

Letter Health Consultation

**HAYNESVILLE GAS PLANT
HAYNESVILLE, CLAIRBORNE PARISH, LOUISIANA**

EPA FACILITY ID: LAD055790554

**Prepared by the
State of Louisiana Department of Health and Hospitals
Office of Public Health**

April 27, 2009

Prepared under a Cooperative Agreement with the
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Agency for Toxic Substances and Disease Registry
Division of Health Assessment and Consultation
Atlanta, Georgia 30333

Health Consultation: A Note of Explanation

A health consultation is a verbal or written response from ATSDR or ATSDR's Cooperative Agreement Partners to a specific request for information about health risks related to a specific site, a chemical release, or the presence of hazardous material. In order to prevent or mitigate exposures, a consultation may lead to specific actions, such as restricting use of or replacing water supplies; intensifying environmental sampling; restricting site access; or removing the contaminated material.

In addition, consultations may recommend additional public health actions, such as conducting health surveillance activities to evaluate exposure or trends in adverse health outcomes; conducting biological indicators of exposure studies to assess exposure; and providing health education for health care providers and community members. This concludes the health consultation process for this site, unless additional information is obtained by ATSDR or ATSDR's Cooperative Agreement Partner which, in the Agency's opinion, indicates a need to revise or append the conclusions previously issued.

You May Contact ATSDR Toll Free at
1-800-CDC-INFO

or

Visit our Home Page at: <http://www.atsdr.cdc.gov>

LETTER HEALTH CONSULTATION

HAYNESVILLE GAS PLANT

HAYNESVILLE, LOUISIANA

Prepared By:

State of Louisiana Department of Health and Hospitals
Office of Public Health

Under a cooperative agreement with the
U.S. Department of Health and Human Services
Agency for Toxic Substances and Disease Registry



Bobby Jindal
GOVERNOR

STATE OF LOUISIANA
DEPARTMENT OF HEALTH AND HOSPITALS



Alan Levine
SECRETARY

March 24, 2009

Keith Casanova
Administrator, Remediation Services Division
Louisiana Department of Environmental Quality
P.O. Box 4314
Baton Rouge, LA 70821-4314

Dear Mr. Casanova:

The Louisiana Department of Health and Hospitals/Office of Public Health/Section of Environmental Epidemiology and Toxicology (DHH/OPH/SEET) has evaluated the soil verification samples collected during the November 2007 sampling event at the Haynesville Gas Plant in Claiborne Parish, Louisiana. The following letter provides the results of SEET's assessment of the soil sampling conducted at the site during that event.

Site Description and History

The Haynesville facility is located west of US Highway 79 approximately 3.5 miles north of Haynesville on the Arkansas-Louisiana border. The facility was initially constructed by Tenneco Oil Company in 1968, and was used continuously for the fractionation of natural gas, storage of its components and field compression until March 1, 2000, when all fractionation activities ceased [1]. DCP Midstream, LP (formerly Duke Energy Field Services (DEFS)) is the current owner of the inactive site.

The area surrounding the site is undeveloped except for a rural church upgradient of the site. There are no registered water wells within 1 mile of the facility with the exception of site-related monitoring wells and one plant water well [1].

The Site Investigation Report, released December 28, 2006, identified three areas of concern (AOCs) at the site; the source north of the facility, the DEFS AST area and the historic process and flare area (see figure 1). Surface soil and groundwater samples were collected by DCP contractors at each of the AOCs. Benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons as gasoline range organics (TPH-GRO), diesel range organics (TPH-DRO), and oil range organics (TPH-ORO) were identified as the constituents of concern (COCs) in these samples [1]. DCP contractors reported that all COCs at the North AOC and the DEFS AST AOC, as well as all groundwater COCs and surface soil TPH-ORO in the Flare Process Area AOC were below the Louisiana Department of Environmental Quality's (LDEQ) Risk Evaluation/Corrective Action Program (RECAP) screening levels [1].

Based on sampling results from the December 2006 Site Investigation Report, a corrective action work plan for the remaining constituents at the Flare Pit Process Area AOC was approved by LDEQ on September 27, 2007 [2]. Remedial actions included excavation of approximately 1009 tons of affected soils, confirmatory sampling and backfilling of the excavation. Excavation of the affected

soils was completed by DCP contractors on November 6-7, 2007. Five post-excavation confirmation soil samples were collected on November 7, 2007 and analyzed for benzene and total petroleum hydrocarbons (TPH) (C16-C35 aliphatic/aromatic fractions). Additionally, two composite samples of the overburden and imported fill material were collected during the same sampling event and analyzed for BTEX and TPH mixtures [2]. Material disposal and backfilling activities were completed November 26-28, 2007. A Basis of Decision for No Further Action for the Haynesville site was granted by LDEQ on August 5, 2008 [3].

Data Evaluation

SEET evaluated the five post-excavation confirmation soil samples collected on November 7, 2007 at the Haynesville site. Samples VS-1, VS-3, VS-4 and VS-5 (figure 2) were collected from the midpoint of the excavation side walls, approximately 5 feet below ground surface. Sample VS-2 and its duplicate were collected from the bottom of the excavation at an 8-foot depth [2]. These five samples were analyzed for benzene and TPH fractions; each of the soil sample concentrations were below the Agency for Toxic Substances and Disease Registry's (ATSDR) child Environmental Media Evaluation Guide (EMEG) for benzene of 30 milligrams per kilogram (mg/kg) and below the LDEQ RECAP for TPH fractions. In absence of an ATSDR health based comparison value for TPH fractions, LDEQ RECAP values were used.

Contaminant concentrations in the overburden and imported fill material samples were below all ATSDR health based comparison values for BTEX and below LDEQ RECAP for TPH mixtures. A detailed explanation of the ATSDR/SEET evaluation process can be accessed in Appendix A.

Exposure Pathways

The Haynesville site is regulated for industrial, non-residential use only. The affected soils were excavated and transported off-site to a permitted facility. The area surrounding the site is undeveloped except for a rural church upgradient of the site and there are no residents living in the vicinity of the site. Trespassing and/or recreational usage is not expected.

Conclusions:

Contaminant concentrations in each of the five verification samples and overburden and fill materials were below ATSDR and LDEQ screening values. Based on available data, there is no public health hazard related to post-excavation flare pit soils at the Haynesville site.

Recommendations:

There are no recommendations at this time.

If there are any questions regarding this health consultation, please contact Darcie Olexia (504) 219-4579.

Sincerely,

Darcie Olexia, MSPH
Environmental Health Scientist Coordinator
Louisiana Office of Public Health
Section of Environmental Epidemiology & Toxicology

Appendix A: Screening Process

Health based comparison values (CVs) were used to determine which samples needed further evaluation. CVs are not used to predict health effects or to set clean-up levels. Contaminants with media concentrations above a health based comparison value do not necessarily represent a health threat, but are selected for further evaluation. Contaminants with media concentrations below a health based comparison value are unlikely to be associated with illness and are not evaluated further.

ATSDR's child Environmental Media Evaluation Guide (EMEG) and the Louisiana Department of Environmental Quality's (LDEQ) Risk Evaluation/Corrective Action Program (RECAP) values were used as CVs in this evaluation. EMEGs are estimated contaminant concentrations that are unlikely to cause adverse non-carcinogenic health effects. EMEGs are calculated by using ATSDR's Minimal Risk Level (MRL), which is also an estimate of daily exposure to contaminants that are unlikely to cause adverse non-cancer health effects. RECAP values represent constituent concentrations in media that are protective of human health and the environment under site-specific conditions. Site-specific RECAP standards were established for the Haynesville site due to the site-wide attenuation of dissolved-phase hydrocarbon constituents [1, 3]. Please note the overlap of carbon ranges between the laboratory analytical method and the LDEQ RECAP for TPH-GRO and TPH-ORO mixtures detected in the overburden and imported materials.

Verification Soil Sample Results, Excavation Area, Flare Pit AOC. November 7, 2007

Sample ID	Benzene	C16-C21 Aliphatics	C21-C35 Aliphatics	C16-C21 Aromatics	C21-C35 Aromatics
Screening Values	ATSDR Child EMEG 30 mg/kg ¹	LDEQ RECAP 10,000 mg/kg	LDEQ RECAP 10,000 mg/kg	LDEQ RECAP 2,100 mg/kg	LDEQ RECAP 10,000 mg/kg
VS-1	2.7	560	5900	210	1200
VS-2	0.11	ND ²	160	ND	ND
VS-2 DUP	0.12	ND	ND	ND	ND
VS-3	ND	ND	ND	ND	ND
VS-4	1.1	ND	ND	ND	ND
VS-5	0.0071	ND	47	ND	ND

¹ mg/kg- milligrams per kilogram; ² ND- not detected

Verification Overburden and Imported Materials Results, Flare Pit AOC. November 7, 2007

Sample	Benzene	Toluene	Ethyl-Benzene	Xylenes	TPH-GRO C6-C12	TPH-DRO C12-C28	TPH-ORO C-28-C35
Screening Values	ATSDR Child EMEG 30 mg/kg ¹	ATSDR Child EMEG 30,000 mg/kg	ATSDR Child EMEG 1000 mg/kg	ATSDR Child EMEG 10,000 mg/kg	LDEQ RECAP C6-C10 3800 mg/kg	LDEQ RECAP C10-C28 1800 mg/kg	LDEQ RECAP C28-C35 10,000 mg/kg
Imported Material	ND ²	ND	ND	ND	ND	ND	ND
Overburden	ND	ND	1.7	8.1	180	250	270

¹ mg/kg- milligrams per kilogram; ² ND- not detected

Figure 1: Areas of Concern identified in the December 2006 Site Investigation Report [1].

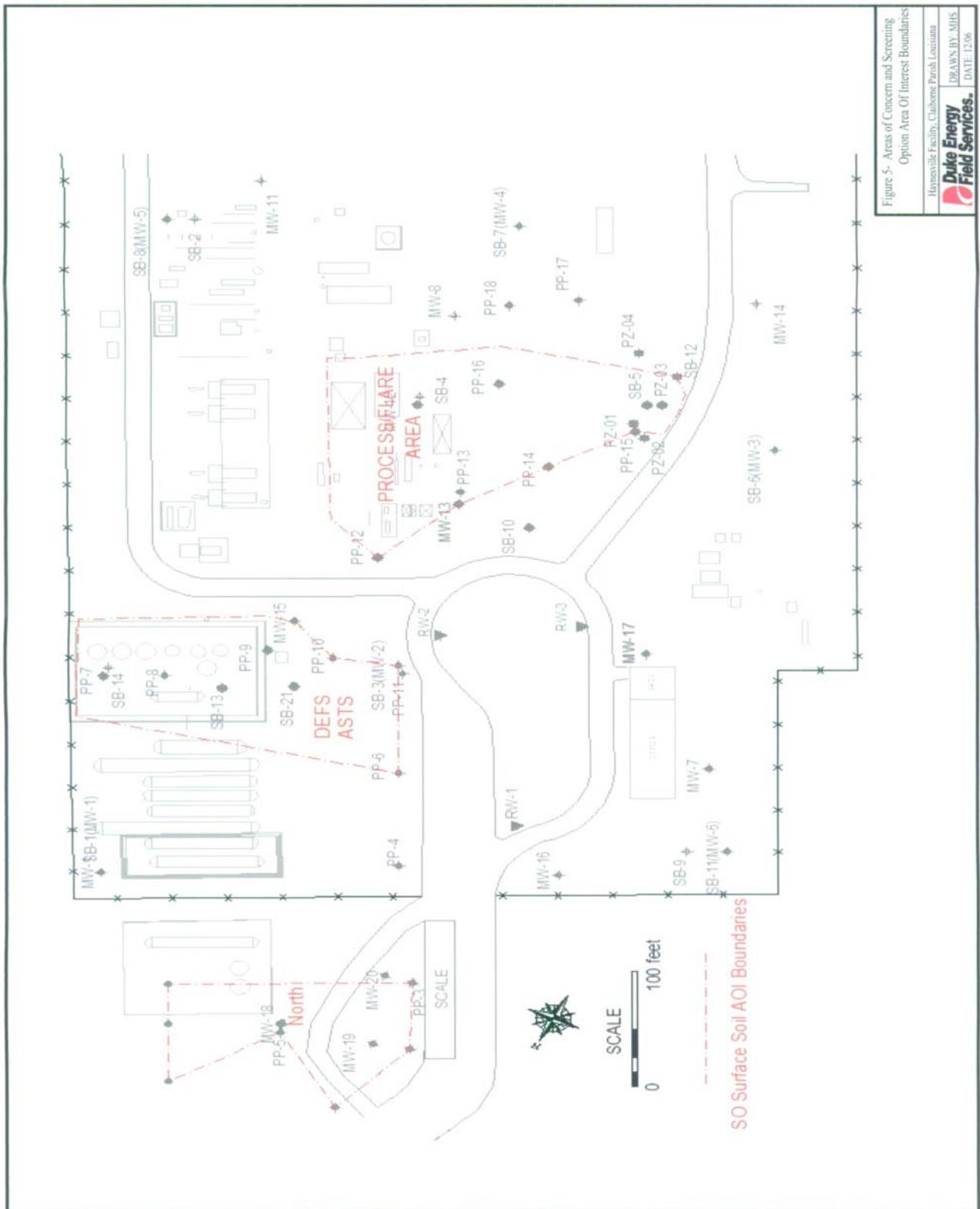
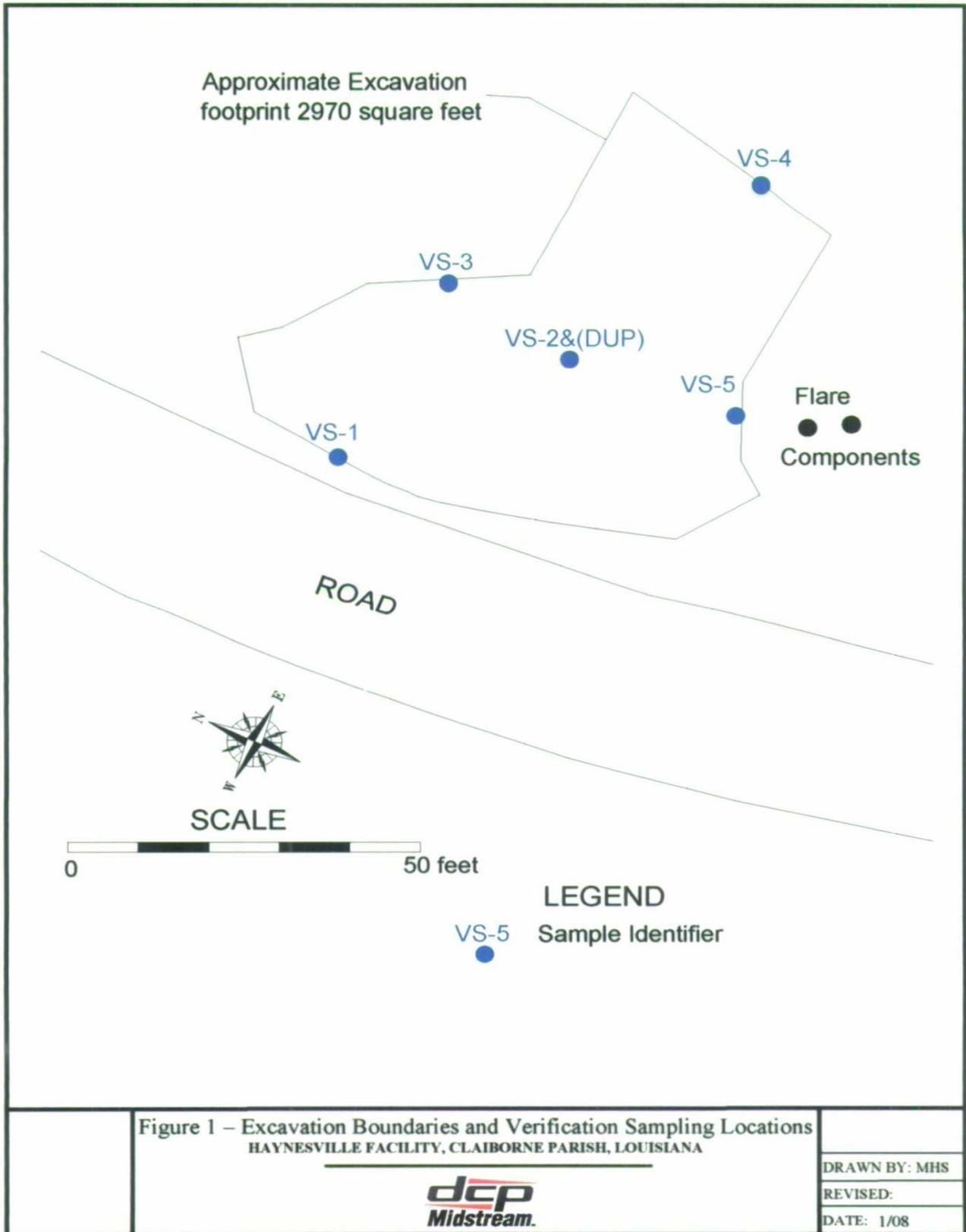


Figure 5- Areas of Concern and Screening Option Area Of Interest Boundaries
 Haynesville Facility, Calibrose Parish Louisiana
Duke Energy
 Field Services.
 DRAWN BY: MHS
 DATE: 12/06

Figure 2: Excavation Boundaries and Verification Sampling Locations at the Flare Pit AOC [2]

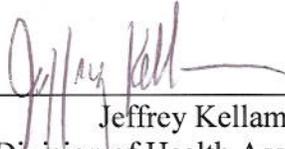


References

1. Duke Energy Field Services. Haynesville Gas Plant Site Investigation Report. December 28, 2006.
2. DCP Midstream, LP. Summary of Remediation Activities, Verification Sample Results and NFA Request. DCP Midstream, LP Haynesville Gas Plant, Claiborne Parish, LA AI#2410. January 14, 2008.
3. Louisiana Department of Environmental Quality. Basis of Decision for No Further Action, DCP Midstream-Haynesville Gas Plant AI#2410 North AOC, AST AOC, Process/Flare Area AOC. August 5, 2008.

Certification

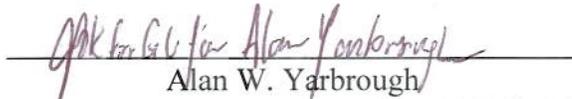
This former Haynesville Gas Plant in Claiborne Parish letter health consultation was prepared by the Louisiana Department of Health and Hospitals under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with approved methodology and procedures at the time the health consultation was begun. The editorial review was conducted by the Cooperative Agreement Partner.



Jeffrey Kellam

Technical Project Officer, Division of Health Assessment and Consultation (DHAC)

The Division of Health Assessment and Consultation, ATSDR, has reviewed this public health consultation and concurs with the findings.



Alan W. Yarbrough

Cooperative Agreement Team Leader, DHAC, ATSDR