



August 20, 2008

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  
4.5-acre Landfarm and 10.2-acre Land Treatment Unit  
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 two portions of the Marathon Petroleum Company's Louisiana Refining Division at Garyville, Louisiana (the "Properties") are 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 Properties encompassed by this Ready for Reuse Determination consist of the 4.5-acre Landfarm and the 10.2-acre Land Treatment Unit used by Marathon Petroleum Company LLC ("Marathon") from 1989 to 1998 for the land treatment of various refinery sludges. The Properties are located within the Garyville Refinery adjacent to processing and utility facilities. Both units have achieved closure and are currently under post-closure monitoring in accordance with LDEQ Hazardous Waste Post-Closure Permit LAD081999724-PC-1.

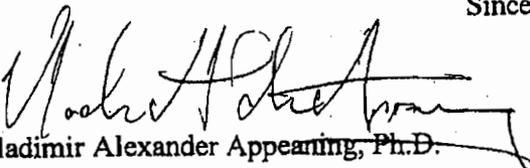
With this Ready for Reuse Determination, LDEQ and EPA Region 6 agree that Marathon Petroleum Company LLC has successfully conducted investigation and risk management activities, and the environmental conditions at the Properties are protective of human health and the environment based on their current 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  
August 20, 2008  
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If conditions on the Properties 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,

  
Vladimir Alexander Appearing, Ph.D.  
Deputy Secretary  
Louisiana Department of Environmental  
Quality

  
Ben Banipal, P.E.  
Chief, Corrective Action and Waste  
Minimization Section  
U.S. EPA, Region 6

Enclosures

**ENCLOSURE 1  
READY FOR REUSE BASIS OF DECISION**

**4.5-ACRE LANDFARM AND 10.2-ACRE LAND TREATMENT UNIT  
MARATHON PETROLEUM COMPANY LLC  
LOUISIANA REFINING DIVISION**

**INTRODUCTION**

The Louisiana Department of Environmental Quality (LDEQ) – Remediation Services Division (RSD) has determined that the 4.5-acre Landfarm and 10.2-acre Land Treatment Unit of 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 industrial 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 (Marathon or MPC), Louisiana Refining Division, is located along the east side of the Mississippi River at US Highway 61 at Marathon Avenue in Garyville, Louisiana. This facility is a fully integrated petroleum refinery containing a crude, vacuum, cat cracker, high octane, propylene, coker, and various hydrotreating units. The refinery processes both foreign and domestic crude oils into a variety of products including, but not limited to, liquefied petroleum gas, motor and heating fuels, asphalt, elemental sulfur, and petroleum coke. 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 4.5-acre Landfarm and 10.2-acre Land Treatment Unit, and comprise approximately 14.7 acres formerly used by the Marathon Petroleum Company for the land treatment of various refinery sludges. The two units are located within the Garyville Refinery adjacent to processing and utility facilities. Both units are closed hazardous waste management facilities that remain subject to regulation by the Louisiana Department of Environmental Quality under Louisiana Administrative Code (LAC) 33:V.Chapter 43.

**BACKGROUND INFORMATION**

In February 1989, LDEQ and the U.S. Environmental Protection Agency (EPA) granted Marathon a final hazardous waste permit. A modified hazardous waste permit was issued by LDEQ to Marathon effective July 22, 1990. A final modified hazardous waste post-closure permit (LAD 081999724-PC-1) was issued by LDEQ and became effective on August 3, 2005. This permit imposed monitoring requirements for the 4.5-acre Landfarm and the 10.2-acre Land Treatment Unit.

(1) 4.5-acre Landfarm (also known as the Old Landfarm)

The 4.5-acre Landfarm (Landfarm) was permitted as an operating hazardous waste management facility in February 1989, but has been inactive since 1989. There have been no additional wastes applied to the Landfarm since that time.

Closure of the Landfarm began in 1990 following Marathon's 1989 approval to operate the 10.2-acre Land Treatment Unit. The Landfarm was included in the Closure/Post-Closure Plan of Marathon's Post-Closure Permit Application, submitted to LDEQ on March 30, 1999. Phase I of the closure consisted of continued operation (tilling) and monitoring the Landfarm to maximize degradation of the remaining organics. The closure plan required surface soil sampling to be conducted on a quarterly basis until the oil and grease level in the Landfarm soils was 1% or less by weight. This condition was reached during 1998, and surface soil sampling was discontinued. The closure plan also required soil core sampling to monitor the degradation and immobilization of the waste in the treatment soils. Nine soil core sampling events were conducted on a semi-annual basis from below the treatment zone (six to 12 feet below grade) at randomly selected locations. Discontinuation of the soil core monitoring program is discussed below.

A Closure Certification Report was submitted by Marathon Ashland Petroleum in December, 2001 and approved by LDEQ on December 9, 2002. The final post-closure permit, Permit Number LAD 081999724-PC-1, was signed by LDEQ on June 28, 2005, and became effective on August 3, 2005. The post-closure care period for the Landfarm is 30 years, beginning on December 9, 2002. This period will remain in effect unless extended or shortened by LDEQ.

(2) 10.2-acre Land Treatment Unit

Marathon's Land Treatment Unit (LTU) was originally 13.7 acres in size, divided into a 10.2-acre North Section and a 3.5-acre South Section.

The 10.2-acre North Section of the LTU was permitted as a operating hazardous waste management facility in February 1989. The LTU is surrounded by a perimeter dike to prevent precipitation run-on and run-off, and the surface is graded to allow stormwater runoff to flow into a sump where the water is pumped to a stormwater storage tank. A subsurface drainage system was installed under the LTU prior to 1990 to lower the water table elevation beneath the active LTU surface. Water samples are still collected quarterly from both the north and south underdrain system collection sumps.

The unsaturated zone of the LTU was monitored by collection and analysis of soil core samples from below the treatment zone in the active LTU. Ten soil core samples were collected from below the treatment zone at locations selected from a grid by a random-number generation computer program. Discontinuation of the soil core monitoring program is discussed below. The permeable vegetated soil cover is routinely inspected and maintained.

The LTU has been inactive since 1998 – there have been no additional wastes applied since that time. Marathon notified LDEQ of its intent to close the unit on December 23, 1997, and received LDEQ approval on January 13, 1998. The LTU was included in the Closure/Post-Closure Plan of MPC's Post-Closure Permit Application, submitted to LDEQ on March 30, 1999. This unit remained in Phase II of Closure while MPC worked to establish the grass cover. A Certification of Closure (dated December, 2002) was submitted by MPC on February 13, 2003. LDEQ approved the Closure Certification Report on June 5, 2003. The final permit, Permit Number LAD 081999724-PC-1, was signed by LDEQ on June 28, 2005, and became effective on August 3, 2005. The post-closure care period for the LTU is 30 years, beginning on June 5, 2003. This period will remain in effect unless extended or shortened by LDEQ.

The 3.5-acre South Section is surrounded by an earthen berm. No hazardous waste was ever applied to the section, and it was not included in MPC's Resource Conservation and Recovery Act (RCRA) Post-Closure Permit. MPC's Certification of Clean Closure for the South Section was submitted on October 20, 1998, and approved by LDEQ on May 20, 1999.

## **INVESTIGATION AND RISK EVALUATION**

On June 28, 2005, Marathon requested that three closed hazardous waste units be included in the LDEQ Ready for Reuse Program: the Oily Sludge Impoundments, the 4.5-acre Landfarm, and the 10.2-acre Land Treatment Unit. This request was later revised on June 28, 2005 to include only the Landfarm and LTU. This document included the information required by LDEQ for review of a Ready for Use Request. A workplan for the sampling and analysis of the treated waste material in the Landfarm and LTU with a Risk Evaluation and Corrective Action Program (RECAP) evaluation of the results was submitted September 21, 2005, and conditionally approved by LDEQ on November 18, 2005. Field activities were implemented in December 2005.

The resulting report was submitted June 23, 2006 and approved by LDEQ on September 28, 2006. In the approval letter, LDEQ concurred that the contaminant concentrations in soil and groundwater at the LTU and Landfarm are below the approved limiting RECAP 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). The future use of the properties is limited to industrial/commercial and a conveyance notification for these properties has been filed with the St. John the Baptist Parish Clerk of Court. Additionally, because these are permitted units, future use that causes any changes to the post-closure groundwater monitoring program must be approved by the LDEQ Waste Permits Division.

## **POST-CLOSURE MONITORING PROGRAM**

Until such time as the permit may be further modified, uses of these properties must be selected and implemented in accordance with the requirements for post-closure monitoring specified in the current Post-Closure Permit.

(1) Current Groundwater Monitoring

Annual detection monitoring of the groundwater continues on a staggered schedule at both units in accordance with the Post-Closure Permit's Post-Closure Plan and the April, 2008 Hazardous Waste Facilities Groundwater Sampling and Analysis Plan.

(2) Discontinued Unsaturated Zone Soil Core Monitoring

Unsaturated zone soil core monitoring was required to monitor the degradation of waste in the zone of incorporation and to detect the migration of waste into the unsaturated zone. During both the active phase and the closed phase of the LTU and Landfarm (i.e., the last 17 years), Marathon has sampled and analyzed soil cores from the unsaturated zone immediately below the treatment zone on a semi-annual basis (34 sampling events). There have been no confirmed detections of any hazardous constituents from these soil core analyses.

On May 19, 2006, Marathon submitted a request for a Class 1 Modification to eliminate the unsaturated soil core monitoring requirement in the permit. The request included results from the January 2006 sampling of underlying native soil, and treatment zone soil from both units. The treatment zone ranges in thickness from six feet to eight feet at the Landfarm, and from six feet to eight feet in the LTU. Samples were analyzed for unit-specific COCs. Background soil samples were also collected and analyzed, and the results were subjected to statistical analysis. According to the permit modification request, these analytical results, as well as semi-annual sampling event results from previous years demonstrated that COCs have not migrated from the treatment zone into underlying soils.

LDEQ's comments on this request were sent on September 26, 2006, and a revised modification request was submitted by Marathon dated July 31, 2007. In a letter dated February 26, 2008, LDEQ agreed that the COCs have not migrated from the treatment zone into the underlying natural soils at either the 4.5-acre Landfarm or the 10.2-acre Land Treatment Unit. LDEQ also specified that it has no objection to the removal of the post-closure permit condition requiring soil core monitoring and or the removal of soil core monitoring requirements from the Soil and Groundwater Sampling and Analysis Plan. A revised Sampling and Analysis Plan addressing groundwater only was conditionally approved by LDEQ on June 27, 2008.

## **CURRENT ENVIRONMENTAL CONDITIONS**

A list of the maximum remaining concentrations of Constituents of Concern in groundwater and soil 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 are 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 4.5-acre Landfarm and 10.2-acre Land Treatment Unit 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:

*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]*

*Ready for Reuse Request, Three Closed Hazardous Waste Units, Oily Sludge Impoundments, Old Landfarm and Land Treatment Unit; Marathon Ashland Petroleum LLC; June 28, 2005 [EDMS Document No. 33062125]*

*Ready for Reuse Request (Addendum 1), Hazardous Waste Treatment Facilities(Landfarm and Land Treatment Unit); Marathon Petroleum Company LLC; September 14, 2005 [EDMS Document No. 33387607]*

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

*Work Plan for RECAP Evaluation of the Landfarm and Land Treatment Unit, LDEQ Ready for Reuse Program; Marathon Petroleum Company LLC; September 21, 2005 [EDMS Document No. 33393194]*

*Conditional Approval of Work Plan for RECAP Evaluation of the Landfarm and Land Treatment Unit, LDEQ Ready for Reuse Program; LDEQ; November 18, 2005*

*Land Treatment Unit and Old Landfarm , Risk Evaluation/Corrective Action Program Assessment for the Ready for Reuse Program; United States Risk Management, LLC; June 23, 2006 [EDMS Document Nos. 34399747 and 34397748]*

*Class 1 Modification Request, Elimination of Soil Core Monitoring Requirement, RCRA Post-Closure Permit Number LAD 081999724-PC-1; Marathon Petroleum Company LLC; May 19, 2006 [EDMS Document No. 34258877]*

*Review of Class 1 Modification Request for the Elimination of Soil Core Monitoring Requirements, Hazardous Waste Post-Closure Permit LAD 081999724-PC-1; LDEQ; September 26, 2006 [EDMS Document No. 34656297]*

*Approval of Land Treatment Unit and Old Landfarm , Risk Evaluation/Corrective Action Program Assessment for the Ready for Reuse Program; LDEQ; September 28, 2006 [EDMS Document No. 34680439]*

*Request for a Class 1<sup>1</sup> Modification to the RCRA Post Closure Permit, Removal of Soil Core Monitoring Requirements*; Marathon Petroleum Company LLC; July 31, 2007 [EDMS Document No. 36185123]

*2007 Annual Land Treatment Unit (LTU) Activity Report*; Marathon Petroleum Company LLC; January 30, 2008 [EDMS Document No. 36581721] Note: This is the final annual LTU Activity Report.

*Review of Request for a Class 1<sup>1</sup> Modification to the RCRA Post Closure Permit, Removal of Soil Core Monitoring Requirements*; LDEQ; February 26, 2008 [EDMS Document No. 36625902]

*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 4.5-acre Landfarm and the 10.2-acre Land Treatment Unit.

*Conditional Approval of the Class 1<sup>1</sup> 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]

**ENCLOSURE 2**  
**ENVIRONMENTAL CONDITIONS TABLE**

**4.5-ACRE LANDFARM AND 10.2-ACRE LAND TREATMENT UNIT**  
**MARATHON PETROLEUM COMPANY LLC**  
**LOUISIANA REFINING DIVISION**

**Table 1. 4.5-acre Landfarm**

Remedial Action Taken	Environmental Conditions			Clean-up Status	Institutional Controls	
	Medium	Contaminant of Concern <sup>(1)</sup>	Maximum Level Remaining			Clean-up Standard
Closed under RCRA Hazardous Waste Permit	Soil	1-Methylnaphthalene	284 mg/kg	382.2 mg/kg (MO-2 SOIL <sub>GW3NDW</sub> )	Under Post-Closure Care (groundwater monitoring)	Limited to industrial use. Conveyance notification filed in St. John the Baptist Parish  LDEQ Hazardous Waste Post-closure Permit
	Soil	Naphthalene	<164 mg/kg	220 mg/kg (MO-2 SOIL <sub>soil</sub> )		
	Soil	Benzene	<0.543 mg/kg	1.90 mg/kg (MO-2 SOIL <sub>PEF</sub> )		
	Soil	Ethylbenzene	1.774 mg/kg <sup>(2)</sup>	230 mg/kg (MO-2 SOIL <sub>soil</sub> )		
	Groundwater	Antimony	<0.06 mg/L	38.22 mg/L (MO-2 GW3NDW)		
	Groundwater	Arsenic	0.11 mg/L	7.35 mg/L (MO-2 GW3NDW)		
	Groundwater	Cadmium	<0.01 mg/L	1.47 mg/L (MO-2 GW3NDW)		
	Groundwater	Lead	<0.05 mg/L	7.35 mg/L (MO-2 GW3NDW)		
	Groundwater	Thallium	<0.003 mg/L	0.294 mg/L (MO-2 GW3NDW)		
	Groundwater	Vanadium	<0.05 mg/L	661.5 mg/L (MO-2 GW3NDW)		
	Groundwater	Benzo(a)pyrene	<0.0118 mg/L	0.0016 mg/L <sup>(3)</sup> (MO-2 Water <sub>sol</sub> )		
	Groundwater	Chrysene	<0.0118 mg/L	0.0016 mg/L <sup>(3)</sup> (MO-2 Water <sub>sol</sub> )		
	Groundwater	1-Methylnaphthalene	<0.01 mg/L	3.822 mg/L (MO-2 GW3NDW)		

<sup>(1)</sup> Contaminants of Concern are those constituents present at an AOI at concentrations that exceed the RECAP Screening Standards.

<sup>(2)</sup> 95% UCL-AM

<sup>(3)</sup> The method detection levels were above the RECAP Standards, however, historical analytical results indicated non-detection. Additionally, the routine analytical results collected in February 2006 indicated non-detection at levels at or below RECAP standards.

Table 2. 10.2-acre Land Treatment Unit

Remedial Action Taken	Environmental Conditions			Clean-up Standard	Clean-up Status	Institutional Controls
	Medium <sup>(1)</sup>	Contaminant of Concern <sup>(2)</sup>	Maximum Level Remaining			
Closed under RCRA Hazardous Waste Permit	Soil	1-Methylnaphthalene	<33 mg/kg	264.6 mg/kg (MO-2 SOIL <sub>-GW3HPW</sub> )	Under Post-Closure Care (groundwater monitoring)	Limited to industrial use. Conveyance notification filed in St. John the Baptist Parish  LDEQ Hazardous Waste Post-closure Permit
	Soil	Naphthalene	<33 mg/kg	220 mg/kg (MO-2 SOIL <sub>est</sub> )		
	Soil	Benzene	<0.317 mg/kg	1.90 mg/kg (MO-2 SOIL <sub>L</sub> )		

(1) All contaminant detections in groundwater at the 10.2-acre LTU were less than the groundwater screening standards.

(2) Contaminants of Concern are those constituents present at an AOI at concentrations that exceed the RECAP Screening Standards.

**ENCLOSURE 3  
READY FOR REUSE AGENCY CONTACTS**

**4.5-ACRE LANDFARM AND 10.2-ACRE LAND TREATMENT UNIT  
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  
Environmental Technology Division  
Office of Environmental Assessment  
Louisiana Department of Environmental Quality  
Post Office Box 4314  
Baton Rouge, LA 70821-4314  
Telephone (225) 219-3396  
[kristine.carter@la.gov](mailto:kristine.carter@la.gov)

or

Mr. Donald W. Hackler  
Advanced HES Professional  
Louisiana Refining Division  
Marathon Petroleum Company LLC  
Post Office Box AC  
Garyville, LA 70051-0849  
Telephone (985) 535-7142  
[DWHackler@MarathonOil.com](mailto:DWHackler@MarathonOil.com)

*On this Day, August 20, 2008*

**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 4.5 Acre Landfarm and 10.2 Acre Land Treatment Unit, the Louisiana Department of Environmental Quality and the United States Environmental Protection Agency, Region 6 have together determined that these properties are Ready for Reuse. As documented in the Ready for Reuse Determination Letter of August 20, 2008, a Ready for Reuse Determination is an acknowledgement that environmental conditions at the these units are protective of human health and the environment based on their current and anticipated future industrial use.



*Vladimir Alexander Appearing, Ph.D.*  
Vladimir Alexander Appearing, Ph.D.  
Deputy Secretary  
Louisiana Department of  
Environmental Quality



**Marathon  
Petroleum Company LLC**

*Richard D. Bedell*  
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Division Manager  
Marathon Petroleum Company LLC  
Louisiana Refining Division



*Ben Banipal, P.E.*  
Ben Banipal, P.E., Chief  
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