April 8, 2008

Mr. John Allaire
Environmental Business Manager
Atlantic Richfield
Amegy Building, MC: AMG-2
2501 Palmer Hwy, Suite 200
Texas City, TX 77590

Mr. William Griffin
Group Real Estate Executive
BP America Inc.
4101 Winfield Road
Cantera III, MC: 3E
Warrenville, IL 60555

Re: Ready for Reuse Determination
Former Pan American Southern Refinery; AI No. 4356
I-310 and LA Hwy 48
Destrehan, Louisiana; St. Charles Parish

Dear Messrs. Allaire and Griffin:

The Louisiana Department of Environmental Quality (LDEQ) and United States Environmental Protection Agency (EPA), Region 6 together have determined that a portion of the Former Pan American Southern Refinery, Destrehan (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 approximately 238 acres used by the former Pan American Southern Refinery from the early 1900s until it was dismantled in 1958: 165 acres that were minimally impacted by historical site activities and are currently undeveloped, and 73 additional acres that were investigated and deemed non-impacted by site activities. The Property is located between Louisiana Hwy 48 (River Road) and the Canadian Northern Railroad switchyard.

With this Ready for Reuse Determination, LDEQ and EPA Region 6 agree that British Petroleum 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 its 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.

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,

for Harold Leggett, Ph.D.
Secretary
Louisiana Department of
Environmental Quality

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

Enclosures

ENCLOSURE 1

READY FOR REUSE BASIS OF DECISION
FORMER PAN AMERICAN SOUTHERN REFINERY

INTRODUCTION

The Louisiana Department of Environmental Quality (LDEQ) – Remediation Services Division (RSD) has determined that the Former Pan American Southern Refinery (the "Property") (LDEQ Agency Interest 4356) is Ready for Reuse. The Property meets the criteria for a Ready for Reuse Determination because the property has been remediated to the extent that the environmental conditions on the Property are protective based upon its current and/or planned land use. A description of the Property's current conditions, background information, and the results of investigations and remedial activities at the Property are summarized in the following sections.

PROPERTY DESCRIPTION

The Property included in this Ready for Reuse Determination consists of approximately 238 acres: 165 acres used by the former Pan American Southern Refinery that were minimally impacted by historical site activities and are currently undeveloped, and 73 additional acres that were investigated and deemed non-impacted by site activities. The Property is located between Louisiana Hwy 48 (River Road) and the Canadian Northern Railroad switchyard. The Property includes 15 Areas of Investigation (AOIs) as described in the table below and shown in the attached figure.

Area Name	Size (acres)	Former Use
AOI-A	3	One crude oil storage tank
AOI-B	13.7	Unused during the operation of the refinery
AOI-C	8.3	Unused during the operation of the refinery
AOI-1	30	Crude, asphalt, and coker feed storage tanks
AOI-2	30	Crude oil, asphalt, and coker feed stock storage
AOI-3B	3.9	Delayed coking unit and coke storage piles
AOI-4	6.6	Crude oil storage tanks
AOI-5	11.5	Offices, laboratories, repair shops, and other small facilities
AOI - 6	11.5	Asphalt production, a warehouse, fire station, and a pump house
AOI-7	19	Several different production units and light products storage tanks
AOI-8	7.5	Catalytic cracking, alkylation, polybutene production, and fluid hydro-formation units
AOI-9	30	Refined product storage
AOI-10	30	Refined product storage
Undeveloped Area	19.6	Offices, open areas, sports fields
Destrehan Plantation and License Area	13.4	Offices, open areas, sports fields (The area has been donated to the River Road Historical Society for the d'Estrehan Manor/Plantation Museum.)

Non-industrial areas with no limitations on property use include AOI-A, AOI-B, AOI-C, AOI-2, AOI-4, AOI-8, AOI-9, AOI-10, the Undeveloped Area, and the Destrehan Plantation and License Area. Areas that meet standards for industrial use include AOI-1, AOI-3B, AOI-5, AOI-6, and AOI-7.

BACKGROUND INFORMATION

The Pan American Southern Refinery operated from the early 1900s until it was dismantled in 1958. It produced tar, heating oil, gasoline, lubricating oil, asphalt, and other petroleum products. Usable equipment was sent to other Pan American Oil Company facilities. The land was sold to Plantation Business Campus, Inc. (PBC) between 1971 and 1972. PBC in turn sold parts of the refinery to other parties. PBC also cleared the southeast one quarter of the site for its business campus. The Louisiana Department of Transportation and Development (LDOTD) purchased the right-of-way for the Mississippi River Bridge and Interstate 310. Amoco Oil Co., Inc. repurchased parts of the land that PBC still owned and some plots owned by other parties in 1990.

INVESTIGATION AND REMEDIAL ACTION CHRONOLOGY

A Remedial Investigation (RI) of the entire 880-acre refinery area by Amoco and LDEQ-Inactive and Abandoned Sites Division (IASD) began in 1986. The RI included a review of facility records, review of LDOTD and U. S. EPA investigations, visual examination of the entire property, and the installation of groundwater wells. Data from these reviews, examinations, and installations were reported in the *Site Reconnaissance Report* submitted on Amoco's behalf by James M. Montgomery Consulting Engineers, Inc. and G&E Engineering, Inc. in February 1988. This report identified 45 areas on the south side of the railroad tracks that needed additional investigation.

Subsequent investigation included sampling and analysis of soil, waste, and groundwater in and around waste disposal areas, tanks, process units, underground piping, canals, and other features that could have released contaminants. The results were submitted in the *Remedial Investigation and Risk Assessment, Amoco Oil Company, Former Pan American Refinery Site, Destrehan, Louisiana* (July 1, 1991). Conclusions based upon these results included: (1) the Ethyl Blending/Continuous Treating Area was the only area on the south side of the railroad tracks that required additional investigation and/or corrective action; (2) groundwater was not impacted by refinery activity with the exception of the area within and immediately adjacent to the Ethyl Blending /Continuous Treating Area; and (3) a number of areas were aesthetically impacted by non-hazardous tarry residue from tank failures, petroleum coke from stockpiles, and other non-hazardous wastes.

The RI was the basis for a feasibility study to evaluate remedial technologies that could be potentially applied to the Ethyl Blending/Continuous Treating Area. Based upon the resulting report, *Feasibility Study for the Former Pan American Refinery* (July 1, 1993), LDEQ determined that the area would be capped in accordance with solid waste regulations. This remedy selection was partially driven by the community's concern about the dangers of excavation, the odors that would be produced, and the hauling of hazardous materials on the roads.

LDEQ-IASD and Amoco entered into a cooperative agreement, i.e., the Environmental Remedial Action and Monitoring Agreement (ERMA) in June 1995. This agreement governed

remediation, monitoring, responses to new problems or releases, and future utilization of the land. Completion of the remedial actions outlined in the ERMA was certified in a report entitled, *Certification of Completion of Remedial Actions and Construction Completion Report, Former Pan American Refinery, Destrehan, Louisiana,* submitted on May 21, 1999.

In March 2000, British Petroleum/Amoco initiated discussion of the requirements for the reutilization of areas of the site south of the railroad tracks that are currently undeveloped and minimally impacted. These discussions resulted in a work plan for additional investigation in accordance with LDEQ's Risk Evaluation/Corrective Action Program (RECAP), as amended in 2003, entitled, *RECAP Work Plan, Former Pan American Refinery, Destrehan, Louisiana*, dated March 19, 2003. The resulting investigation report, *MO-1 Summary, Former Pan American Refinery, Destrehan, Louisiana,* dated April 16, 2004, was approved by LDEQ on August 3, 2005.

On May 31, 2005, British Petroleum requested a No Further Action Determination for the areas labeled Undeveloped Area and Destrehan Plantation and License Area. LDEQ requested sampling in accordance with RECAP for this area as it was omitted from the investigations discussed above. The results of this investigation were provided in the August 15, 2005, report entitled, *Results from Undeveloped Area Sampling*, submitted by URS Corporation on behalf of Atlantic Richfield. A No Further Action At This Time (NFA-ATT) Determination for all of the 15 AOIs listed in the table above was issued by LDEQ on October 20, 2007.

CURRENT ENVIRONMENTAL CONDITIONS

The current status of those Ready for Reuse AOIs with contaminant concentrations that exceeded the RECAP Screening Standards are summarized in Enclosure 2 (Environmental Conditions Table) to the Pan American Southern Refinery Ready For Reuse Determination letter. 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 the site investigations and remedial actions at the Former Pan American Southern Refinery 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:

Amoco Oil Company, Former Destrehan Refinery Site RI/FS, Background Record Search Technical Memoranda, James M. Montgomery Consulting Engineers, Inc., and G&E Engineering, Inc., February 1988 [EDMS Document No. 2239007]

Site Reconnaissance Report, James M. Montgomery Consulting Engineers, Inc., February 1988 [EDMS Document No. 2240548]

Remedial Investigation and Risk Assessment, Amoco Oil Company, Former Pan American Refinery Site, Destrehan, Louisiana, Amoco Oil Company, July 1, 1991 [EDMS Document Nos. 2251277, 2244831, 2245155, 2245761, 2246083, 2247058, 2246589, 2249139, 2248257]

Responses to LaDEQ Comments on the RI/RA Report, Amoco Oil Company, September 25, 1991 [EDMS Document No. 2252631]

Feasibility Study for the Former Pan American Refinery, Foster Wheeler Environmental Services, July 1, 1993 [EDMS Document No. 2260629]

Feasibility Study Revision, Amoco Oil Company, September 16, 1993 [EDMS Document No. 2252216]

Certification of Completion of Remedial Actions and Construction Completion Report, Former Pan American Refinery, Destrehan, Louisiana, ThermoRetec Construction Corporation, May 21, 1999 [EDMS Document No. 1870055]

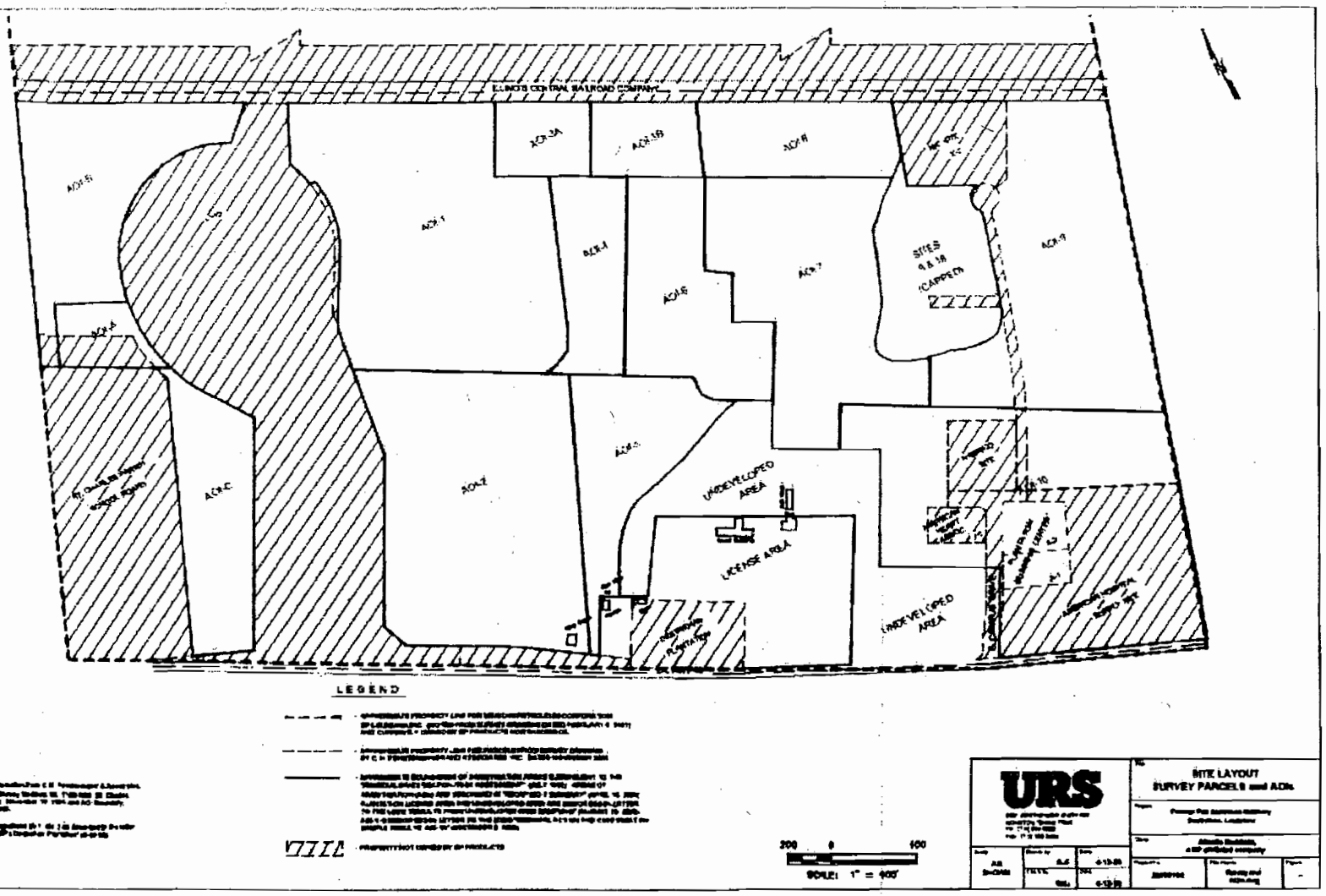
RECAP Work Plan, Former Pan American Refinery, Destrehan, Louisiana, The RETEC Group, Inc., March 19, 2003 [EDMS Document No. 25950612]

RECAP MO-1 Summary, Former Pan American Refinery, Destrehan, Louisiana, The RETEC Group and URS Corporation, April 16, 2004 [EDMS Document No. 31301568]

Response to LDEQ Letter Dated August 3, 2004 MO-1 Summary (supplemental information to the RECAP MO-1 Summary), URS Corporation, September 27, 2004 [EDMS Document No. 32430295]

Results from Undeveloped Area Sampling, URS Corporation, August 15, 2005 [EDMS Document No. 33252975]

No Further Action At This Time (NFA-ATT) Determination, Louisiana Department of Environmental Quality, Remediation Services Division, October 20, 2007 [EDMS Document No. 36374518]


ILLINOIS CENTRAL RAILROAD COMPANY
AOI-5
AOI-3A
AOI-3B
AOI-8
AOI-1
AOI-4
AOI-6
AOI-7
SITES 9 & 10 (CAPPED)
AOI-9
AOI-2
AOI-C
AOI-E
AOI-D
UNDEVELOPED AREA
LEASE AREA
UNDEVELOPED AREA
LEGEND
NOTE:
200 0 400
SCALE: 1" = 400'
URS
SITE LAYOUT
SURVEY PARCELS and AOIs

ENCLOSURE 2

ENVIRONMENTAL CONDITIONS TABLE
FORMER PAN AMERICAN SOUTHERN REFINERY

Area Name/ Unit Name	Remedial Action Taken	Contaminant of Concern and Maximum Level Remaining	Clean-up Standards	Clean-up Status	Institutional Controls
AOI-A	No remedial action required	TPH-ORO – 210 mg/kg	TPH-ORO – 1,800 mg/kg (MO-1 SOILni)	NFA-ATT	No use limitations for non-industrial use
AOI-2	No remedial action required	TPH-ORO – 4,400 mg/kg 95% UCL-AM – 1,100 mg/kg	TPH-ORO – 1,800 mg/kg (MO-1 SOILni)	NFA-ATT	No use limitations for non-industrial use
AOI-4	No remedial action required	Methylene chloride – 0.079 mg/kg	Methylene chloride – 0.41 (MO-1 SOILni)	NFA-ATT	No use limitations for non-industrial use
AOI-8	No remedial action required	Methylene chloride – 0.079 mg/kg	Methylene chloride – 0.41 (MO-1 SOILni)	NFA-ATT	No use limitations for non-industrial use
AOI-9	No remedial action required	Antimony – 13.9 mg/kg Methylene chloride – 0.079 mg/kg	Antimony – 31.0 mg/kg (MO-1 SOILni) Methylene chloride – 0.17 mg/kg (MO-1 SOILni)	NFA-ATT	No use limitations for non-industrial use
AOI-10	No remedial action required	Antimony – 13.9 mg/kg	Antimony – 31.0 mg/kg (MO-1 SOILni)	NFA-ATT	No use limitations for non-industrial use
AOI-1	Impacted soil excavated to a depth of 3 feet bgs	Benzo(a)anthracene – 3.1 mg/kg; 95% UCL-AM – 1.1 mg/kg TPH-ORO – 1,200 mg/kg	Benzo(a)anthracene – 2.9 mg/kg (MO-1 SOILi) TPH-ORO – 2,500 mg/kg (MO-1 SOILi)	NFA-ATT	Use limited to industrial use. A conveyance notification was filed in St. Charles Parish
AOI-3B	No remedial action required	TPH-DRO – 370 mg/kg TPH-ORO – 1,900 mg/kg	TPH-DRO – 2,600 mg/kg (MO-1 SOILi) TPH-ORO – 2,500 mg/kg (SO SOILi)	NFA-ATT	Use limited to industrial use. A conveyance notification was filed in St. Charles Parish
AOI-5	No remedial action required	Methylene chloride – 0.088 mg/kg TPH-ORO – 1,600 mg/kg	Methylene chloride – 1.0 mg/kg (MO-1 SOILi) TPH-ORO – 2,500 mg/kg (SO SOILi)	NFA-ATT	Use limited to industrial use. A conveyance notification was filed in St. Charles Parish

ENVIRONMENTAL CONDITIONS TABLE (CONTINUED)
FORMER PAN AMERICAN SOUTHERN REFINERY

Area Name/ Unit Name	Remedial Action Taken	Contaminant of Concern and Maximum Level Remaining	Clean-up Standards	Clean-up Status	Institutional Controls
AOI-6	No remedial action required	Benzene – 0.13 mg/kg Benzo(a)anthracene – 1.1 mg/kg Benzo(a)pyrene – 1.0 mg/kg 95% UCL-AM – 0.32 mg/kg Lead – 280 mg/kg Methylene chloride – 0.5 mg/kg 2-Methylnaphthalene – 57.0 mg/kg Naphthalene – 1.8 mg/kg TPH-GRO – 200 mg/kg 95% UCL-AM – 6.4 mg/kg TPH-DRO – 1,900 mg/kg 95% UCL-AM – 570 mg/kg TPH-ORO – 3,400 mg/kg 95% UCL-AM – 1,400 mg/kg	Benzene – 1.5 mg/kg (SO SOILni) Benzo(a)anthracene – 2.9 mg/kg (SO SOILi) Benzo(a)pyrene – 0.33 mg/kg (SO SOILni) Lead – 400 mg/kg (SO SOILni) Methylene chloride – 19 mg/kg (SO SOILni) 2-Methylnaphthalene – 170 mg/kg (SO SOILi) Naphthalene – 6.2 mg/kg (SO SOILni) TPH-GRO – 512 mg/kg (SO SOILi) TPH-DRO – 2,700 mg/kg (MO-1 SOILi) TPH-ORO – 1,800 mg/kg (MO-1 SOILni)	NFA-ATT	Use limited to industrial use. A conveyance notification was filed in St. Charles Parish
AOI-7	No remedial action required	Arsenic – 28.0 mg/kg 95% UCL-AM – 9.4 mg/kg Lead – 3,000 mg/kg; 95% UCL-AM – 850 mg/kg	Arsenic – 12.0 mg/kg (SO SOILni) Lead – 1,400 mg/kg; (MO-1 SOILi)	NFA-ATT	Use limited to industrial use. A conveyance notification was filed in St. Charles Parish

Notes:

(1) Contaminants of Concern are those constituents present at an AOI at concentrations that exceed the RECAP Screening Standards.
(2) This table does not include Ready for Reuse areas AOI-B, AOI-C, the Undeveloped Area, and the Destrehan Plantation License Area. All investigation results were below the RECAP Screening Standards.
(3) The 95% UCL-AM – 95% Upper Confidence Level on the Arithmetic Mean is the upper limit of a 95 percent confidence interval for the mean; there is only a five percent probability that the true mean is greater than this value. The concentration represented by the 95% UCL-AM must be less than the Clean-up Standard.
(4) Results from the remedial investigation and risk assessment indicated that the groundwater in the Ready for Reuse areas was not contaminated by refinery activities (see *Remedial Investigation and Risk Assessment, Amoco Oil Company, Former Pan American Refinery Site, Destrehan, Louisiana,* July 1, 1991)

ENCLOSURE 3

AGENCY CONTACTS
FORMER PAN AMERICAN SOUTHERN REFINERY

For a copy of the administrative record providing detailed information regarding environmental conditions at the Former Pan American Southern 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 Former Pan American Southern Refinery, please contact:

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