



September 29, 2009



Richard D. Bedell
Division Manager
Marathon Petroleum Company LLC
Louisiana Refining Division
Post Office Box AC
Garyville, LA 70051-0849

Re: Ready for Reuse Determination
Oily Sludge Impoundments
Marathon Petroleum Company LLC
Louisiana Refining Division
AI No. 3165
Highway 61 and Marathon Avenue, Garyville, LA 70051
St. John the Baptist Parish

Dear Mr. Bedell:

The Louisiana Department of Environmental Quality (LDEQ) and United States Environmental Protection Agency (EPA), Region 6 together have determined that a portion of the Marathon Petroleum Company's Louisiana Refining Division at Garyville, Louisiana (the "Property") is Ready for Reuse. A Ready for Reuse Determination is an acknowledgment by both agencies that environmental conditions on the property are protective of human health and the environment based on its current and anticipated future use.

The Property encompassed by this Ready for Reuse Determination consists of the Oily Sludge Impoundments used by Marathon Petroleum Company LLC ("Marathon") until 1988 as temporary storage facilities for oily sludges prior to being landfarmed. The Property is located within the Garyville Refinery. Both impoundments have achieved closure and are currently under post-closure monitoring in accordance with LDEQ Hazardous Waste Post-Closure Permit LAD081999724-PC-1.

With this Ready for Reuse Determination, LDEQ and EPA Region 6 agree that Marathon Petroleum Company LLC has successfully conducted investigation and risk management activities, and the environmental conditions at the Property are protective of human health and the environment based on their current and planned future commercial and/or industrial uses. The Ready for Reuse Basis of Decision is provided as Enclosure 1 to this correspondence. Information concerning the current environmental conditions of the site and risk management activities to ensure protectiveness is summarized in Enclosure 2. Copies of relevant documents may be obtained from LDEQ at the addresses provided in Enclosure 3 to this correspondence.

Mr. Richard D. Bedell

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If conditions on the Property change, including environmental conditions, land use, site receptors, and remedy performance, the current owner/operator will notify LDEQ and it may become necessary to perform additional investigation and/or remediation to ensure continuing protectiveness. The undersigned expressly reserve all rights and authorities to require future action by owners or operators if new or additional information becomes apparent that impacts this Ready for Reuse Determination, whether such information is known as of this date, or is discovered in the future.

Congratulations on this most noteworthy achievement!

Sincerely yours,



Paul D. Miller, R.E.
Assistant Secretary
Office of Environmental Assessment
Louisiana Department of Environmental
Quality



Carl E. Edlund, P.E.
Director
Multimedia Planning and Permitting Division
U.S. EPA, Region 6

Enclosures

ENCLOSURE 1
READY FOR REUSE BASIS OF DECISION

OILY SLUDGE IMPOUNDMENTS
MARATHON PETROLEUM COMPANY LLC
LOUISIANA REFINING DIVISION

INTRODUCTION

The Louisiana Department of Environmental Quality (LDEQ) – Remediation Services Division (RSD) has determined that the Oily Sludge Impoundments at the Marathon Petroleum Company LLC, Louisiana Refining Division (LDEQ Agency Interest 3165) are Ready for Reuse. These units meet the criteria for a Ready for Reuse Determination because their current environmental conditions are protective of human health and the environment based upon their current and/or planned land use. Background information, results of investigations and risk management activities, post-closure permit requirements, and the units' current conditions are summarized in the following sections.

PROPERTY DESCRIPTION

The Marathon Petroleum Company LLC, Louisiana Refining Division, is located along the east bank of the Mississippi River at the intersection of US Highway 61 and Marathon Avenue near Garyville, Louisiana (St. John the Baptist Parish). This facility is a fully integrated petroleum refinery and produces a variety of products, primarily No. 2 and No. 6 fuel oils and gasoline, but also sulfur, propylene, kerosene, propane, and asphalt. The facility has a current design capacity of 255,000 barrels of crude oil per day. The previous use of the land was agricultural (San Francisco Sugar Cane Plantation). Prior to September 1, 2005, the refinery was known as Marathon Ashland Petroleum LLC.

The specific properties included in this Ready for Reuse Determination are the two former Oily Sludge Impoundments (OSIs), located south of the 10.2-acre Land Treatment Unit and northeast of the 4.5-acre Landfarm. The area is 0.36 acres in size, and covered by a modified RCRA cap. The asphalt-covered area is currently used for staging tools for nearby process equipment work and as a parking area with a vehicle/equipment weight limit. The future intended use is for future construction projects or use as an equipment storage/staging area.

BACKGROUND INFORMATION

Historically, Marathon's refinery wastes were placed in three hazardous waste units: a landfarmed area (the Interim Status Landfarm), the east oily sludge impoundment, and the west oily sludge impoundment. The sludge impoundments were used as temporary storage facilities for slop oil emulsions solids, API separator sludge, DAF sludge, and other oily sludges prior to being landfarmed. The surface impoundments were determined not to meet Resource Conservation and Recovery Act (RCRA) land disposal restriction minimum technology requirements and ceased receiving wastes in 1988. A closure plan was developed that specified excavation of the sludges and affected soils between June and November 1988. The impoundments were deemed inactive on November 8, 1988, and were included in the Final Operating Hazardous Waste Permit granted to

Marathon on March 6, 1989. Permit modifications were issued on July 22, 1990, July 22, 1996, and October 27, 1997.

Marathon's original intent was to "clean close" these impoundments. The sludge, affected soils, and the flow structure separating the two impoundments were removed and placed into the 4.5-acre Interim Status Landfarm. However, due to the presence of visibly impacted soils remaining in certain areas of the excavation and the results of soil samples collected from the bottom and sidewalls, Marathon decided not to pursue clean closure and developed engineered plans for closure of the impoundments. In March and April, 1993, the impoundments were backfilled to grade, including the placement of a clay liner followed by structural clay fill. The structural fill was placed horizontally in six to nine inch lifts, compacted, and tested for density. A clay cap was placed over the clay fill, and compacted to a permeability of less than 1×10^{-7} cm/sec. The clay cap was covered by 18 inches of protective fill pending LDEQ approval of the final cover design. The plan for the final cover system was approved by LDEQ in July 1996 and installed in November 1996 through January 1997. The protective fill was removed, and the final cover system consisting of, in ascending order, an HDPE Geomembrane, a geocomposite drainage layer, 15 inches of crushed limestone, and three inches of asphalt was placed over the clay cap. Closure of the OSI was completed January 31, 1997. A Closure Certification Report was submitted to LDEQ on March 27, 1997. The report included a maximum load-bearing capacity for the final cap of 2,000 pounds per square foot and the statement that signs would be posted to ensure that the area is properly restricted. Marathon requested approval to use the area for light vehicle parking and light equipment laydown.

A letter denoting deficiencies in the report was issued by LDEQ on July 23, 1997. This letter emphasized that the area may be used only for light equipment laydown and light vehicle parking on a temporary basis, and that Marathon must ensure that the approved bearing capacity for the final cover of the closed unit was not exceeded at any time. An addendum to the Closure Certification was submitted August 5, 1997. LDEQ issued a letter on September 23, 1997 with the determination that the Oily Sludge Impoundments had been closed in accordance with Marathon's hazardous waste permit.

Marathon notified LDEQ on October 5, 1998 that it would not request the renewal of its hazardous waste operating permit due to changes in waste management practices. The permit expired on March 6, 1999, and a Hazardous Waste Post-Closure Permit was issued by LDEQ on June 28, 2005 (LAD 081999724-PC-1; effective August 3, 2005). Under the requirements of this permit, the Oily Sludge Impoundments are subject to post-closure care activities, including groundwater monitoring.

POST-CLOSURE MONITORING PROGRAM

Annual detection monitoring of groundwater with annual reporting continues at the Oily Sludge Impoundments in accordance with the 2005 Hazardous Waste Post-Closure Permit. Post-closure care of the OSI began on September 23, 1997 and will continue for 30 years on a staggered schedule. Five annual events remain (years 14, 17, 20, 25, and 30).

INVESTIGATION AND RISK EVALUATION

In 2009, Marathon proposed to demonstrate that Contaminants of Concern exposure at the OSIs poses no risks to human health and the environment using LDEQ's Risk Evaluation/Corrective Action Program (RECAP) process. In a workplan for the investigation of remaining contamination dated January 23, 2009, it proposed that the successful demonstration of no risk will allow Marathon to (1) eliminate the need for a post-closure hazardous waste permit and (2) discontinue post-closure care activities, including groundwater monitoring, at the two impoundments. The investigation described in the work plan was approved by LDEQ on February 13, 2009.

The results of this investigation, as well as results from a subsequent resampling event at one boring location (OSB-8), were submitted to LDEQ in Marathon's *Risk Evaluation/Corrective Action Program (RECAP) Evaluation, Oily Sludge Impoundment*, dated August 14, 2009 and in supplemental information dated August 31, 2009. The evaluation document also included a request to participate in the LDEQ/EPA Ready for Reuse Program.

In a letter dated August 31, 2009, LDEQ approved the Limiting RECAP Standards (LRS) calculated for this area, and concurred that the concentrations of detected contaminants in soil and groundwater at the Oily Sludge Impoundments are below the approved standards. A list of the maximum remaining concentrations of Constituents of Concern (COCs) may be found in Enclosure 2 to the Ready For Reuse Determination letter (Environmental Conditions Table). Because the Oily Sludge Impoundments were evaluated using nonindustrial remediation standards, the future use of the properties is not limited to industrial/commercial use, and a conveyance notification for these properties need not be filed with the parish.

However, until the Post-Closure Permit is modified to so allow, future use that causes any changes to the post-closure groundwater monitoring program must be approved by the LDEQ Waste Permits Division. Future decisions regarding the elimination of the need for a post-closure hazardous waste permit or discontinuation of post-closure care activities will be made by the Waste Permits Division.

CURRENT ENVIRONMENTAL CONDITIONS

A list of the maximum remaining concentrations of Constituents of Concern in soil and groundwater may be found in Enclosure 2 to the Ready For Reuse Determination letter (Environmental Conditions Table). Contact information for questions regarding the environmental conditions described in this Ready for Reuse Basis of Decision is provided in Enclosure 3 to the Ready For Reuse Determination letter.

REFERENCES

Documents related to site investigations, risk management activities, and post-closure permit requirements at the Oily Sludge Impoundments are public records, and are available through LDEQ's Electronic Document Management System (EDMS). Contact information for obtaining access to these records is provided in Enclosure 3 to the Ready For Reuse Determination letter. A

list of documents supporting this Ready for Reuse Determination Basis of Decision is provided below:

1989 *Final Hazardous Waste Operating Permit*; LDEQ; March 6, 1989 (modifications: July 22, 1990; July 22, 1996; October 27, 1997)

1997 *Closure Certification Report, Oily Sludge Impoundment*; Marathon Oil Company; March 27, 1997 [EDMS Document No. 33490476]

Notice of Deficiency for *Closure Certification Report, Oily Sludge Impoundment*; LDEQ; July 23, 1997 [EDMS Document No. 7986898]

Addendum to *Closure Certification Report, Oily Sludge Impoundment*; Marathon Oil Company; August 5, 1997 [EDMS Document No. 6264262]

Oily Sludge Impoundment Closure Certification-Verification; LDEQ; September 23, 1997 [EDMS Document No. 7986754]

1998 Notification to LDEQ regarding expiration without renewal of Final Modified Operating Permit LAD 081 999 724-MO-2; Marathon Ashland Petroleum LLC; October 20, 1998 [EDMS Document No. 7986401]

2005 *Final LDEQ Post-Closure Permit for Hazardous Waste Surface Impoundments and Land Treatment Units, Marathon Ashland Petroleum LLC, LAD081999724-PC-1*; LDEQ; June 28, 2005 [EDMS Document No. 34680469]

Facility Name Change; Marathon Petroleum Company LLC; September 14, 2005 [EDMS Document No. 33391670]

2008 *Response to Notice of Deficiencies*; Marathon Petroleum Company LLC; April 18, 2008 [EDMS Document No. 36770807] Note: This submittal includes the April 2008 version of *Hazardous Waste Facilities Groundwater Sampling and Analysis Plan* that was subsequently conditionally approved by LDEQ on June 27, 2008. This document includes the current requirements for groundwater monitoring at the Oily Sludge Impoundments.

Conditional Approval of the Class 1¹ Hazardous Waste Permit Modification – Incorporation of the “Hazardous Waste Facilities Groundwater Sampling and Analysis Plan (April 2008) into Hazardous Waste Post-Closure Permit LAD 081999724-PC-1; LDEQ; June 27, 2008 [EDMS Document No. 37057815]

2009 *Risk Evaluation/Corrective Action (RECAP) Work Plan, Oily Sludge Impoundments*; Marathon Petroleum Company LLC; January 23, 2009; [EDMS Document No. 39596622]

Approval of Risk Evaluation/Corrective Action (RECAP) Work Plan, Oily Sludge Impoundments; LDEQ; February 13, 2009 [EDMS Document No. 40134551]

Risk Evaluation/Corrective Action Program (RECAP) Evaluation, Oily Sludge Impoundments; C-K Associates for Marathon Petroleum Co., LLC; August 14, 2009 [EDMS Document No. 42714198]

Memo to LDEQ File, Addendum to *Risk Evaluation/Corrective Action Program (RECAP) Evaluation, Oily Sludge Impoundments*; LDEQ; August 31, 2009 [EDMS Document No. 43315639]

Approval of Risk Evaluation/Corrective Action Program (RECAP) Evaluation, Oily Sludge Impoundments; LDEQ; August 31, 2009 [EDMS Document No. 43054421]

ENCLOSURE 2
ENVIRONMENTAL CONDITIONS TABLE
OILY SLUDGE IMPOUNDMENTS
MARATHON PETROLEUM COMPANY LLC
LOUISIANA REFINING DIVISION

Remedial Action Taken	Environmental Conditions			Clean-up Standard	Clean-up Status	Institutional Controls	
	Medium	Contaminant of Concern (COC) ⁽¹⁾	Maximum Level Remaining				
Excavation and disposal of contaminated soil; monitoring of groundwater	Soil	Benzene	<0.051 mg/kg	1.0 mg/kg ⁽³⁾	Remaining concentrations are less than non-industrial screening standards	LDEQ Hazardous Waste Post-closure Permit (conveyance notification is not required)	
		Benzo(a)pyrene	0.231 mg/kg ⁽²⁾	0.33 mg/kg ⁽⁴⁾			
		2-Methylnaphthalene	2.5 mg/kg	110 mg/kg ⁽⁴⁾			
		Phenanthrene	2.0 mg/kg	21,000 mg/kg ⁽⁴⁾			
		Pyrene	3.9 mg/kg	1,150 mg/kg ⁽⁴⁾			
		Anthracene	<0.001	0.043 mg/L ⁽⁵⁾			
	Groundwater	Benzo(a)pyrene	<0.0002 mg/L	0.0016 mg/L ⁽⁵⁾			Remaining concentrations are less than screening standards
		Chrysene	<0.0002	0.0016 mg/L ⁽⁵⁾			
		2,4-Dimethylphenol	<0.5	198 mg/L ⁽⁶⁾			
		2,4-Dinitrophenol	<0.1	220 mg/L ⁽⁶⁾			
		Fluoranthene	0.00041	0.21 mg/L ⁽⁵⁾			
		2-Methylnaphthalene	0.35	11.88 mg/L ⁽⁶⁾			
		Naphthalene	<0.02	5 mg/L ⁽⁷⁾			
		4-Nitrophenol	<0.1	572 mg/L ⁽⁶⁾			
	Phenanthrene	0.15	1.2 mg/L ⁽⁵⁾	Currently under Post-Closure Care (groundwater monitoring); future change of status will require revision or termination of the Post-Closure Permit			
	Phenols	<0.5	36,520 mg/L ⁽⁶⁾				
	Pyrene	0.0012	0.14 mg/L ⁽⁵⁾				

⁽¹⁾ Contaminants of Concern are those constituents present at an Area of Interest at concentrations that exceed the RECAP Screening Standards. Remaining concentrations in soil are less than the nonindustrial screening standards and would generally not be listed as COCs. However, in the interests of future land use, an evaluation of the soil under the enclosed structure scenario was also performed for the listed soil contaminants (Management Option 1).

⁽²⁾ 95% UCL-AM

⁽³⁾ MO-1 SOIL_{esni}

⁽⁴⁾ MO-1 SOIL_{ni}

⁽⁵⁾ MO-1 Water_{SOL}

⁽⁶⁾ MO-1 GW_{3NDW}

⁽⁷⁾ MO-1 GW_{esni}

**ENCLOSURE 3
READY FOR REUSE AGENCY CONTACTS**

**OILY SLUDGE IMPOUNDMENTS
MARATHON PETROLEUM COMPANY LLC
LOUISIANA REFINING DIVISION**

For a copy of the administrative record providing detailed information regarding environmental conditions at the Marathon Petroleum Company's Garyville Refinery, please contact:

Louisiana Department of Environmental Quality
Public Records Center
Galvez Building, Room 127
602 North Fifth Street
Baton Rouge, LA 70802
(225) 219-3168

For questions regarding the environmental conditions described in the Ready for Reuse Basis of Decision for the Marathon Petroleum Company's Garyville Refinery, please contact:

Ms. Kristine Carter
Geologist III
Remediation Services Division
Office of Environmental Assessment
Louisiana Department of Environmental Quality
Post Office Box 4314
Baton Rouge, LA 70821-4314
Telephone: (225) 219-3396
E-mail: kristine.carter@la.gov

or

Mr. Robert L. Harris
Advanced HES Professional
Louisiana Refining Division
Marathon Petroleum Company LLC
Post Office Box AC
Garyville, LA 70051-0849
Telephone: (985) 535-2241
E-mail: rlharris@marathonoil.com

On this Day, September 29, 2009,

**Louisiana Department of Environmental Quality
U.S. Environmental Protection Agency, Region 6**

Present to

**Marathon Petroleum Company LLC
Louisiana Refining Division**

Ready for Reuse Determination

In recognition of the Marathon Petroleum Company's efforts to investigate the Oily Sludge Impoundments, the Louisiana Department of Environmental Quality and the United States Environmental Protection Agency, Region 6 have together determined that this property is Ready for Reuse. As documented in the Ready for Reuse Determination Letter of September 29, 2009, a Ready for Reuse Determination is an acknowledgement that environmental conditions at these units are protective of human health and the environment based on their current and anticipated future industrial use.



Paul D. Miller
Paul D. Miller, P.E.
Assistant Secretary
Office of Environmental Assessment
Louisiana Department of
Environmental Quality



**Marathon
Petroleum Company LLC**

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