UNIROYAL CHEMICAL COMPANY, INC. (Tax I.D. #06-1148490), a corporation, organized under the laws of the State of New Jersey and doing business in the State of Louisiana, appearing herein through its undersigned agent, Vincent J. Stadolnik, Manager,.duly authorized;

(collectively hereinafter referred to as "Grantees"),

who declare, covenant, contract and agree as follows, to-wit:

RECITALS

That the Grantors are the owners of that certain property located in Sections 36 and 41, Township 10 South, Range 3 East, Southeastern District of Louisiana, Ascension Parish, Louisiana, being more particularly described in Exhibit "A", attached hereto and made a part hereof, and being depicted on that certain plat of survey attached hereto and made a part hereof as Exhibit "B", ("Property"), it being hereby understood that in the event of any conflict between the descriptions of the Property as contained in Exhibits "A" and "B", the description as contained in Exhibit "B" shall control;

That Grantees are subject to a certain First Amended Administrative Order, issued by the United States Environmental Protection Agency, Region 6, Dallas, Texas ("U.S. EPA"), on February 5, 1991, in the matter of "*Cleve Reber, Monochem, Inc., Stauffer Chemical Company, Uniroyal Chemical Company, Inc. and Vulcan Materials Company*" Docket Number CERCLA-VI-12-88, ("Administrative Order"), a copy of which is attached hereto and made a part hereof as Exhibit "C";

That the Administrative Order has been issued by U.S. EPA to Grantees pursuant to the authorities of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§ 9601, *et seq.* ("CERCLA"), and by virtue of the status of Grantees as potentially responsible parties, as that term is defined in CERCLA;

That for purposes of this Servitude, the term "remediation" shall have the same meaning as is given to the terms "remedy" or "remedial action" under CERCLA, 42 U.S.C. §9601(24), and shall include, but not be limited to, any and all activities anticipated by the Administrative Order, any documents executed pursuant to the Administrative Order, any amendments to the Administrative Order, consent decrees in lieu of a judicial order, any further orders or directives from U.S. EPA, State of Louisiana or other authorities having jurisdiction, or any other activities deemed appropriate or necessary by Grantees, U.S. EPA, State of Louisiana or other authorities

having jurisdiction, for remediation of the Property (collectively referred to as "Remediation Requirements");

That the Property has been listed on the National Priorities List ("NPL") pursuant to the authorities of CERCLA;

That Grantors are also potentially responsible parties, as that term is defined by CERCLA, due to their ownership of the Property;

That as a result of his alleged liability as a potentially responsible party under CERCLA, Grantor, Vernon J. Schexnaydre, has been made a party defendant in that certain action styled, *Vulcan Materials Company, et al. versus Ascension Parish et al.*, No. 89-778, Section "B", in the United States District Court for the Middle District of Louisiana ("the Suit");

That in order to fulfill the Remediation Requirements, it is necessary for the Grantees to have access and use (as hereinafter defined) of the Property for the purpose of remediation of the Property, as may be required by U.S. EPA, State of Louisiana or any other authority having jurisdiction under CERCLA, as is more specifically set forth in the Administrative Order, and as may be set forth in further orders or directives issued by U.S. EPA, State of Louisiana or any other authority having jurisdiction, relating to the Property;

That Grantees have submitted to U.S. EPA, and U.S. EPA has approved, a scope of work, attached hereto and made a part hereof as Exhibit "D"; and

That Grantors are willing to grant to Grantees, U.S. EPA and State of Louisiana, for the consideration hereinafter shown, the use and access on, over, under and around the Property for the purpose of implementing and performing the Remediation Requirements;

Now, therefore, the parties agree and stipulate that the consideration for the grant of this Servitude of the Right of Access and Use ("Servitude") of the Property by Grantors to Grantees is the dismissal of Grantor, Vernon Schnexnaydre, from the Suit, as is more particularly expressed in that certain Release, a copy of which is attached hereto as Exhibit "E", and Barbara Bourgeois Schnexnaydre not being joined as a party defendant in the Suit, as well as the benefits which shall

inure to the Grantors as a result of the remediation anticipated hereby, and Grantors, for themselves, their heirs, successors and assigns, agree with the Grantees as follows:

1. GRANT OF SERVITUDE

A. Grantors hereby grant to Grantees, jointly and severally, and to their agents, consultants, employees and contractors, and to U.S. EPA and State of Louisiana and their agents, employees and contractors, the exclusive right of use and access to the Property for the purpose of remediation of the Property pursuant to the Remediation Requirements. Grantors and Grantees hereby agree that such right of use and access shall include, but not be limited to the right to: (i) use existing roadways and driveways, and construct such roadways as necessary; (ii) excavate; (iii) remove vegetation and soil; (iv) drain ponds and back fill; (v) completely or partially enfence the Property; (vi) control ingress to and egress from the Property; (vii) construct and operate, on-site, monitoring well(s), incinerator and water treatment systems; (viii) install such cap on the Property as may be required by U.S. EPA, State of Louisiana or any other authority having jurisdiction, or otherwise deemed necessary in the sole judgment of Grantees; and (ix) perform other appropriate or necessary activities related to the Remediation Requirements.

B. At their sole option, Grantees shall also have the right to erect buildings and other structures and improvements to implement the Remediation Requirements during the term of this Servitude, and the Grantees may, at their sole option, at any time during the term of the Servitude, remove any and all building, structures and improvements, or abandon in place any such buildings, structure and improvements to Grantors, and upon such removal or abandonment are released from and have no further responsibility in connection therewith.

C. The Parties recognize that the performance of the remediation as anticipated hereby is within the sole and absolute control of the Grantees, U.S. EPA and State of Louisiana. Grantors cannot and will not attempt to direct the manner or method in which such remediation activities shall be performed.

D. The Parties further recognize that this Servitude does not constitute an admission by any Party with respect to liability for any conditions at the Property.

2. SITE UTILIZATION

A. Grantees shall have the right to enter on the Property and take any action which, in their sole opinion, is necessary to implement the remediation pursuant to the Remediation Requirements or any other action deemed necessary or appropriate by Grantees, U.S. EPA or State of Louisiana to access or remediate the environmental conditions in, on, under and around the Property.

B. Grantors agree that they will not interfere, nor shall they allow any other party to interfere, with Grantees' use of the Property, nor interfere with any remediation facilities or operations occurring on the Property, or with any other operation or activities of Grantees pursuant to their rights under this Servitude. Grantors shall not grant any hunting or other rights to third parties to enter or use the Property, except as expressly provided herein.

C. Grantors may access or use the Property only to the extent permitted by U.S. EPA or State of Louisiana for purposes not inconsistent with this Servitude.

D. Grantees agree that they will not make any changes on the Property or use the Property for any purpose not necessary, appropriate or associated with the Remediation Requirements of the Property as defined herein or any additional remediation deemed necessary or appropriate by Grantees, U.S. EPA or State of Louisiana;

E. Grantees may regrade the area in the vicinity of the remedial and excavation activity and shall be authorized to use, without any fee or other charge, native soil from the Grantors' property in completing the regrading. Grantees will not be responsible for maintaining any particular grade level with respect to the Property.

F. Grantees shall not be obligated to restore any soil, water or other materials removed in furtherance of and in compliance with the formulation and implementation of the remediation or to restore the condition of the Property to its condition on the date of this Servitude.

3. OTHER TERMS AND CONDITIONS

A. Grantors do hereby reserve unto themselves and all prior owners all rights of ownership to all of the oil, gas, and other minerals in, on, and under the Property covered and affected by the aforesaid Servitude granted herein, but waive all surface rights and represent that any drilling will be by directional means only. It is specifically understood and agreed that the mineral rights reserved herein shall, for all purposes, be subject to the terms and provisions hereof, and before the conduct of any drilling activities beneath the surface of the Property, the owner of the mineral rights shall obtain prior written consent of Grantees, which consent shall not be unreasonably withheld.

B. Grantors warrant they have good and unencumbered title to the Property and the right to grant this Servitude to the full extent as shown herein; Grantors will comply with all present and future restrictions, rules and orders on the use of the Property imposed by U.S. EPA or the State of Louisiana.

C. The Grantees are familiar with the condition of the Property and take the Property which is the subject of the Servitude, in its present state of condition.

D. To the best of the Grantors' knowledge, there are no hidden or latent defects in, on or under the Property or other conditions which would limit or restrict the full use of this Servitude and the purpose intended;

E. Grantors on behalf of themselves and their heirs, successors and assigns, hereby waive and forever release the Grantees from any and all claims, liabilities or damages in any way relating to the Property or resulting from the use thereof, any substances, materials, improvements, equipment or other thing located or to be located on the Property by Grantees, or from any activity engaged in by Grantees thereon.

F. In connection with the implementation of the remediation requirements to be conducted on the property, Grantees may maintain ordinary and customary general liability insurance covering instances of personal injury or property damage to third parties that might result

from Grantees' activities in the use of this servitude. To the extent that such insurance is obtained by Grantees, Grantees will provide copies of said insurance to Grantors;

4. TERMINATION

This Servitude and all amendments hereto shall be construed as covenants running with the land, binding on the Grantors, and their heirs, assigns, successors and subsequent owners of the Property and Grantors hereby acknowledge and agree that they shall not have the right to terminate this Servitude with Grantees, for forty-five (45) years from the date of this Servitude or until such time as the remediation, operation and maintenance as required under the Remediation Requirements is completed and the governing authorities, U.S. EPA or its successor and State of Louisiana, have approved the cessation of operation and maintenance of the Property, whichever occurs last, provided however, that Grantees may terminate this Agreement at any time, at their sole election. Upon approval of the U.S. EPA or its successor and State of Louisiana for cessation of operation and maintenance of the Property, Grantors shall execute and record an appropriate document evidencing that this Servitude has terminated.

Upon approval of U.S. EPA that all active remediation and cleanup have been substantially completed, Grantees may elect, in their sole discretion, but are not required, to execute modifications to reduce the scope of this Servitude so to provide for a limited servitude consistent with any and all remaining obligations of Grantees, including, but not limited to, maintenance of test wells and other remaining monitoring devices.

5. NO WAIVER; ENTIRE AGREEMENT

The failure of Grantees or Grantors to insist upon the strict performance of any terms, covenants and conditions of this Servitude, or to exercise any right or remedy herein contained, shall not be construed as a waiver or relinquishment for the future of such term, covenant, condition, right or remedy. This Servitude and attached Exhibits constitute the entire agreement

between Grantors and Grantees with respect to the access to and use of the Property and all prior negotiations and agreements regarding access and use are merged herein.

6. NO IMPLICATION OF INTERPRETATION

It is mutually agreed that this Servitude shall be construed and interpreted as if drafted by each party and is further acknowledged that this Servitude is the product of negotiations between the parties, and shall not be construed or interpreted against either party based on such party having drafted this Servitude or any portion thereof.

7. AGENTS AND EMPLOYEES AND GRANTEES

A. The rights granted to Grantees and their successors and assigns under this Servitude may be exercised through their respective agents, employees, successors, assigns, contractors, designees and by representatives of U.S. EPA and State of Louisiana. The terms hereof shall for all purposes be considered a *stipulation pour autri* in favor of U.S. EPA and the Louisiana Department of Environmental Quality ("LDEQ"), including their respective employees, agents, successors, assigns, contractors and designees. This Servitude shall inure to the successors and assigns of the Grantees, whether by merger or otherwise, which shall be bound by all the terms and conditions hereof.

B. At its sole election, any Grantee shall have the right to assign the rights granted hereunder to any person, firm, corporation or other legal entity without obtaining the consent or approval of Grantors, their successors, heirs or assigns.

8. RELATIONSHIP OF PARTIES

Grantors and Grantees acknowledge and agree that neither of them intend by this agreement to create between them the relationships of "landlord and tenant", "partnership", "joint venture", "tenancy in common", "principal and agent", or any kind of fiduciary or other relationship nor to create in Grantees any fee ownership interest.

9. ADDITIONAL TERMS AND CONDITIONS

A. The parties to this Servitude may enforce their rights under this Servitude by any remedy available to them at law or equity.

B. This Servitude shall be filed for record in the mortgage and conveyance records in the office of the Clerk of Court of Ascension Parish, State of Louisiana, at the expense of the Grantors.

C. This Servitude may not be changed or terminated orally, but only by a written instrument of change, modification, waiver or termination.

D. Any notice required or permitted hereunder shall be in writing and shall be sent by certified mail, return receipt requested, by recognized overnight courier service that in the ordinary course of its business obtains a receipt for each of its deliveries, or by personal hand delivery to the parties at the respective addresses set forth below, and shall be deemed given upon personal delivery, three business days after depositing with the United States Postal Service, or one day after depositing with such courier service.

Grantors: Vernon J. Schexnaydre and
Barbara Bourgeois Schexnaydre
39412 Highway 74
Gonzales, Louisiana 70737

Grantees: William L. Bryant, Esq.
Vulcan Materials Company
1 Metroplex Drive
P.O. Box 530187
Birmingham, Alabama 35253-0187

Grantors and Grantees may modify the names and addresses of the persons to whom notices should be sent by sending written notice of such change to the other party in accordance with this Paragraph.

E. In the event any of the provisions of this Agreement are deemed by any court to be unenforceable, any such provision is deemed to be severable and the remaining provisions of this Agreement shall remain in full force and effect.

F. This Servitude shall be governed by and construed in accordance with the laws of the State of Louisiana.

10. HEADINGS

The headings of this Agreement are for convenience only and shall not affect the meaning or construction of this Servitude.

TO HAVE AND TO HOLD said Servitude, unto said Grantees, their successors and assigns, so long as the same shall be used for the purposes expressed herein.

THUS DONE AND PASSED, in triplicate originals, in the Parish of East Baton Rouge, State of Louisiana, on this 31st day March, 1992, in the presence of the undersigned competent witnesses, who hereunto sign their names with the said appearer and me, Notary, after due reading of the whole.

WITNESSES:

GRANTORS:

VERNON SCHEXNAYDRE

BARBARA BOURGEOIS SCHEXNAYDRE

NOTARY PUBLIC

THUS DONE AND PASSED, in triplicate originals, in the Parish of Ascension, State of Louisiana, on this 20th day May, 1992, in the presence of the undersigned competent witnesses, who hereunto sign their names with the said appearer and me, Notary, after due reading of the whole.

WITNESSES:

Wanda L. Brand

Marie L. Bourgeois

GRANTEE:

VULCAN MATERIALS COMPANY

BY: John A. Waupsh
JOHN A. WAUPSH, PLANT MANAGER

NOTARY PUBLIC

THUS DONE AND PASSED, in triplicate originals, in the County of Braulolin, State of ~~Louisiana~~ This, on this 11th day May, 1992, in the presence of the undersigned competent witnesses, who hereunto sign their names with the said appearer and me, Notary, after due reading of the whole.

WITNESSES:

GRANTEE:

MONOCHEM, INC.

BY: _____
JOSEPH M. SAGGESE, OFFICER

5/16/92

NOTARY PUBLIC
VICTORIA J. WEST
NOTARY PUBLIC, STATE OF OHIO
MY COMMISSION EXPIRES 4/17/96

THUS DONE AND PASSED, in ~~duplicate~~ originals, in the County of New Castle State of Delaware, on this 22nd day April, 1992, in the presence of the undersigned competent witnesses, who hereunto sign their names with the said appearer and me, Notary, after due reading of the whole.

WITNESSES:

~~Constance H. Haney~~

Judith A. Bowman

GRANTEE:

STAUFFER CHEMICAL COMPANY through
STAUFFER MANAGEMENT COMPANY

BY: J. Kent Riegel
J. KENT RIEGEL, VICE PRESIDENT

Judith T. Eisbrun
NOTARY PUBLIC

THUS DONE AND PASSED, in triplicate originals, in the Parish of Ascension, State of Louisiana, on this 20th day May, 1992, in the presence of the undersigned competent witnesses, who hereunto sign their names with the said appearer and me, Notary, after due reading of the whole.

WITNESSES:

Benton R Leach

Melinda C. Noel

GRANTEE:

UNIROYAL CHEMICAL COMPANY, INC.

BY: Vincent J. Stadolnik
VINCENT J. STADOLNIK, MANAGER

NOTARY PUBLIC

EXHIBIT "A"
LEGAL DESCRIPTION

CLEVE REBER SITE
Sections 36 and 41 of Township 10 South, Range 3 East
Ascension Parish, Louisiana

A certain tract of land situated in the Parish of Ascension being the West Half of the Southeast Quarter of the Southeast Quarter of Section 36, Township 10 South, Range 3 East, Southeastern District of Louisiana, containing 20 acres, and designated as Tract CDEF on the plan of survey by Durald F. Woods, C.E. dated June 17, 1965.

A certain tract of land situated in the Parish of Ascension in the northern portion of Lots 1, 2 & 3 of Section 41, Township 10 South, Range 3 East, Southeastern District of Louisiana, containing 3.21 acres, and designated as Tract CFHG on the plan of survey by Durald F. Woods, C.E. dated June 17, 1965.

A certain tract of land situated in the Parish of Ascension in the northern portion of Lots 1, 2 & 3 of Section 41, Township 10 South, Range 3 East, Southeastern District of Louisiana, containing 1.428 acres and designated as Tract KCHL on the plan of survey by Durald F. Woods, C.E. dated June 17, 1965.

FURTHER, in accordance with a more recent survey of C. Mistric Surveyors, Inc. dated July 12, 1988 and updated on February 18, 1992, said tract of land is more fully described as follows, to-wit:

A Tract of Land located in the Northern Portion of Lots 1 & 2 of Section 41, and the West 1/2 of the South East 1/4 of the South East 1/4 of Section 36, T-10-S, R-3-E, Southeastern Land District, East of River, Ascension Parish, Louisiana, and more particularly described as follows:

COMMENCING at a 1" iron pipe, state plane coordinates of X = 2146634.503 and Y = 540773.576 at the northeast corner of Section 41; THENCE along the section line common to Sections 41 & 36, N 89°39'06" W 659.73' to a 1" iron pipe at the intersection of the east boundary of the Cleve Reber Site S 00°57'17"E 212.20' to a 1" iron pipe at the POINT OF BEGINNING, being the southeast corner of said tract, being located at State Plane Coordinates X = 2145978.317 and Y = 540565.418; THENCE N 89°40'20" W 928.22' to a 1/2" iron pipe at the southwest corner and east right-of-way of La. Hwy. 70; THENCE along the easterly right-of-way of La. Hwy. 70, along the arc of a curve, curving to the left a distance of 219.10', having a radius of 5829.58' and a chord bearing N 14°05'28" W to a 1/2" iron pipe and corner; THENCE S 89°41'24"E 317.95' to a 1" iron pipe and corner; THENCE N 00°56'41" W 1319.89' to a 1" iron pipe at the northwest corner; THENCE S 89°40'17" E 659.84' to a 1' iron pipe at the northeast corner; THENCE S 00°57'17" E 1532.23' to a 1" iron pipe at the POINT OF BEGINNING; containing 24.633 acres, all as is more fully shown on said updated survey dated February 18, 1992.

Being the same property acquired by Barbara Bourgeois, wife of/and Vernon J. Schexnaydre from Mrs. Elmyra Landry, C. J. Bishop, Mrs. Ruth St. Amant and Clyde Penrose St. Amant, by Act of Cash Sale dated November 12, 1976 passed before Dolly M. Diez, Notary Public, and duly recorded in Conveyance Office Book 283, folio 321 on December 2, 1976, Entry No. 146159, Ascension Parish, Louisiana.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
DALLAS, TEXAS

IN THE MATTER OF:	§	
	§	
CLEVE REBER	§	ADMINISTRATIVE ORDER
MONOCHEM, INC.	§	
STAUFFER CHEMICAL COMPANY	§	DOCKET NUMBER
UNIROYAL CHEMICAL COMPANY, INC.	§	
VULCAN MATERIALS COMPANY	§	CERCLA VI-12-88
	§	
REGARDING THE	§	
	§	
CLEVE REBER SITE	§	
SORRENTO, LOUISIANA	§	
	§	
Proceeding under § 106(a) of	§	
the Comprehensive Environmental	§	
Response, Compensation and	§	
Liability Act of 1980 (42 U.S.C.	§	
§ 9606(a)), as amended.	§	

FIRST AMENDED ADMINISTRATIVE ORDER

I. JURISDICTION AND PURPOSE

A. This Administrative Order (ORDER) is issued pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. § 9606(a) as amended; by authority delegated by the President of the United States in Executive Order 12580, 51 Fed. Reg. 2923 (January 29, 1987), to the Administrator of the United States Environmental Protection Agency (EPA). The authority was further delegated to the Regional Administrators on September 13, 1987 by EPA Delegation No. 14-14-B. The authority was further redelegated to the Director of the Hazardous Waste Management Division Region 6. Notice of the issuance of this ORDER has been given to the

EXHIBIT 17 C

State of Louisiana through the Louisiana Department of Environmental Quality (LDEQ).

B. The purpose of this order is to protect the public health or welfare or the environment from releases or threatened releases of hazardous substances as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), from the facility known as the Cleve Reber Site, which is located in Sorrento, Louisiana at 744 South Choctaw, by directing you to undertake the actions set forth herein to protect the public health and welfare and the environment from the release or threatened release of hazardous substances.

C. This Administrative Order was initially issued on September 31, 1988. A delayed effective date was given to the Order in a letter authorized by the Regional Administrator and signed by the Acting Superfund Enforcement Branch Chief, Larry Wright, dated January 10, 1989. This letter changed the effective date to fifteen (15) days after receipt of the Final Design. After finalization of the Design, it is now necessary to amend the Order to include the Final Design Report and to bring the Order into conformity with current EPA policy.

This First Amended Order modifies, incorporates and supercedes the previous Order issued on September 31, 1988.

II. DEFINITIONS

Unless otherwise expressly provided herein, terms used in this

Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in the statute or its implementing regulations. Whenever terms listed below are used in this Order or in the documents attached to this Order or incorporated by reference into this Order, the following definitions shall apply:

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

B. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the end of the next working day.

C. "EPA" shall mean the United States Environmental Protection Agency.

D. "Final Design Report" or "FDR" shall mean the document entitled "Specifications for Remedial Action, Cleve Reber Site" and thirty-eight (38) drawings which are designated as Attachment 2.

E. "National Contingency Plan" or "NCP" shall mean the National Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, including any amendments thereto.

F. "Operation and Maintenance" or "O&M" shall mean all

activities required under the "Post Closure Plan for the Remedial Action at the Cleve Reber Site" and any other activities necessary to maintain the integrity of the remedial action.

G. "Paragraph" shall mean a portion of this Order identified by alphanumeric numeral.

H. "Performance Standard" shall mean those cleanup standards, standards of control, and other substantive requirements, criteria or limitations, identified in the Record of Decision, FDR, and Scope of Work, that the Remedial Action and Work required by this Order must attain and maintain.

I. "Post Closure Plan for the Remedial Action at the Cleve Reber Site" or "PCP" shall mean the document designated as Attachment 3.

J. "Record of Decision" or "ROD" shall mean the EPA Record of Decision relating to the Site, signed on March 31, 1987 by the Regional Administrator, EPA Region 6, and all attachments thereto.

K. "Remedial Action" or "RA" shall mean those activities, except for Operation and Maintenance, to be undertaken by the Respondents pursuant to the FDR, including any additional activities required under Sections VI, VII, VIII, IX, and XI of this Order.

L. "Scope of Work" or "SOW" shall mean the Scope of Work for implementation of the Remedial Action and Operation and Maintenance at the Site.

M. "Section" shall mean a portion of this Order identified by a roman numeral and includes one or more paragraphs.

N. "Work" shall mean all activities the Respondents are required to perform under this Order, including the Remedial Action, Operation and Maintenance, and any activities to be undertaken pursuant to Sections VI through IX, XI and XIX.

III. FINDINGS OF FACT

The following constitutes an outline of the facts upon which this Order is based:

A. The Cleve Reber Site (herein referred to as the Site) includes, but is not limited to, 24.633 acres of land forming the W 1/2 of the SE 1/4 of the SE 1/4 of Section 36, and a northern portion of Lots 1 & 2 of Section 41, Township 10 South, Range 3 East, SE district of Louisiana, in Ascension Parish at 744 South Choctow, Sorrento, Louisiana.

B. Environmental Controls Company of Louisiana(ECCO) was a corporation incorporated in the State of Louisiana on June 10, 1969 but whose charter was revoked May 13, 1982.

C. ECCO leased the Site from Elmyra Landry Bishop, C.J. Bishop, and Lydia Landry St. Amant.

D. On August 31, 1970, Ascension Parish entered into a Sanitary Landfill Operation Agreement with ECCO to provide for the operation of a landfill on the site effective September 1, 1970.

E. During the period 1970 to 1974, both municipal and industrial wastes were placed in the landfill at the Site. ECCO reportedly segregated the wastes into municipal and chemical waste disposal areas.

F. Vernon J. Schexnaydre of Ascension Parish, Louisiana purchased a portion of the Site on November 12, 1976 and is one of the current owners of the Site. His current address is Route 1, Box 162 Gonzales, LA 70737.

G. Sylvia Weill Marcuse, Aline Weill, and Leon Weill are current owners at the Site. Since 1956, these owners have retained undivided one-third interests in parcels of land forming the East portion of the Cleve Reber Site. The current address of Sylvia Weill Marcuse is 4012 Vendome Place, New Orleans, Louisiana 70125.

H. Drums containing hazardous substances and piles of dry chemicals were removed from the site surface in July 1983 pursuant to an immediate removal action by EPA and its contractors. Vulcan, Uniroyal, and Monochem reimbursed EPA for the costs of this removal action. Drums containing hazardous substances and bulk waste remain at the site.

I. On September 8, 1983, (Fed. Reg. 40658), pursuant to section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Cleve Reber Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B.

J. A Remedial Investigation and Feasibility Study (RI/FS) for the Site was completed June 3, 1985, by EPA contractors. The RI/FS reports that surface soil samples from the Site contained levels greater than 100,000 parts per million (ppm) hexachlorobutadiene. Surface waters on the site contained up to 80 ppm of hexachlorobenzene. Hexachlorobenzene, hexachlorobutadiene, and

aniline are listed as hazardous substances as defined by CERCLA in Section 101(14), 42 U.S.C. § 9601(14).

K. In June 1985, EPA collected additional ground water samples at the site to analyze for certain contaminants at a concentration level consistent with a 10-6 lifetime cancer risk factor. Sample results revealed that the deeper drinking water aquifer known as (NORCO) aquifer to be free of contamination. However, hexachlorobenzene contamination had migrated from the landfill into a thin water bearing sand zone known as the Shallow Sand Aquifer located at approximately 30 feet below the surface of the Site. Hexachlorobenzene appears to have a high affinity for the local clays based upon the field investigation data and a literature search. This coupled with a very small groundwater gradient were reasons to believe that contaminant migration has not spread beyond the site boundaries.

L. The Supplemental Remedial Investigation completed September 30, 1986, indicated there is contamination in the shallow Sand Aquifer but there is no significant migration of hazardous substances in groundwater beyond the site boundaries. The potential exists, however, for future migration.

M. Although the groundwater pathway is not considered to be complete by a formal pathway analysis, a potential for exposure still exists based upon uncertainties in understanding of site hydrogeology in addition to the possibility that a future well could cause aquifer cross contamination due to improper installation. Concentrations of leachate currently exceed

concentrations corresponding to a 10-6 excess cancer risk for benzene, hexachlorobutadine, hexachloroethane, tetrachloroethylene, and vinyl chloride. Concentrations of hexachlorobenzene in the Shallow Sand Aquifer exceed the concentration level corresponding to a 10-6 excess lifetime cancer risk.

N. Several other exposure pathways besides ground water contamination are considered to pose potential health and environmental risks under present site conditions. Because the on-site surface and subsurface soil samples are highly contaminated, soil is considered the major on-site exposure source. Other potential exposure pathways include surface water, direct contact or incidental ingestion of sediments, and human ingestion of contaminated bottom-dwelling fish and crayfish.

O. The concentration of hexachlorobenzene in various media (surface water, groundwater, soil and food sources) contributes most significantly to total excess lifetime cancer risk values, regardless of the exposure pathway. The assessment of exposure via dermal contact with the contaminated on-site surface soils yields excess lifetime cancer risk values with a 10-5 to 10-7 range. These risk estimates are dominated by the risk estimates for hexachlorobenzene. Risks for the other detected chemicals of concern were greater than three orders of magnitude below those of hexachlorobenzene. Also, for the fish ingestion exposure pathway, the carcinogenic risk estimates based on the current most reasonable and assumed worst-case concentrations were approximately 10-5 and 10-4, respectively. The excess lifetime cancer risks for

the other chemicals of concern via this pathway were three or more orders of magnitude less than those for hexachlorobenzene alone.

P. The ingestion of contaminated fish from Pond A presents the highest excess lifetime cancer risks (10-5 and 10-4 for current most reasonable and assumed worst cases; 10-5 and 10-2 for future most reasonable and assumed worst cases) compared with the other exposure pathways.

Q. A high potential for harm does exist if individuals came in contact with hazardous substances in the drums on the Site.

R. Respondent Cleve Reber, the sole owner of Environmental Controls Company of Louisiana was an owner/operator at the time of disposal of hazardous substances at the Site.

S. The following companies by contract, agreement or otherwise arranged for disposal of hazardous substances at the Cleve Reber Site or arranged with a transporter for transport of hazardous substances to the Site and are Respondents in this action:

1.a. Respondent Monochem, Inc., is a corporation organized in 1961 under the laws of the State of Louisiana, and is operating a plant at Geismar, Louisiana.

b. In a response to an EPA § 104(e) information request, Monochem stated it disposed of wastes, including mercury sludge, at the Site. Mercury is a CERCLA hazardous

substance.

c. At the time of this disposal, Monochem was jointly owned by Uniroyal and Borden. Presently, Monochem is fifty (50) percent owned by Borden Chemicals and Plastics Limited Partnership and fifty (50) percent owned by Uniroyal Chemical, Inc.

d. The registered agents for Monochem are Frank M. Coats Jr., and Frank W. Middletown, Jr., 451 Florida Street, 8th Floor, Baton Rouge, Louisiana 70801.

e. Legal Counsel for Monochem is:

Mr. Harvey Rosenzweig
Elarbee, Thompson & Trapnell
800 Peachtree-Cain Tower
229 Peachtree St., NE
Atlanta, GA 30043
(404) 659-6700

2.a. Respondent Stauffer Chemical Company is a Delaware Corporation doing business in the State of Louisiana.

b. In response to an EPA §104(e) information request, Stauffer states it believes it disposed of activated carbon which may have

contained trace amount of insoluble mercuric sulfide. Mercury sulfide is a hazardous substance.

c. The Registered Agent for this Corporation is C T Corporation Systems, 601 Poydras Street, New Orleans, Louisiana 70130.

d. Legal Counsel for Stauffer Chemical is:

Mr. Micheal Th. Bourgue
Stauffer Management Company
Legal Department
Concord Pike & New Murphy Rd.
Wilmington, Delaware 19897

3.a. Respondent Uniroyal, Inc. is a corporation organized under the laws of the State of New Jersey and doing business in the State of Louisiana.

b. In response to an EPA § 104(e) information request, Uniroyal states it disposed of various CERCLA hazardous substances including toluene, aniline, benzothiazole, 2-mercapto-benzothiazole, and paraaminodiyphenylamine at the Site from 1971 through 1974.

c. The Registered Agent for this Corporation is

Prentice-Hall Corporation, 1006 Hibernia Bank Building, New Orleans, Louisiana 70112-1406.

d. Legal counsel for Uniroyal is:

Susan H. Shomway
Shomway & Merle
2425 Post Road, Suite 205
South Port, CT 06490
(203) 255-9225

4.a. Respondent Vulcan Materials Company is a corporation organized under the laws of the State of New Jersey and doing business in the State of Louisiana.

b. In response to an EPA § 104(e) information request, Vulcan states it disposed of waste including Hex Pot Bottoms, Hydrochlor Flasher Dump, Vinylidene Chloride Dump and EDC Catalyst at the Site from July 1970 until May 1973. These wastes are CERCLA hazardous substances.

c. The Registered Agent for this Corporation is Prentice-Hall Corporation, 1006 Hibernia Bank Building, New Orleans, Louisiana 70112-1406.

d. Legal counsel for Vulcan is:
Mr. Robert A. Wason IV
General Counsel
Vulcan Materials Company
P.O. Box 7497
Birmingham, Al 35253-0497
(205) 877-3206

T. Pursuant to Section 117 of CERCLA, 42 U.S.C. 9617, EPA published notice of the completion of the FS and the proposed plan for remedial action in December 1986, and provided opportunity for public comment on the proposed remedial action.

U. The decision by EPA on the remedial action to be implemented at the Cleve Reber Site is embodied in a final Record of Decision ("ROD"), executed on March 31, 1987, on which the State of Louisiana reviewed and on which the State of Louisiana has given its concurrence. The Record of Decision is attached to this Order as Attachment I and is incorporated by reference. The Record of Decision is supported by an administrative record that contains the documents and information upon which EPA based the selection of the response action.

IV. CONCLUSIONS OF LAW

A. The Respondents are "persons" as defined in Section 101(21), of CERCLA, 42 U.S.C. § 9601(21).

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

C. Substances found at the site include "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. §

9601(14).

D. Respondents Cleve Reber, Monochem, Inc., Stauffer Chemical Company, Uniroyal Chemical Company Inc., and Vulcan Materials Company by contract, agreement or otherwise arranged for disposal of hazardous substances at the site or arranged with a transporter for transport of hazardous substances to the site within the meaning of Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

E. "Releases" or "threatened releases" of hazardous substances into the environment have occurred and continue to occur at the Cleve Reber site as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

F. Respondents are responsible parties pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a) and are liable for all costs incurred by EPA not inconsistent with the National Contingency Plan, 40 C.F.R. Part 300. Under Section 106, of CERCLA, EPA may issue orders, as necessary to protect public health and welfare and the environment.

G. Persons otherwise liable under Section 107(a) may become liable for punitive damages (in accordance with Section XIX) if they fail, without sufficient cause, to provide removal or remedial actions ordered of them, by a person authorized, pursuant to Section 104 or 106 of CERCLA (42 U.S.C. § 9604, § 9606).

V. DETERMINATIONS

A. Unrestricted and/or unlimited access to the Site and/or the release or threat of release of the hazardous substances

described in Section III of this Order may present an imminent and substantial endangerment to public health, welfare or the environment.

B. In order to protect human health, welfare and/or the environment, it is necessary that the actions described below be taken. The EPA has also determined that the response actions described below are consistent with the National Contingency Plan, 40 C.F.R. Part 300.

VI. ORDER

Based on the foregoing Findings of Facts, Conclusions of Law, and Determinations, it is hereby Ordered and Directed that:

A. Respondents shall, no later than thirty (30) days after the effective date of this Order, contact David Weeks or Bruce Jones in writing, whose addresses and telephone numbers are provided in Section XVIII below, and inform him of your intent to comply with this Order. EPA will assume if you do not respond, that you refuse to perform the action. If you fail to act you may be subject to penalties as explained in Section XIX. If you comply as ordered, you will proceed as follows:

B.1. Respondents shall (jointly) identify no later than forty-five (45) days after the effective date of this Order, a Facility Coordinator who shall be responsible for this ORDER and the activities required herein. Respondents shall, by certified letter, postmarked within the specified timeframe, notify EPA of the Facility Coordinator's identity, address and telephone number

at which he may be contacted. If the Respondents choose to use a contractor to fulfil this requirement of the Order, Respondent shall submit information to EPA concerning the contractors training, experience and qualifications. EPA reserves the right to disapprove any contractor chosen by the Respondents. Your Facility Coordinator shall coordinate and work with the EPA Remedial Project Manager (RPM). EPA's RPM is David Weeks who may be reached at the address and telephone number listed in Section XVIII. The Respondents will be notified by certified mail if a new RPM is appointed by EPA.

B2. All work shall be performed by qualified employees or subcontractors of Respondents.

C. Respondents shall implement the Remedial Action (RA) pursuant to EPA's attached FDR. The FDR is incorporated by reference into this Order and is designated as Attachment 2.

D. The Chief of the Superfund Enforcement Branch shall have the full authority to change specific requirements of the FDR, within the scope of the ROD, as site/field conditions warrant such changes.

E. Respondents, within ninety (90) days after the effectual date of this Order, shall provide a draft Scope of Work for EPA review and approval which describes how the Respondents shall implement the Remedial Action as set forth in the FDR. The draft Scope of Work shall include, but is not limited to, the following:

1. An Overall Schedule which addresses items b, c, d, f, g, j, k, l, n, o, q, r, s, t, u, and v as set forth in FDR,

Section 01310, paragraph 1.06, A. Additionally, the following constraints shall apply:

a. Item o shall be initiated no later than 690 days from EPA approval of the Scope of Work.

b. Item r shall be initiated no later than 960 days from EPA approval of the Scope of Work.

c. Item v shall be completed no later than 1935 days from EPA approval of the Scope of Work.

2. A Management Plan which addresses items 1-5 as set forth in the FDR, Section 01030, paragraph 1.03.

3. A list of possible Remedial Action Constructors (RACs) to be used in carrying out work under this Order. The Respondents shall include appropriate documentation in accordance with each evaluation criterion as set forth in the FDR, Section 1010, paragraph 1.03. The documentation shall also include a copy of any contractor solicitation documents which pertain to the selection of a RAC the Respondents have in their possession. EPA shall approve or disapprove each RAC on the list.

4. A list of possible Independent Soil Testing Companies (ISTCs) and/or Independent Testing Laboratories (ITLs) to be used in carrying out the quality assurance testing, including tests of the barrow sources, required by Section 2221, 2280, 2360, and 2770 of the FDR. The Respondents shall include appropriate documentation in accordance with each evaluation criteron as set forth in

the FDR, Section 1010, paragraph 1.03. The documentation shall also include a copy of any contractor solicitation documents which pertain to the selection of a ISTC/ITL the Respondents have in their possession. EPA shall then approve or disapprove each ISTC or ITL on the list.

F. Upon EPA approval of the Scope of Work, the Respondents shall adhere to the schedule contained in such Scope of Work during the implementation of the Remedial Action.

G. Upon EPA approval of the Scope of Work, the Respondents may select any Remedial Action Constructor or Independent Testing Laboratory (per paragraphs E.3 and E.4 above) from the approved list. The Respondents shall notify EPA of the names of the RAC, ISTC or ITL selected within five (5) days of the date those entities are selected. If at any time Respondents proposes to change the RAC, ISTC or ITL, Respondents shall notify EPA and shall obtain approval from EPA as provided in this paragraph, before the new RAC, ISTC or ITL performs any work under this Order. If EPA disapproves of the selection of any RAC, ISTL or ITL, Respondents shall submit a new list of RACs, ISTCs and ITLs, that would be acceptable to the Respondents, to EPA within thirty (30) days after receipt of EPA's disapproval of the RAC, ISTC ot ITL previously selected.

H. Upon EPA approval, the Scope of Work is incorporated into this Order as a requirement of this Order and shall be an enforceable part of this Order.

I. At the conclusion of the site remediation phase of the

Remedial Action, Respondents shall implement the attached "Post Closure Plan for the Remedial Action at the Cleve Reber Site" and any other Operation and Maintenance (including groundwater monitoring) necessary to maintain the integrity of the Remedial Action. The Operation and Maintenance may be modified, if necessary, during Remedial Action based upon Site conditions encountered during the conduct of the RA.

J. Respondents shall continue Operation and Maintenance as is required by the "Post Closure Plan for the Remedial Action at the Cleve Reber Site" or pursuant to any modification under the terms of this Order.

K. Monthly Progress Reports

1. In addition to the meetings or specific reports required by the FDR, Respondents shall provide general written progress reports to EPA on a monthly basis. These progress reports shall describe all actions taken to comply with this Order, including but not limited to the following: activities undertaken to prepare FDR submittals; general description of the Work activities commenced, on going or completed during the reporting period; work activities projected to be commenced or completed during the next reporting period; any problems that have been encountered or are anticipated by Respondents in commencing or completing the work activities; and any other requirements as set forth

in the FDR. Monthly Progress Reports shall be due on the 15th day of each month.

L. Reports, Plans, Submittals and Other Items

1. Any reports, plans, submittals, specifications (including discharge or emission limits), schedules, appendices, and attachments required or established by this Order are, upon approval by EPA, incorporated into this Order. Any noncompliance with such EPA approved reports, plans, submittals, specifications (including discharge or emission limits), schedules, appendices, or attachments shall be considered a violation of this Order subject to penalties in accordance with Section XIX of this Order.

2. All plans, reports, submittals or items required by this Order and its Attachments must be submitted to EPA and are subject to EPA review and approval. Within thirty (30) days of the receipt of EPA's comments on any draft plan, report, submittal, or item which is submitted to EPA for review and/or approval, the Respondents shall submit to EPA for approval a final version which addresses to EPA's satisfaction each comment made by EPA.

3. If EPA disapproves any final plan, report, submittal or item required to be submitted to EPA for approval pursuant to this Order, Respondents shall correct

any deficiencies and resubmit the plan, report, submittal or item for EPA approval within ten (10) working days from the receipt of such disapproval.

4. Failure to submit either a draft or a final plan, report, submittal or item and the submission of a incomplete and/or deficient plan (either draft or final) report, submittal or item is a violation of this Order subject to penalties in accordance with Section XIX whether or not resubmission corrects the deficiencies of the original submission.

5. Additionally, if EPA receives a final plan, report, submittal or item which is incomplete and/or deficient or does not incorporate EPA's comments, EPA may disapprove of that document and assume responsibility for performing all or any part of the response action.

M. Respondents shall demonstrate their ability to complete the Work and to pay all claims that arise from the performance of the Work by obtaining, and presenting to EPA for approval within ninety (90) days after the effective date of this Order, one of the following items: 1) performance bond; 2) letter of credit; or 3) RCRA corporate guarantee - guarantee by a third party. In lieu of any of the three items listed above, Respondents may present to EPA, within forty-five (45) days after the effective date of the Order, financial information sufficient to ensure that Respondents have sufficient assets to make it unnecessary to require additional

assurances.

N. The Respondents shall maintain a segregated account dedicated to funding Respondents' obligations pursuant to this Order. Respondents shall quarterly submit an account statement to EPA which shall confirm that the account is funded adequately to ensure performance of Respondents' obligations under this Order for the following quarter. If at any time funds in such account are insufficient to ensure performance of Respondents' obligations, Respondents shall deposit sufficient funds into the account to meet its upcoming obligations.

O. The Respondents shall submit a quality assurance report to EPA on a quarterly basis on January 30th, April 30th, July 30th, and October 30th of each year. This report shall contain information that demonstrates that Respondents and their contractors are complying with the requirements of the FDR and approved Quality Assurance Project Plan (QAPP).

P. Any analytical or design data generated or obtained by Respondents that are related to the Work shall be provided to EPA within seven (7) days of any request by EPA for such data.

Q. EPA employees and EPA's authorized representatives shall have the right, upon request, to take splits of any samples obtained by Respondents or anyone acting on Respondents' behalf in the implementation of the Work. Respondents shall also have the right upon request to obtain splits of samples taken independently by EPA or its authorized representatives.

R. Respondents shall notify EPA fourteen (14) days prior to

any sampling being conducted at the Site by the Respondents or anyone acting on its behalf. EPA shall be notified thirty (30) days prior to the disposal of any such sample, and EPA shall have an opportunity, upon request, to take possession of all or a portion of such sample.

S. All data, factual information, and documents submitted by Respondents to EPA pursuant to this Order shall be subject to public inspection. Respondents shall not assert a claim of confidentiality regarding any hydrogeological or chemical data, any data submitted in support of a remedial proposal, or any other scientific or engineering data. Respondents may assert a claim of confidentiality as to any process, method, technique, or any description thereof that Respondents claim constitute proprietary or trade secret information developed by Respondents or developed by the contractor or the contractor's subcontractors. In addition, Respondents may assert business confidentiality claims covering part or all of the information provided in connection with this Order in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7) and pursuant to 40 C.F.R. § 2.203(b) or applicable state law. Any such claim shall be subject to EPA's confidentiality determination procedures and, if determined to be confidential, afforded the protection by EPA provided in 40 C.F.R., Part 2, Subpart B. Documents which are asserted to be attorney work product or subject to an evidentiary privilege under law shall not be subject to inspection or copying under this Order provided that, upon request, Respondents shall provide EPA with an

identification of the title and subject.

T. No Respondent, either singularly or in combination with other Respondents shall, in any way, interfere with, obstruct, or undo efforts taken by any party to comply with or implement this ORDER.

U. To the extent that the Site is presently owned by parties other than those bound by this Order and that it is necessary to obtain offsite easements, the Respondents must use their best efforts to obtain site access or easement agreements from the present owners within the time frame specified in the approved Scope of Work. Such agreements shall provide reasonable access to EPA and/or its authorized representatives. In the event that Site access or easement agreements will not be obtained within the time referenced above, the Respondents shall notify EPA regarding both the lack of, and efforts to obtain, such agreements at or before the deadline specified in the approved Scope of Work for obtaining such agreements. In such event, EPA may in its discretion, assist Respondents in obtaining site access or the necessary easements.

VII. COMPLIANCE WITH OTHER LAWS

Respondents shall comply with all federal, state and local laws and regulations in carrying out the terms of this Order. All hazardous substances removed from the facility shall be handled in accordance with the Resource Conservation and Recovery Act of 1976, U.S.C. §6921, et seq., the regulations promulgated under that Act, and EPA's Offsite Disposal Policy, OSWER Directive 9834.11

(Nov. 13, 1987).

VIII. SUBMITTALS

A. All plans, reports, submittals, items or notifications to EPA required by this Order or its Attachments shall be made to the EPA RPM at the following address:

USEPA Remedial Project Manager (6H-EA)
1445 Ross Avenue
Dallas, Texas 75202-2733

B. All decisions of EPA under this Order, including approvals, disapprovals, reports, workplans, specifications, schedules, and other work outputs, will be communicated to you by the EPA RPM. No formal or informal advice, guidance, directions, suggestions, or comments by anyone other than the RPM regarding any activities undertaken in satisfaction of this Order shall relieve you of, or add to, obligations imposed by this Order. No informal guidance provided by the RPM is binding upon you. The RPM will differentiate between formal and informal guidance.

IX. RECORD PRESERVATION

A. You shall preserve, during the pendency of this Order and for a minimum of ten (10) years after the termination of this Order, all records and documents in your possession or in the possession of your divisions, employees, agents, or contractors, successors or assignees, prepared pursuant to or under the requirements of this Order, or which in any way relate to, the Site, regardless of any document retention policy to the contrary.

B. You shall notify EPA thirty (30) calendar days prior to the destruction of any documents required to be kept pursuant to this section. Upon request by EPA, you shall make available, to EPA, the actual records or copies of the actual records required to be maintained pursuant to this paragraph.

X. EPA PERIODIC REVIEW

EPA is required by Section 121(c) of CERCLA, 42 U.S.C. § 9621(c) to perform a five year review of those sites where hazardous substances remain after initiation of the RA. Additional response actions may be necessary to protect human health and the environment if the five year review indicates that there is a release or threat of a release of a hazardous substance into the environment.

XI. ENDANGERMENT DURING IMPLEMENTATION

The Regional Administrator, EPA Region 6, may determine that acts or circumstances (whether related to or unrelated to this Order) may endanger human health, welfare or the environment and may order Respondents to stop further implementation of this Order until the endangerment is abated. EPA may also for any other reason permitted by law order Respondents to cease activities at the Cleve Reber site.

XII. FAILURE TO ATTAIN PERFORMANCE STANDARDS

A. Notwithstanding any action by EPA, Respondents remain

fully responsible for achievement of the Performance Standards in the Record of Decision and FDR. Nothing in this Order, or in EPA's approval of the Scope of Work, or in the FDR, or approval of any other submission, shall be deemed to constitute a warranty or representation of any kind by EPA that full performance of the FDR or Remedial Action will achieve the Performance Standards set forth in the ROD and in the FDR. Respondent's compliance with such approved documents does not foreclose EPA from seeking additional work to achieve the applicable performance standards.

B. In the event that EPA determines that additional response activities are necessary to meet applicable Performance Standards, EPA will notify Respondent(s) and take the appropriate action necessary to ensure compliance with the applicable Performance Standard.

XIII. ADDITIONAL RESPONSE ACTIONS

EPA may determine that in addition to the Work identified in this Order and the Attachments to this Order, additional response activities may be necessary to protect human health and the environment. If EPA determines that additional response activities are necessary, EPA reserves the right to take any additional actions as are appropriate to protect human health and the environment.

XIV. RESERVATION OF RIGHTS

A. EPA retains its rights and power to take appropriate

action, including enforcement action, to address any noncompliance by the Respondents with the terms of this ORDER, or to address any other event or occurrence not covered by this ORDER upon which EPA is empowered to act under any applicable law.

B. Compliance with this Order does not release any person from responsibilities to pay costs, recompensations, indemnifications or contributions, to undertake, or cause to be undertaken, response actions or other efforts of any nature not herein required but necessary to protect human health or the environment from releases or threats of releases of hazardous substances arising from the Cleve Reber site.

C. EPA reserves the right to bring an action against the Respondents pursuant to Section 107 of CERCLA for recovery of all response and oversight costs, including indirect costs, incurred by the United States related to this Order and not reimbursed by the Respondents, as well as any other past and future costs incurred by the United States in connection with response activities conducted pursuant to CERCLA, or other authority, in connection with the Site.

D. EPA reserves authority to order further action necessary to protect human health or the environment from releases or threats of releases of hazardous substances arising from the Cleve Reber Site.

XV. OTHER CLAIMS

A. Nothing herein is intended to release any claims, causes

of action or demands in law or equity against any person, firm, partnership, or corporation for any liability it may have to the United States, the State of Louisiana or any other person, firm, partnership, corporation or association arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, solid wastes, pollutants, or contaminants found at, taken to, or taken from the Site.

B. This Order does not constitute any decision on preauthorization of funds under CERCLA.

XVI. LIABILITY OF EPA

A. Nothing herein is intended to be an assumption by EPA of liability for any claims or causes of action arising from, or on account of, your acts, omissions or acts or omissions of those under your control arising in connection with the carrying out of activities pursuant to this ORDER.

B. EPA will not be a party to any contract you might make in responding to this Order.

XVII. PARTIES BOUND

This Order shall apply to and is binding upon Respondents listed in Section II, their officers, directors, agents, employees, contractors, successors and assigns.

XVIII. EFFECTIVE DATE - OPPORTUNITY TO CONFER

A. This ORDER is effective fourteen (14) calendar days after your receipt thereof, and all times for performance of response shall be calculated from that date.

B. You may make an oral request for a conference with EPA, followed by written notice concerning this Amended Order. Such request must be received by EPA within ten (10) days following your receipt of this ORDER. Address your request for a conference to:

Mr. David Weeks
Cleve Reber Superfund Site
U.S. Environmental Protection Agency
Superfund Compliance Section (6H-EA)
1445 Ross Avenue
Dallas, Texas 75202-2733
(214) 655-6582

or

Mr. Bruce Jones
Cleve Reber Superfund Site
U.S. Environmental Protection Agency
Office of Regional Counsel (6C-WT)
1445 Ross Avenue
Dallas, Texas 75202-2733
(214) 655-2120

C. At any conference held pursuant to your request, you may appear in person or by attorney or other representatives. At the conference, you or your representative, may present your analysis of the technical feasibility of this Order, or you or your representative may offer evidence correcting any factual allegation made in this Order.

XIX. PENALTIES FOR NONCOMPLIANCE

Be advised that willful violations of, failure or refusal to comply with this Order, or any portion of it, may subject you, under § 106(b) of CERCLA, 42 U.S.C. § 9606(b), to a civil penalty of not more than $25,000 for each day in which such violation occurs or such failure to comply continues. Failure to comply with this ORDER, or any portion thereof, without sufficient cause, may subject you, under § 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), to liability for punitive damages in an amount up to three times the costs incurred by the government as a result of your failure to take proper action.

Dated: February 5, 1991

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BY: Jack Divita
for Allyn M. Davis
Director
Hazardous Waste Management Division
U.S. Environmental Protection Agency
Region 6

MUTUAL RECEIPT, RELEASE AND SETTLEMENT AGREEMENT

THIS MUTUAL RECEIPT, RELEASE AND SETTLEMENT AGREEMENT IS ENTERED INTO BY AND AMONG VULCAN MATERIALS COMPANY, MONOCHEM INC., CIBA-GEIGY CORPORATION, STAUFFER CHEMICAL COMPANY (THROUGH STAUFFER MANAGEMENT COMPANY) AND UNIROYAL CHEMICAL COMPANY, INC. (AND ANY OF THEIR PREDECESSORS, SUCCESSORS OR ASSIGNS), THROUGH THEIR RESPECTIVE UNDERSIGNED COUNSEL; AND VERNON J. SCHEXNAYDRE AND BARBARA BOURGEOIS SCHEXNAYDRE, INDIVIDUALLY AND THROUGH THEIR RESPECTIVE UNDERSIGNED COUNSEL, AS FOLLOWS:

WHEREAS, on or about October 16, 1989, plaintiffs, Vulcan Materials Company, Monochem, Inc., CIBA-GEIGY Corporation and Uniroyal Chemical Company Inc. filed a complaint in the United States District Court, Middle District of Louisiana, entitled and numbered "Vulcan Materials Company, et al, versus Ascension Parish, et al.," Civil Action Number 89-778-B.

WHEREAS, this suit concerns the Cleve Reber Dump Site, located in Ascension Parish, Louisiana, which Site is recognized on the National Priorities List as a federal Superfund site subject to the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 USCA §9601, et seq.

WHEREAS, Vulcan Materials Company, Monochem Inc., Stauffer Chemical Company and Uniroyal Chemical Company Inc. are among the

EXHIBIT E

parties listed by the United States Environmental Protection Agency ("EPA") as potentially responsible parties for the cleanup of the Cleve Reber Dump Site under CERCLA.

WHEREAS, plaintiffs in the above referenced suit are seeking contribution from other potentially responsible parties who acted as owner, operator, generator and/or transporter with regard to the Cleve Reber Dump Site and said suit seeks to recover for response costs, as that term is defined by CERCLA, incurred and to be incurred at the Site by plaintiffs.

WHEREAS, on or about November 12, 1976, Vernon J. Schexnaydre (defendant in the referenced litigation) and his wife Barbara Bourgeois Schexnaydre purchased the property which comprises the above referenced Cleve Reber Dump Site from Elmyra Landry, C.J. Bishop, Ruth St.Amant and Clyde Penrose St. Amant and said purchase was recorded in the public records with the Clerk and Recorder in and for the Parish of Ascension, Louisiana.

WHEREAS, plaintiffs in the above-referenced suit named Vernon J. Schexnaydre as a defendant in said suit, and plaintiffs have actively pursued Vernon J. Schexnaydre in said suit for liability under CERCLA.

WHEREAS, Vernon J. Schexnaydre and Barbara Bourgeois Schexnaydre acknowledge that they are presently the owners of the Cleve Reber Dump Site property and that as owners they are subject to the jurisdiction of CERCLA and the potential joint and several liability which CERCLA could impose upon them for the response costs which have been incurred and response cost to be incurred in the future with respect to the subject property.

WHEREAS, all of the parties jointly agree, and warrant, that this Mutual Receipt, Release and Settlement Agreement, and the exchanges made by and between the parties, represent a fair and equitable resolution of this matter and that all parties have consulted legal counsel for advice before freely entering into this Mutual Receipt, Release and Settlement Agreement and the Servitude of Access and Right of Use Agreement which is being executed contemporaneously herewith.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

I. That for the consideration of Vernon J. Schexnaydre and Barbara Bourgeois Schexnaydre (hereinafter "Grantors") executing a Servitude of Access and Right of Use Agreement appended hereto as Exhibit A.

(A.) Vulcan Materials Company, Monochem, Inc., Ciba-Geigy Corporation and Uniroyal Chemical Company, Inc. agree to dismiss Vernon J. Schexnaydre from the referenced litigation; and

(B.) Vulcan Materials Company, Monochem, Inc., Ciba-Geigy Corporation, Uniroyal Chemical Company, Inc. and Stauffer Chemical Company (through Stauffer Management Company), and any of their respective predecessors, successors and assigns, agree forever to release Grantors from any and all common law claims, and any and all claims, causes of action or liability under laws, statutes, or regulations, including subsequently enacted laws, statutes or regulations, administered or enforced by the United States or by any State, associated with, relating to, or arising from property or properties known as the Cleve Reber Dump Site, and being more specifically described as follows:

(1.) A certain tract of land situated in the Parish of Ascension being the West Half of the Southeast Quarter of the Southeast Quarter of Section 36, Township 10 South, Range 3 East, Southeastern District of Louisiana, containing 20 acres, and designated as Tract CDEF on the plan of survey by Durald F. Woods, C.E. dated June 17, 1965.

A certain tract of land situated in the Parish of Ascension in the northern portion of Lots 1, 2 & 3 of Section 41, Township 10 South, Range 3 East, Southeastern District of Louisiana, containing 3.21 acres, and designated as Tract CFHG on the plan of survey by Durald F. Woods, C.E. dated June 17, 1965.

A certain tract of land situated in the Parish of Ascension in the northern portion of Lots 1, 2 & 3 of Section 41, Township 10 South, Range 3 East, Southeastern District of Louisiana, containing 1.428 acres, and designated as Tract KCHL on the plan of survey by Durald F. Woods, C.E. dated June 17, 1965; and

(2.) further, in accordance with a more recent survey of C. Mistric Surveyors, Inc. dated July 12, 1988 and updated February 18,1992, and described as a Tract of Land located in the Northern Portions of Lots 1 & 2 of Sections 41, and the West 1/2 of the South East 1/4 of the South East 1/4 of Section 36, T-10-S, R-3-E, Southeastern Land District, East of River, Ascension Parish, Louisiana, and being the same property acquired by Barbara Bourgeois, wife of/and Vernon J. Schexnaydre from Mrs. Elmyra Landry, C.J. Bishop, Mrs. Ruth St. Amant and Clyde Penrose St. Amant, by Act of Cash Sale dated November 12, 1976 passed before Dolly M. Diez, Notary Public, and duly recorded in Conveyance Office Book 283, folio 321 on December 2, 1976, Entry No. 146159, Ascension Parish,

Louisiana; and being more particularly described in Exhibit B appended hereto.

II. That for the consideration of Vulcan Materials Company, Monochem, Inc., Ciba-Geigy Corporation and Uniroyal Chemical Company, Inc. dismissing Vernon J. Schexnaydre from the referenced litigation, the release set forth in Section I. (B.) (1.) and I. (B.) (2.) above, and the benefits which shall inure to Grantors as a result of the remediation of the Cleve Reber Dump Site, Grantors agree forever to release Vulcan Materials Company, Monochem, Inc., Ciba-Geigy Corporation, Uniroyal Chemical Company, Inc. (for and on behalf of itself and as successor to Uniroyal, Inc. with respect to this matter) and Stauffer Chemical Company (through Stauffer Management Company), and any of their predecessors, successors, and assigns, from any and all common law claims, and any and all claims, causes of action or liability under laws, statutes, or regulations, including subsequently enacted laws, statutes or regulations, administered or enforced by the United States or by any State, associated with, relating to, or arising from the Cleve Reber Dump Site, as described in Section I. (B.) (1.) and I. (B.) (2.) above.

It is expressly understood and agreed by and between all parties hereto that this Mutual Receipt, Release and Settlement Agreement will not affect any other claims, rights, or causes of action of any of the parties against any other persons who are not parties hereto, and those rights are specifically reserved unto the parties hereto.

Executed by the parties on the dates indicated below.

3-31-92
DATE

VERNON J. SCHEXNAYDRE

3-31-92 Barbara B. Schexnaydre
DATE

BARBARA B. SCHEXNAYDRE

3-31-92
DATE

VERNON J. SCHEXNAYDRE AND
BARBARA B. SCHEXNAYDRE
through their attorney
of record: PETER J. LOSAVIO

5-20-92
DATE

VULCAN MATERIALS COMPANY
MONOCHEM, INC.
CIBA-GEIGY CORPORATION
UNIROYAL CHEMICAL COMPANY, INC.
through their counsel of record:
WARREN E. BYRD, II

4-27-92
DATE

STAUFFER CHEMICAL COMPANY
through STAUFFER MANAGEMENT COMPANY

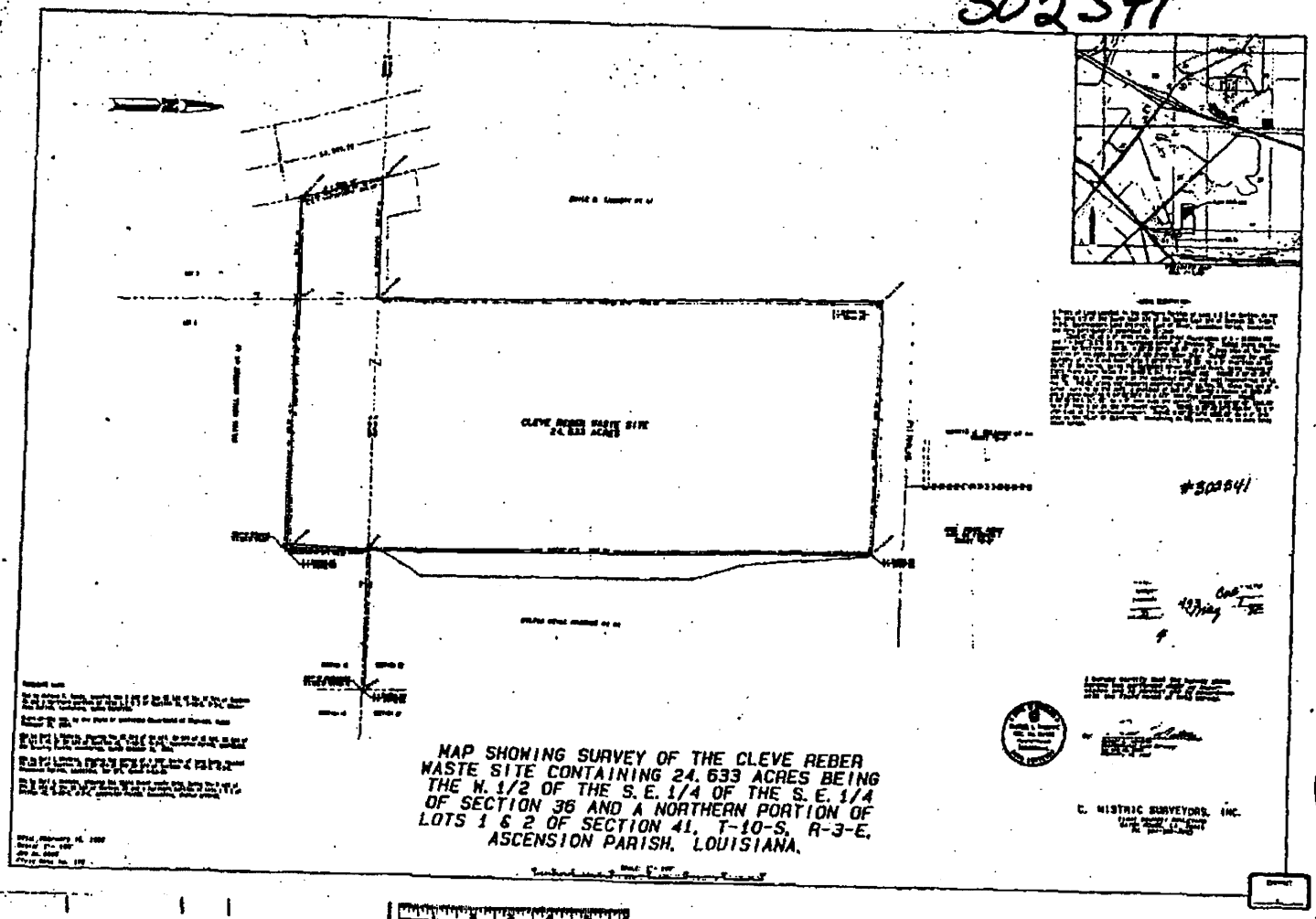
through its Vice President:
J. KENT RIEGEL

FOR MAP SEE
PLAT FILE
302541

State of Louisiana, Parish of Ascension
I do hereby certify that the above and foregoing was received, filed and recorded in COB 443 Folio No. 1
21 day of May 19 92

21st DAY OF MAY 1992

302541



MAP SHOWING SURVEY OF THE CLEVE REBER WASTE SITE CONTAINING 24.633 ACRES BEING THE W. 1/2 OF THE S.E. 1/4 OF THE S.E. 1/4 OF SECTION 36 AND A NORTHERN PORTION OF LOTS 1 & 2 OF SECTION 41, T-10-S, R-3-E, ASCENSION PARISH, LOUISIANA.

Attachment 8

Public Notices

CLEVE REBER SUPERFUND SITE
PUBLIC NOTICE
U.S. Environmental Protection Agency Region 6 and
Louisiana Department of Environmental Quality
March 2008

The U.S. Environmental Protection Agency Region 6 (EPA) and the Louisiana Department of Environmental Quality (LDEQ) have begun the third Five-Year Review of the remedy for the Cleve Reber Superfund Site. The review will let us know if the remedy performed is still protecting public health and the environment. The site is located in Ascension Parish, Louisiana. Once completed, the results of the Five-Year Review will be made available to the public on the internet at www.epa.gov and at the following information repository:

Louisiana Department of
Environmental Quality
Public Records Center
602 N. Fifth Street
Baton Rouge, LA 70802

Information about the Site also is available on the internet at:

www.epa.gov/region6/superfund

For more information about the Site, contact:

Mr. Bartolome Cañellas at EPA
(214) 665-6662
or 1-800-533-3508 (toll-free),
or by e-mail at canellas.bart@epa.gov or

Ms. Regina A. Philson at LDEQ
(225) 219-3210 or by e-mail at
regina.philson@la.gov

All media inquiries should be directed to the EPA Press Office at (214) 665-2200.

This notice was published in *The Weekly Citizen* for Ascension Parish on April 1, 2008.

CLEVE REBER SUPERFUND SITE
PUBLIC NOTICE
U.S. Environmental Protection Agency Region 6 and
Louisiana Department of Environmental Quality
September 2008

The U.S. Environmental Protection Agency Region 6 (EPA) and the Louisiana Department of Environmental Quality (LDEQ) have completed the third Five-Year Review of the remedy for the Cleve Reber Superfund Site. This third Five-Year Review evaluated the ability of the remedy to protect public health and the environment. The site is located in Ascension Parish, Louisiana.

The results of the third Five-Year Review indicate that the site remedy is performing as intended and is protective of human health and the environment. The results are available to the public on the internet at www.epa.gov/superfund/cleanup/postconstruction/5yr.htm and at the following information repository:

Louisiana Department of Environmental Quality
Public Records Center
602 N. Fifth Street
Baton Rouge, LA 70802

Information about the Site also is available on the internet at:

www.epa.gov/region6/6sf/pdffiles/0600512.pdf

For more information about the Site, contact:

Mr. Bartolome Cañellas at EPA
(214) 665-6662
or 1-800-533-3508 (toll-free),
or by e-mail at
canellas.bart@epa.gov

or

Ms. Regina A. Philson at LDEQ
(225) 219-3210 or by e-mail at
regina.philson@la.gov

All news media inquiries should be directed to the EPA Press Office at (214) 665-2200.

This notice will be published in *The Weekly Citizen* for Ascension Parish once the third Five-Year Review process is completed.

Attachment 9

Site Inspection Photographs after Hurricane Gustav

Site Inspection Photographs after Hurricane Gustav

Note: Damage observed during the site inspection after Hurricane Gustav was repaired.