Maryland Department of the Environment Sample UST Closure Report Guidance



November 16, 2007

Updated Sample UST Closure can be viewed on MDE web at:

http://mde.maryland.gov/programs/Land/OilControl/Pages/ustcertification_programs.aspx

Executive Summary

This document is intended to serve as guidance for contractors employed to close underground storage tank systems (UST) systems and to provide a sample UST System Closure Report in order to satisfy COMAR 26.10.10.03 *Assessing the Site at Closure or Change-in-Service*. Contractors performing the UST closure should, at a minimum, include the information and documents contained in this document applicable to each job site in all UST system Closure Reports submitted to the Department.

Prior notice of UST closure activities must be given to the Department (MDE) in accordance with COMAR 26.10.10.02A. All UST closure activities must be performed under the direct supervision of a Maryland certified technician or remover. Proper safety procedures must be followed and safety equipment used.

The report on the UST closure activity must be prepared to accurately describe the closure activities and findings for each UST location. The information contained in the report will assist the Department to evaluate if an UST site poses a threat to public health, safety and the environment and if further investigation or corrective action is required. Contractor conclusions and recommendations are a very important part of this evaluation process.

To ensure a timely review of each report submitted, the report must be sent to the attention of the inspector designated as the case manager and shall be identified by case number and facility ID number. The case manager can provide the case and facility numbers upon request.

Please call the Oil Control Program at 410-537-3442 with any questions.

Visit our Web Site at <u>http://mde.maryland.gov/programs/Land/OilControl/Pages/</u> <u>index.aspx</u> to obtain additional information.

This document is for informational and guidance proposes. This document is not intended nor should it be interpreted to be a regulation, as defined in Section 10-101, State Government Article. The MDE encourages you to read and understand the regulations that govern the operation and closure of underground storage systems found in Code of Maryland Regulations 26.10. "*Oil Pollution and Tank Management*"

MDE Sample UST Closure Report

January 1, 2007

Maryland Department of the Environment Waste Management Administration Oil Control Program Attn: Inspector (Name) 1800 Washington Boulevard, Suite 620 Baltimore MD 21230-1719

RE: Underground Storage Tank System Closure Report Case No. 2007-7777HO Doe Property 1234 Main Street Hampton, Maryland Facility I.D. No. 1111

Dear Inspector (Name):

Blank Environmental, Inc. is pleased to submit the enclosed underground storage tank system closure report for the above-referenced property located in Howard County prepared on behalf of:

John Doe Property Owner 4321 Niam Road Hampton MD 12345 410-555-1212 410-555-1213 (fax)

Should you have any questions or comments regarding this report, please contact the project manager, Joe Blank, at 410-555-5555 or via Email: jblank@blankenvironmental.com.

Sincerely,

Joe Blank Senior Environmental Scientist

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I. Underground Storage Tank System Closure Report

A. Narrative

On January 1, 2007, Blank Environmental, Inc. mobilized equipment to 1234 Main Street located in Howard County for the proper abandonment of three underground storage tank systems. Two underground storage tank systems, one 4,000-gallon gasoline bare steel and one 2,000-gallon diesel double wall fiberglass reinforced plastic, were removed and one underground storage tank system, a 500-gallon used oil StiP3, was abandoned in place, after receiving approval from MDE case manager Joe Regulator. These activities were completed under the direction of MDE certified technician, Joe Blank, MDIC 2007-0000 (expires 01-01-09). The gasoline system steel product supply pipe extended 20 feet with no change of direction from the underground storage tank to the single dispenser. The diesel system single wall fiberglass reinforced plastic diesel supply pipe extended 5 feet with no change of direction from the underground storage tank to the single dispenser. There was no product piping associated with the used oil tank. Tank diameters were 64", 48", and 48" respectively. Tank overburden was 18" for all tanks.

Using contract vacuum truck services provided by Vac USA, all petroleum was removed from the piping and the tanks prior to the removals and abandonment. Four gallons of water was utilized to flush the piping following the draining of product to the tank. The underground storage tanks were pumped free of petroleum and rinse waters. The used oil underground storage tank was cleaned internally in accordance with state and local regulations. An eductor-type air mover was utilized to purge any flammable vapor concentrations from the gasoline underground storage tank. Thirty pounds of dry ice were placed into the diesel underground storage tank to inert it. A *MSA* Combustible Gas Indicator, Model 1000, was utilized to scan the underground storage tanks for combustible vapors prior to, during, and after the removals and abandonment. The lower explosive limit did not exceed five percent after purging and inerting were complete.

The gasoline and diesel underground storage tank systems, including all associated piping, were removed from the ground. In addition, all vent risers were removed. Above ground portions of the used oil underground storage tank system were removed and the openings (fill and vent pipe risers) sealed at grade with concrete.

Five perforations were observed in the gasoline underground storage tank ranging from a pinhole to ½- inch in diameter. No perforations were observed in the gasoline underground storage tank system piping. No perforations were observed in the diesel underground storage tank. A single perforation measuring 1/8-inch diameter was observed in the diesel product piping approximately two feet from the dispenser. No perforations were observed in the used oil tank following cleaning.

The shared gasoline and diesel tank excavation measured 16 feet in length, 10 feet in width, and 14 feet in depth. Excavation limits were based on the extent of the equipment, visual signs of contamination, field screening of the soil utilizing a *Mini-Rae* photoionization detector, the existence of a natural gas line along the north wall of the excavation, and the existence of the building foundation along the south wall of the excavation. Subsurface soil was silty-clay. Oil-contaminated soil was encountered to excavation depth. There were no indications of

contamination along the gasoline or diesel piping trenches or below the dispensers. Approximately 120 tons of oil-contaminated soil were removed and transported to Disposal Facility X for proper disposal. Contaminated soil encountered along the north wall of the excavation could not be removed for proper disposal due to the presence of the natural gas line.

Groundwater entered the shared gasoline and diesel underground storage tank excavation at 14 feet below grade surface. Neither liquid phase hydrocarbon nor sheen was detected on the groundwater. No groundwater was removed for treatment.

Subsurface soil below the used oil underground storage tank system was sand. The soil did not exhibit signs of contamination. Groundwater was not encountered during abandonment of the used oil tank system. The UST was filled in-place with Flo-Ash.

Water supply to the site and vicinity is through a public water system with the exception of one drinking water well located on the adjacent residential property to the north. There are no wellhead protection areas within one-half mile radius of the site.

B. Soil and Groundwater Sampling

A total of nine soil samples labeled S1 through S9 were collected from the site for analysis. Two soil samples, S1 and S2, were collected with a clean auger from two feet below the used oil underground storage tank from opposing ends after drilling access holes through the bottom. Five soil samples, S3 through S7, were collected from the shared gasoline and diesel underground storage tank excavation. S3 was collected at ten feet below grade surface along the center of the north wall of the excavation in the area exhibiting the most significant subsurface contamination remaining after removal of soil. Samples S4 through S7 were collected to address subsurface conditions along the piping trenches. S8 was collected midway between the gasoline dispenser and the gasoline tank at three feet below grade surface. S9 was collected between the diesel dispenser and tank, two feet from the dispenser, at three feet below grade surface, the area where the perforation was observed in the piping. Soil samples were collected utilizing sterile gloves. All soil samples were placed in four-ounce wide mouth laboratory supplied jars and immediately placed on ice in a clean cooler. The cooler temperature was maintained at less than or equal to four degrees Celsius.

A groundwater sample labeled G1 was collected from the shared gasoline and diesel underground storage tank excavation at a depth of 14-feet below grade surface utilizing a disposal bailer and sterile gloves. The sample was transferred from the bailer into three 40-ml vials previously acidified with hydrochloric acid and one amber one liter glass bottle. The containers were immediately placed on ice in a clean cooler. The cooler temperature was maintained at less than or equal to four degrees Celsius.

Per directive of the Maryland Department of the Environment, a drinking water well sample labeled W1 was collected, by a certified supply well sampler, on January 8, 2007 from the adjacent property to the north. There was no type of treatment system or holding tank associated with the well water. Sterile gloves were worn when the sample was collected from the kitchen tap and placed into three 40-ml vials previously acidified with hydrochloric acid. The sink aerator was removed and the water was allowed to run ten minutes prior to filling the vials. The full vials had no air bubbles or headspace. The samples were immediately placed on ice in a clean cooler. The cooler temperature was maintained at less than or equal to four degrees Celsius.

The groundwater sample from the tank excavation and all soil samples were delivered to Detection Laboratory Inc. on January 1, 2007. The drinking water well sample was delivered to Detection Laboratory Inc. on January 8, 2007.

C. Analytical Results

Soil Analytica	i Results:				
Sample	Sample	Benzene	Toluene	Ethylbenzene	Xylenes
Identification	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S1	1-1-07	ND	ND	ND	ND
S2	1-1-07	ND	ND	ND	ND
S 3	1-1-07	600	20	1,000	1,200
S 4	1-1-07	5	1,000	700	1,400
S5	1-1-07	ND	ND	ND	ND
S 6	1-1-07	10	980	640	1,000
S 7	1-1-07	ND	ND	ND	ND
S 8	1-1-07	ND	ND	ND	ND
S 9	1-1-07	ND	ND	ND	60
Analysi		1-5-07	1-5-07	1-5-07	1-5-07
MDE's residenti stand	ards	12	1,600	780	16,000
	MDE's non-residential soil cleanup standards		57,000	20,000	410,000
r	1		1	1	
Sample	Sample	MTBE	Naphthalene	TPH-GRO	TPH-DRO
Identification	Date	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S 1	1-1-07	ND	ND	11 U	11 U
S2	1-1-07	ND	ND	11 U	11 U
S 3	1-1-07	800	420	2,400	750
S 4	1-1-07	180	80	230	10
S5	1-1-07	ND	ND	10 U	10 U
S 6	1-1-07	65	110	60	230
S 7	1-1-07	ND	ND	11 U	11 U
S 8	1-1-07	ND	ND	11 U	11 U
S 9	1-1-07	ND	ND	11 U	11 U
Analysi		1-5-07	1-5-07	1-15-07	1-15-07
MDE's residenti stand	ards	650	160	230	230
MDE's non-re cleanup s		2,700	4,100	620	620
					-

Soil Analytical Results:

In addition to the above constituents, barium was detected in sample S2 at a concentration of 600 mg/kg above MDE's residential soil cleanup standard set at 550 mg/kg.

ndwater Analyi	lical Results.				
Sample Identification	Sample Date	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Xylenes (ug/kg)
G1	1-1-07	100	1,500	2,000	10,000
Analysi	s Date	1-10-07	1-10-07	1-10-07	1-10-07
0	MDE's groundwater cleanup standards		1,000	700	10,000
Sample	Sample	MTBE	Naphthalene	TPH-GRO	TPH-DRO
Identification	Date	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
G1	1-1-07	80	100	450	58
Analysi	Analysis Date		1-10-07	1-11-07	1-11-07
MDE's groundwater cleanup standards		20	10	47	47
Sample	Sample	Benzene	Toluene	Ethylbenzene	Xylenes
Identification	Date	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
W1	1-8-07	ND	ND	ND	ND
Analysi	s Date	1-9-07	1-9-07	1-9-07	1-9-07
MDE's ground standa		5	1,000	700	10,000
Sample	Sample	MTBE	Naphthalene	TPH-GRO	TPH-DRO
Identification	Date	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
W1	1-8-07	ND	ND	ND	ND
Analysi	s Date	1-9-07	1-9-07	1-9-07	1-9-07
MDE's ground standa	1	20	10	47	47

Groundwater Analytical Results:

D. Conclusions and Recommendations

The site is a commercial facility surrounded by residential homes to the north and east and commercial facilities to the south and west. The sample results from soil sample S3 revealed the presence of benzene, ethylbenzene, methyl tertiary butyl ether, naphthalene, and total petroleum hydrocarbons above MDE's residential soil cleanup standards. Groundwater sample results revealed the presence of benzene, toluene, ethylbenzene, methyl tertiary butyl ether, naphthalene, and total petroleum hydrocarbons above MDE's groundwater cleanup standards.

Based on the elevated soil and groundwater sample results and the presence of a drinking water well on the adjacent residential property, Blank Environmental, Inc. proposes to install two twoinch wells on the northern property boundary between the gasoline and diesel tank excavation and the adjacent property drinking water well. A third two-inch well will be installed off the southeast edge of the excavation to determine groundwater flow. A detailed corrective action work plan identifying the subsurface investigation techniques, sampling methodology and frequency, and site map of proposed well points will be forwarded to MDE.

II. Support Documents

A. Site Sketch



Main Street

Bond Street

B. Photographs



Photograph of the used oil underground storage tank after cleaning.



Photograph of a hole in the gasoline underground storage tank.

C. Receipts

- Tank Disposal
 Slurry Fill

- Soil Disposal
 Liquid Disposal

ABC Salvage, Inc. 1010 ABC Lane Metal MD 22222 1-800-555-5555

Certificate of Storage Tank Disposal

In accordance with current Federal, State, and Local regulations, ABC Salvage, Inc. of

Metal Maryland accepts full responsibility for the disposal of the tank(s) listed below.

The following tanks are no longer suitable for food, flammable liquid, combustible

liquid, or hazardous liquid storage. The tanks have been rendered unfit for further use.

Number of Tank	Size In Gallons	Material of Construction	Product Previously Stored

The above-reference tanks were removed from:

Site:_____

Address:_____

Customer Signature:_____

Recycling Facility		
Operator Signature:		
- •		

Date:_____

Slurry Receipt

Date Delivered	ABC Slurry, Inc. 1012 ABC Lane Metal MD 22222 1-800-555-5556 Date Delivered:					
Customer:						
Ship to:						
Order No.	Amount Ordered (yards)	Shipped (yards)	Product Identifier	Description		
1514	1.00	1.00	1234	Flo-Ash		

Soil Disposal Receipt

ABC Disposal Facility, Inc. 1014 ABC Lane Metal MD 22222 1-800-555-5557				
Non-Hazardous Materials Manifest				
Generator Information:	Customer Information:			
Name:	Name:			
Address:	Address:			
Phone:	Phone:			
Carrier Information: Name:				
Address: Phone: Driver:				
Description of Commodity: Non-hazardous oil-contaminated soil Date Received:	Vehicle Weight Information: Gross: Tare: Net:			
	Tons:			
Customer Signature:				
Driver Signature:				
Disposal Facility Operator Signature:				

Liquid Disposal Receipt

	10 Me	sposal Facility 14 ABC Lane tal MD 22222 800-555-5557	2	
Non-Hazardous Materials M	lanifest			
Generator Information:		Customer In	nformation:	
Name:		Name:		
Address:		Address:		
Phone:		Phone:		
Carrier Information:				
EPA ID#				
Name:				
Address:				
Phone:				
Driver:				
Description:	Number of Containers:	Type of Container:	Quantity:	Units:
Customer Signature:		•		·
Driver Signature:				
Disposal Facility Operator S	ignature:			
Date Received:				

D. Sample Locations

Sample Location Diagram





E. Analytical Laboratory Information

Name:					Signatur	re:	Site:						
Company	y:					Phone:		Analysis					
Address:						Fax:					Τ		
City, Stat	te, Zip:												
Sample ID	Date Sampled	Time Sampled	Preser	rvative	Matrix	Number of Containers	Notes:						
Relinquis	shed by:			Date:		Time:	Received By:	D	ate:			Ti	me:
Relinquis	shed by:			Date:		Time:	Received By:	D	ate:	:		Ti	me:
Relinquished by: Date:			Time:	Received By:	Date:		Time:						
Relinquis	shed by:			Date:		Time:	Received By:	D	ate:	:		Ti	me:

ABC Laboratory 1015 Analysis Way Anywhere MD Phone: 410-555-5555 Fax: 410-555-5556

Certificate of Analysis

Sample Identification:	W-1 (potable)	well)					
Matrix:	Water						
Date Sampled:	1-1-07						
Date Received:	1-2-07						
Date Analyzed:	1-8-07						
Analyst:	River						
Volatile Organic Compound	Limit of Detection	EPA Method	Result	Units			
Dichlorodifluoromethane	0.5	524.2	ND	ug/kg			
Chloromethane	0.5	524.2	ND	ug/kg			
Vinyl Chloride	0.5	524.2	ND	ug/kg			
Bromomethane	0.5	524.2	ND	ug/kg			
Chloroethane	0.5	524.2	ND	ug/kg			
Trichlorofluoromethane	0.5	524.2	ND	ug/kg			
1,1-Dichloroethene	0.5	524.2	ND	ug/kg			
tert-Butyl Alcohol (TBA)	0.5	524.2	ND	ug/kg			
Methylene Chloride	0.5	524.2	ND	ug/kg			
trans-1,2-Dichloroethene	0.5	524.2	ND	ug/kg			
Methyl tert-Butyl Ether (MtBE)	0.5	524.2	ND	ug/kg			
1,1-Dichloroethane	0.5	524.2	ND	ug/kg			
Diisopropyl Ether (DIPE)	0.5	524.2	ND	ug/kg			
cis-1,2-Dichloroethene	0.5	524.2	ND	ug/kg			
Bromochloromethane	0.5	524.2	ND	ug/kg			
Chloroform	0.5	524.2	ND	ug/kg			
2,2-Dichloropropane	0.5	524.2	ND	ug/kg			

Ethyl tert-Butyl Ether (EtBE)	0.5	524.2	ND	ug/kg
1,2-Dichloroethane	0.5	524.2	ND	ug/kg
tert-Amyl Alcohol (TAA)	0.5	524.2	ND	ug/kg
1,1,1-Trichloroethane	0.5	524.2	ND	ug/kg
1,1-Dichloropropene	0.5	524.2	ND	ug/kg
Carbon tetrachloride	0.5	524.2	ND	ug/kg
Benzene	0.5	524.2	ND	ug/kg
tert-Amyl Methyl Ether (TAME)	0.5	524.2	ND	ug/kg
Dibromomethane	0.5	524.2	ND	ug/kg
1,2-Dichloropropane	0.5	524.2	ND	ug/kg
Trichloroethene	0.5	524.2	ND	ug/kg
Bromodichloromethane	0.5	524.2	ND	ug/kg
tert-Amyl Ethyl Ether (TAEE)	0.5	524.2	ND	ug/kg
cis-1,3-Dichloropropene	0.5	524.2	ND	ug/kg
trans-1,3-Dichloropropene	0.5	524.2	ND	ug/kg
1,1,2-Trichloroethane	0.5	524.2	ND	ug/kg
Toluene	0.5	524.2	ND	ug/kg
1,3-Dichloropropane	0.5	524.2	ND	ug/kg
Dibromochloromethane	0.5	524.2	ND	ug/kg
1,2-Dibromomethane	0.5	524.2	ND	ug/kg
Tetrachloroethene	0.5	524.2	ND	ug/kg
1,1,1,2-Tetrachloroethene	0.5	524.2	ND	ug/kg
Chlorobenzene	0.5	524.2	ND	ug/kg
Ethylbenzene	0.5	524.2	ND	ug/kg
m&p-Xylene	0.5	524.2	ND	ug/kg
Bromoform	0.5	524.2	ND	ug/kg
Styrene	0.5	524.2	ND	ug/kg
o-Xylene	0.5	524.2	ND	ug/kg
1,1,2,2-Tetrachloroethane	0.5	524.2	ND	ug/kg
1,2,3-Trichloropropane	0.5	524.2	ND	ug/kg
Isopropylbenzene	0.5	524.2	ND	ug/kg
Bromobenzene	0.5	524.2	ND	ug/kg

n-Propylbenzene	0.5	524.2	ND	ug/kg
2-Chlorotoluene	0.5	524.2	ND	ug/kg
4-Chlorotoluene	0.5	524.2	ND	ug/kg
1,3,5-Trimethylbenzene	0.5	524.2	ND	ug/kg
tert-Butylbenzene	0.5	524.2	ND	ug/kg
1,2,4-Trimethylbenzene	0.5	524.2	ND	ug/kg
sec-Butylbenzene	0.5	524.2	ND	ug/kg
1,3-Dichlorobenzene	0.5	524.2	ND	ug/kg
1,4-Dichlorobenzene	0.5	524.2	ND	ug/kg
1,2-Dichlorobenzene	0.5	524.2	ND	ug/kg
p-iso-Propyltoluene	0.5	524.2	ND	ug/kg
n-Butylbenzene	0.5	524.2	ND	ug/kg
1,2-Dibromo-3-chloropropane	0.5	524.2	ND	ug/kg
1,2,4-Trichlorobenzene	0.5	524.2	ND	ug/kg
Naphthalene	0.5	524.2	ND	ug/kg
Hexachlorobutadiene	0.5	524.2	ND	ug/kg
1,2,3-Trichlorobenzene	0.5	524.2	ND	ug/kg
<u>Note:</u> ND – Not Detected at a Concentration Greater Than Detection Limit				

ABC Laboratory 1015 Analysis Way Anywhere MD Phone: 410-555-5555 Fax: 410-555-5556

Certificate of Analysis

Sample Identification:	G-1 (non-potable well)
Matrix:	Water
Date Sampled:	1-1-07
Date Received:	1-2-07
Date Analyzed:	1-8-07
Analyst:	River

Compound	Limit of Detection	EPA Method	Result	Units
Dichlorodifluoromethane	50	8260	ND	ug/kg
Chloromethane	50	8260	ND	ug/kg
Vinyl Chloride	50	8260	ND	ug/kg
Bromomethane	50	8260	ND	ug/kg
Chloroethane	50	8260	ND	ug/kg
Trichlorofluoromethane	50	8260	ND	ug/kg
1,1-Dichloroethene	50	8260	ND	ug/kg
tert-Butyl Alcohol (TBA)	500	8260	ND	ug/kg
Methylene Chloride	50	8260	ND	ug/kg
trans-1,2-Dichloroethene	50	8260	ND	ug/kg
Methyl tert-Butyl Ether (MtBE)	50	8260	ND	ug/kg
1,1-Dichloroethane	50	8260	ND	ug/kg
Diisopropyl Ether (DIPE)	50	8260	ND	ug/kg
cis-1,2-Dichloroethene	50	8260	ND	ug/kg
Bromochloromethane	50	8260	ND	ug/kg
Chloroform	50	8260	ND	ug/kg

2,2-Dichloropropane	50	8260	ND	ug/kg
Ethyl tert-Butyl Ether (EtBE)	50	8260	ND	ug/kg
1,2-Dichloroethane	50	8260	ND	ug/kg
tert-Amyl Alcohol (TAA)	500	8260	ND	ug/kg
1,1,1-Trichloroethane	50	8260	ND	ug/kg
1,1-Dichloropropene	50	8260	ND	ug/kg
Carbon tetrachloride	50	8260	ND	ug/kg
Benzene	50	8260	ND	ug/kg
tert-Amyl Methyl Ether (TAME)	50	8260	ND	ug/kg
Dibromomethane	50	8260	ND	ug/kg
1,2-Dichloropropane	50	8260	ND	ug/kg
Trichloroethene	50	8260	ND	ug/kg
Bromodichloromethane	50	8260	ND	ug/kg
tert-Amyl Ethyl Ether (TAEE)	50	8260	ND	ug/kg
cis-1,3-Dichloropropene	50	8260	ND	ug/kg
trans-1,3-Dichloropropene	50	8260	ND	ug/kg
1,1,2-Trichloroethane	50	8260	ND	ug/kg
Toluene	50	8260	ND	ug/kg
1,3-Dichloropropane	50	8260	ND	ug/kg
Dibromochloromethane	50	8260	ND	ug/kg
1,2-Dibromomethane	50	8260	ND	ug/kg
Tetrachloroethene	50	8260	ND	ug/kg
1,1,1,2-Tetrachloroethene	50	8260	ND	ug/kg
Chlorobenzene	50	8260	ND	ug/kg
Ethylbenzene	50	8260	ND	ug/kg
m&p-Xylene	50	8260	ND	ug/kg
Bromoform	50	8260	ND	ug/kg
Styrene	50	8260	ND	ug/kg
o-Xylene	50	8260	ND	ug/kg
1,1,2,2-Tetrachloroethane	50	8260	ND	ug/kg
1,2,3-Trichloropropane	50	8260	ND	ug/kg
Isopropylbenzene	50	8260	ND	ug/kg

Bromobenzene	50	8260	ND	ug/kg
n-Propylbenzene	50	8260	ND	ug/kg
2-Chlorotoluene	50	8260	ND	ug/kg
4-Chlorotoluene	50	8260	ND	ug/kg
1,3,5-Trimethylbenzene	50	8260	ND	ug/kg
tert-Butylbenzene	50	8260	ND	ug/kg
1,2,4-Trimethylbenzene	50	8260	ND	ug/kg
sec-Butylbenzene	50	8260	ND	ug/kg
1,3-Dichlorobenzene	50	8260	ND	ug/kg
1,4-Dichlorobenzene	50	8260	ND	ug/kg
1,2-Dichlorobenzene	50	8260	ND	ug/kg
p-iso-Propyltoluene	50	8260	ND	ug/kg
n-Butylbenzene	50	8260	ND	ug/kg
1,2-Dibromo-3-chloropropane	50	8260	ND	ug/kg
1,2,4-Trichlorobenzene	50	8260	ND	ug/kg
Naphthalene	50	8260	ND	ug/kg
Hexachlorobutadiene	50	8260	ND	ug/kg
1,2,3-Trichlorobenzene	50	8260	ND	ug/kg
TPH GRO	100	8015B	ND	mg/kg
TPH DRO	500	8015B	ND	mg/kg

ABC Laboratory 1015 Analysis Way Anywhere MD Phone: 410-555-5555 Fax: 410-555-5556

Certificate of Analysis

VOLATILE ORGANIC COMPOUND (VOC) By Method 8260

Sample Identification:	S-1	S-2	S-3	S-4	S-5	
Sumple Rentification.	1234 Main		55	51	55	
Matrix:	Soil	Soil	Soil	Soil	Soil	
Date Sampled:	1/1/07	1/1/07	1/1/07	1/1/07	1/1/07	
Date Received:	1/2/07	1/2/07	1/2/07	1/2/07	1/2/07	
	1/8/07	1/8/07	1/8/07	1/8/07	1/8/07	
Date Analyzed:		1/0/07	1/0/07	1/0/07	1/0/07	
Analyst:	River					/1
Unit:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
						Detection
						Limit
Dichlorodifluoromethane	ND	ND	ND	ND	ND	5.0
Chloromethane	ND	ND	ND	ND	ND	5.0
Vinyl Chloride	ND	ND	ND	ND	ND	5.0
Bromomethane	ND	ND	ND	ND	ND	5.0
Chloroethane	ND	ND	ND	ND	ND	5.0
Trichlorofluoromethane	ND	ND	ND	ND	ND	5.0
1,1-Dichloroethene	ND	ND	ND	ND	ND	5.0
tert-Butyl Alcohol (TBA)	ND	ND	ND	ND	ND	5.0
Methylene Chloride	ND	ND	ND	ND	ND	5.0
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	5.0
Methyl tert-Butyl Ether (MtBE)	ND	ND	800	180	ND	5.0
1,1-Dichloroethane	ND	ND	ND	ND	ND	5.0
Diisopropyl Ether (DIPE)	ND	ND	ND	ND	ND	5.0
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	5.0
Bromochloromethane	ND	ND	ND	ND	ND	5.0
Chloroform	ND	ND	ND	ND	ND	5.0
2,2-Dichloropropane	ND	ND	ND	ND	ND	5.0
Ethyl tert-Butyl Ether	ND	ND	ND	ND	ND	5.0
(EtBE)						
1,2-Dichloroethane	ND	ND	ND	ND	ND	5.0
tert-Amyl Alcohol (TAA)	ND	ND	ND	ND	ND	5.0
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	5.0
1,1-Dichloropropene	ND	ND	ND	ND	ND	5.0
Carbon tetrachloride	ND	ND	ND	ND	ND	5.0
Benzene	ND	ND	600	5		5.0

tert-Amyl Methyl Ether (TAME)	ND	ND	ND	ND	ND	5.0
Dibromomethane	ND	ND	ND	ND	ND	5.0
1,2-Dichloropropane	ND	ND	ND	ND	ND	5.0
Trichloroethene	ND	ND	ND	ND	ND	5.0
Bromodichloromethane	ND	ND	ND	ND	ND	5.0
tert-Amyl Ethyl Ether	ND	ND	ND	ND	ND	5.0
(TAEE)						
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	5.0
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	5.0
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	5.0
Toluene	ND	ND	20	1,000	ND	5.0
1,3-Dichloropropane	ND	ND	ND	ND	ND	5.0
Dibromochloromethane	ND	ND	ND	ND	ND	5.0
1,2-Dibromomethane	ND	ND	ND	ND	ND	5.0
Tetrachloroethene	ND	ND	ND	ND	ND	5.0
1,1,1,2-Tetrachloroethene	ND	ND	ND	ND	ND	5.0
Chlorobenzene	ND	ND	ND	ND	ND	5.0
Ethylbenzene	ND	ND	1,000	700	ND	5.0
m&p-Xylene	ND	ND	ND	ND	ND	5.0
Bromoform	ND	ND	ND	ND	ND	5.0
Styrene	ND	ND	ND	ND	ND	5.0
o-Xylene	ND	ND	ND	ND	ND	5.0
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	5.0
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	5.0
Isopropylbenzene	ND	ND	ND	ND	ND	5.0
Bromobenzene	ND	ND	ND	ND	ND	5.0
n-Propylbenzene	ND	ND	ND	ND	ND	5.0
2-Chlorotoluene	ND	ND	ND	ND	ND	5.0
4-Chlorotoluene	ND	ND	ND	ND	ND	5.0
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	5.0
tert-Butylbenzene	ND	ND	ND	ND	ND	5.0
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	5.0
sec-Butylbenzene	ND	ND	ND	ND	ND	5.0
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	5.0
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	5.0
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	5.0
p-iso-Propyltoluene	ND	ND	ND	ND	ND	5.0
n-Butylbenzene	ND	ND	ND	ND	ND	5.0
1,2-Dibromo-3-	ND	ND	ND	ND	ND	5.0
chloropropane						
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	5.0
Naphthalene	ND	ND	420	80	ND	5.0
Hexachlorobutadiene	ND	ND	ND	ND	ND	5.0
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	5.0
ug/kg – Parts Per Billion (PPB) mg/kg – Parts Per Million (PPM)					

ABC Laboratory ere MD Phone: 410-555-5555 Fax: 410-555-5556 1015 Analysis Way Anywhere MD

Certificate of Analysis

DIESEL-RANGE ORGANICS (DRO) By Method 8015

Sample Identification:	S-1 1234 Mai	S-2 n Street	S-3	S-4	S-5
Matrix:	Soil	Soil	Soil	Soil	Soil
Date Sampled:	1/1/07	1/1.07	1/1/07	1/1/07	1/1/07
Date Received:	¹ /2/07	¹∕₂ /07	¹∕₂ /07	1/2/07 1/2/	/07
Date Analyzed:	1/8/07	1/8/07	1/8/07	1/8/07	1/8/07
Analyst:	River				
Unit:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Diesel-Range Organics	11 U	11 U	750	10	11 U
Gasoline Range Organics	11 U	11 U	2,400	230	11 U

ug/kg – Micrograms per kilogram (parts per billion) mg/kg – Milligrams per kilogram (parts per million) U- Less than laboratory reported quantitation limit

ABC Laboratory

1015 Analysis Way Anywhere MD Phone: 410-555-5555 Fax: 410-555-5556

Certificate of Analysis

DIESEL-RANGE ORGANICS (DRO) By Method 8015

Sample Identification:	S-6 1234 Main	S-7 Street	S-8	S-9
Matrix:	Soil	Soil	Soil	Soil
Date Sampled:	1/1/07	1/1.07	1/1/07	1/1/07
Date Received:	1/2/07	1⁄2/07	1⁄2/07	¹∕₂/07
Date Analyzed:	1/8/07	1/8/07	1/8/07	1/8/07
Analyst:	River			
Unit:	mg/kg	mg/kg	mg/kg	mg/kg
Diesel-Range Organics	230	11 U	11 U	11 U
Gasoline Range Organics	60	11 U	11 U	11 U

ug/kg – Micrograms per kilogram (parts per billion) mg/kg – Milligrams per kilogram (parts per million) U- Less than laboratory reported quantitation limit

F. Registration Information

All UST system closures, including abandonment in-place, require one of the Department's notification/registration forms listed below to be completed and submitted to the Oil Control Program before a case is reviewed and closed. Both forms require a signature from the owner or owner's representative.

1. New Facility or previously unregistered UST Registration Notification Form for Underground Storage Tank Systems

The registration notification forms and instructions may be found online at:

http://mde.maryland.gov/programs/Land/Pages/landpermits.aspx

2. Existing Facility or previously register UST Removal/Abandonment 30-Day Written Notification

The 30-day written notification form may be found online at:

http://mde.maryland.gov/programs/Land/Pages/landpermits.aspx

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Suite 620 • Baltimore, Maryland 21230-1719 410-537-3442 • 800-633-6101 x3442 • <u>http://www.mde.state.md.us</u>

Waste Management Administration • Oil Control Program

NOTIFICATION FOR UNDERGROUND STORAGE TANKS

Return completed form to: Maryland Department of the Environment Oil Control Program 1800 Washington Boulevard, Suite 620 Baltimore MD 21230-1719 Type Of Notification: (check one) New Facility Amended Closure Number of tanks at facility Number of continuation sheets attached	State Use Only Facility ID Number: Alt ID Number: Date Entered into Computer: Data Clerk's Initials: Owner Contacted to Clarify Response: Comments:				
I. OWNERSHIP INFORMATION:	Owner ID:				
Owner Name:	Type Of Owner: (check one)				
Street Address:	Government Commercial				
	Federal Corporation				
City State Zip Code	State Company				
County:	Local Partnership				
	Individual				
Mailing Address (if different from above):					
	Non-Commercial				
Phone Number:	Residential				
	Agricultural				
Contact Person:	Non-Profit Agency				
II. LOCATION OF TANK(S):					
Facility Name or Company Site Identifier (as applicable):					
Street Address:					
City State Zip C	Code County				
Mailing Address (if different from above):	· · · · · · · · · · · · · · · · · · ·				
Phone Number:					
Facility Operator:					

Facility ID Number:

III. TYPE OF FACILITY: (check one)				
Federal Non-Military	Gas Station	Private Home		
Federal Military	Petroleum Distributor	Apt. / Condo		
Educational	Trucking/Transport	Farm / Nursery		
Fire/Rescue/Ambulance	Industrial	Marina		
Public Service	Contractor	Store		
Utilities	Airline	Office		
Railroad	Auto Dealership	Other:		
IV. CONTACT PERSON IN CHARGE C	F TANKS:			
Name:	Job Ti	tle:		
Street Address:	Phone Number:			
City State	Zip	County		
V. FINANCIAL RESPONSIBILITY: (if a	pplicable - see instruction she	et)		
I have met the financial responsibility requireme	nts in accordance with 40 CFR Part	280, Subpart H		
□ Yes □ No				
Policy #:	Commercial Insurance	Letter of Credit		
Insurer:		Surety Bond		
Agent/Broker:		Other method allowed		
Phone No.:				
	Guarantee	(specify)		
VI. CERTIFICATION: (to be completed	by owner or owner's represen	itative)		
	-			
I certify, under penalty of law, that I has				
submitted in this and all attached docu COMAR 26.10.03, and is true, accurate		on provided is in compliance with		
Name (print/type):				
Title (print/type):				
ппе (рішитуре).				
Signaturo				
Signature:				
Date Signed:				
Baro Alduon				

Form Number: MDE/WAS/PER.012 Date: August 4, 2004 TTY Users: 800-201-7165

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VII. DESCRIPTION OF UNDERGROUND STORAGE TANKS: (complete for each tank at this facility)

Tank Identification Number	Tank No.	Tank No	Tank No	Tank No	Tank No
Alt. Tank ID Number	Tank No.	Tank No.	Tank No.	Tank No.	Tank No
Status of Tank (mark only one) -Currently In Use -Temporarily Out of Use -Permanently Out of Use 2. Date of Installation (mo/yr)					
3. Total Capacity (gallons)					
 Material of Tank Construction (mark all that apply) Asphalt Coated or Bare Steel Cathodically Protected Steel Composite (Steel w/ Fiberglass) Concrete Fiberglass Reinforced Plastic Polyethylene Tank Jacket Unknown Other (specify) 					
-Has tank been repaired?	YES NO	YES NO	YES NO	YES NO	YES NO
-Double-walled -Excavation Liner -Lined Inerior					
 Material of Piping Construction (mark all that apply) Bare Steel Galvanized Steel Fiberglass Reinforced Plastic Copper Flexible Plastic Unknown Other (specify) 					
-Cathodically Protected -Double-walled -Secondary Containment (specify)					
 Type of Piping (mark all that apply) Pressure Gravity Feed Suction: no valve at tank (Safe Suction) Suction: valve at tank (U.S. Suction) Has piping been repaired 	? YES NO	YES NO	YES NO	YES NO	YES NO
7. Substance Currently or Last Stored -Gasoline -Diesel					

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Facility ID Number:

Tank Identification Number	Tank No.	Tank No.	Tank No	Tank No	Tank No
Alt. Tank ID Number	Tank No.	Tank No.	Tank No	Tank No.	Tank No
-Gasohol -Kerosene -Heating Oil -Used Oil -Hazardous Substance CERCLA name and/or CAS # -Other (specify)					
-Mixture of Substances (specity)					-
 8. Closing of Tank Estimated date last used (mo/dd/yr) Date tank closed (mo/dd/yr) Tank removed from ground? Tank filled with inert material? If yes, material used 	YES NO YES NO				
-Change in service to non- regulated substance?	YES NO				
 Site Assessment Completed? 	YES NO				
 Release Detection (mark all that apply) Manual Tank Gauging Tank Tightness Testing Inventory Controls Automatic Tank Gauging Vapor Monitoring Groundwater Monitoring Interstitial Monitoring Double-walled Tank/Piping Statistical Inventory Reconciliation (SIR) Automatic Line Leak Detection Line Tightness Testing Other Method Allowed (specify) 	TANK PIPING				
 Spill and Overfill Protection Overfill device installed Spill catch basin 					
 Stage I Vapor Recovery? Stage II Vapor Recovery? 	YES NO YES NO				

VIII. CERTIFICATION OF COMPLIANCE: (complete for all new and upgraded tanks at this location)

Installer Certification

Signature

Company

I certify that the underground storage system installed, upgraded, or repaired at this facility is in compliance with all applicable regulations.

Date

Installer:

Print Name

MDIC-

State Identification Number

Form Number: MDE/WAS/PER.012 Date: August 4, 2004 TTY Users: 800-201-7165 Page 4 of 4