

## STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

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March 5, 2013

Mr. Yon Kim Blaine Mini Mart 2530 Peace Portal Drive Blaine, Washington 98230-9782

## Re: Notice of Required Action for the Release of Hazardous Substances:

- Name: Blaine Mini Mart
- Address: 2530 Peace Portal Drive, Blaine, WA 98230
- Facility No.: 42128291
- UST No.: UST 3081

Dear Mr. Kim:

Under the Model Toxics Control Act (MTCA), chapter 70.105D Revised Code of Washington (RCW), the Department of Ecology (Ecology) is requiring immediate action at the Site referenced above. All action items listed below must be addressed and confirmation of each item must be received in writing by the dates indicated below. If the compliance dates are not met, administrative action will be implemented regarding this release.

If necessary, written justification of why a compliance date cannot be met, along with a proposed compliance timeline, must be received by Ecology within one week of receipt of this letter for Ecology to consider an amendment to the compliance date.

## **Description of Release**

On February 27, 2013, a release of hazardous substances occurred at the Site. Hazardous substances were released to soil and groundwater after a seal blew on the turbine for underground storage tank (UST) 2 which contained premium grade gasoline. An attempt was made to recover the released gasoline via vacuum extraction truck. The amount of gasoline released to the environment was not reported. The amount of gasoline and water removed was not reported.

## **Action Items**

In response to the release of hazardous substances at the Site, Ecology is requiring immediate actions under WAC 173-340-450:

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- 1. Immediately conduct free product removal to the maximum extent practicable and in a manner that minimizes the spread of hazardous substances, by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the Site. Collect groundwater samples from tank observation wells OW-1 through OW-3 monthly for a period of at least three months to evaluate groundwater conditions in the vicinity UST basin. Groundwater samples should be analyzed per Table 830-1 Required Testing for Petroleum Releases (Attachment A).
- 2. Monitor and mitigate any fire and safety hazards posed by vapors or free product that may have migrated from the UST into structures in the vicinity of the Site, such as sewers or basements.
- 3. As soon as possible, but no later than 45-days following confirmation of an UST release, testing for hazardous substances in soil and groundwater shall be performed. Testing shall be done in accordance with a sampling and analysis plan (SAP) prepared under WAC 173-340-820. Proposed soil boring locations are included on Figure 1.
- 4. Within 20-days of the UST release, a status report shall be submitted to Ecology outlining work completed to date and a compliance schedule for work outstanding. This report can be combined with the SAP.
- 5. Within 90-days after release confirmation, unless directed to do otherwise by Ecology, submit a report to Ecology detailing the nature and extent of the release.
- 6. A remedial investigation and feasibility study may need to be conducted if there is evidence that the release has caused hazardous substances to be present in the groundwater in excess of the groundwater standards adopted under chapter 90.48 RCW or cleanup levels in WAC 173-340-720, free product is found; or where otherwise required by Ecology.

Additional actions may be required if Ecology deems necessary.

Ecology's policy is to work cooperatively with potentially liable parties to accomplish the prompt and effective cleanup of contaminated Sites. Please note that your cooperation in planning or conducting remedial actions at the Site is not an admission of guilt or liability.

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## **Contact Information**

If you have questions regarding this letter, or if you would like additional information regarding the cleanup of contaminated sites, please call me at (360) 407-6913. Thank you for your cooperation.

Sincerely,

Addam Log

Nicholas M. Acklam Toxics Cleanup Program - HQ

cc: Ralph Wieland, W.L. Repair

Figure 1 - Site Map with Proposed Soil Boring Locations

Attachment A - Table 830-

BY CERTIFIED MAIL NO. 7008 2810 0001 3940 6135

# MTCA Cleanup Regulation

173-340-900

Table 830-1							
Required	Testing	for	Petroleum	Releases.			

	Gasoline Range Organics (GRO) (1)	Diesel Range Organics (DRO) (2)	Heavy Oils (DRO) (3)	Mineral Oils . (4)	Waste Oils and Unknown Oil (5)		
Volatile Petroleum Cor			ntradicioand/aging		Asia Sinformatriplatic		
Benzene	X (6)	. X (7)			X (8)		
Toluene	X (6)	X (7)		· · · · · · · · · · · · · · · · · · ·	X (8)		
Ethyl benzene	X (6)	X (7)			X (8)		
Xylenes	X (6)	X (7)			X (8)		
n-Hexane	X (9)						
Fuel Additives and Blending Compounds							
Dibromoethane, 1-2 (EDB); and Dichloroethane, 1-2 (EDC)	X (10)				X (8)		
Methyl tertiary-butyl ether (MTBE)	X (11)	-			X (8)		
Total Lead and Other Additives	X (12)				X (8)		
Other Petroleum Com	ponents						
Carcinogenic PAHs		X (13)	X (13)		X (8)		
Naphthalenes	X (14)	. X (14)	X (14)		X (14)		
Other Compounds							
Polychlorinated Biphenyls (PCBs)	•		X (15)	X (15)	X (8)		
Halogenated Volatile Organic Compounds (VOCs)					X (8)		
Other	X (16)	X (16)	X (16)	X (16)	X (16)		
Total Petroleum Hydr	ocarbons Method:		N.V. (1901) MILLS				
TPH Analytical Method for Total TPH (Method A Cleanup Levels) (17)	NWTPH-Gx	NWTPH-Dx	NWTPH-Dx	NWTPH-Dx	NWTPH-Gx & NWTPH-Dx		
TPH Analytical Methods for TPH fractions (Methods B or C) (17)	VPH	EPH	EPH	EPH	VPH and EPH		

[Editor's Note: See next page for the footnotes associated with Table 830-1.]



#### 70.105D.920

Use of Table 830-1: An "X" in the box means that the testing requirement applies to ground water and soil if a release is known or suspected to have occurred to that medium, unless otherwise specified in the footnotes. A hox with no "X" indicates (except in the last two rows) that, for the type of petroleum product release indicated in the top row, analyses for the hazardous substance(s) named in the far-left column corresponding to the empty box are not typically required as part of the testing for petroleum releases. However, such analyses may be required based on other sitespecific information. Note that testing for Total Petroleum Hydrocarbons (TPH) is required for every type of petroleum release, as indicated in the bottom two rows of the table. The testing method for TPH depends on the type of petroleum product released and whether Method A or Method B or C is being used to determine TPH cleanup levels. See WAC 173-340-830 for analytical procedures. The footnotes to this table are important for understanding the specific analytical requirements for petroleum releases.

#### Footnotes:

- (1) The following petroleum products are common examples of GRO: automotive and aviation gasolines, mineral spirits, stoddard solvents, and naphtha. To be in this range, 90 percent of the petroleum components need to be quantifiable using the NWTPH-Gx; if NWTPH-HCID results are used for this determination, then 90 percent of the "area under the TPH curve" must be quantifiable using NWTPH-Gx. Products such as jet fluel, diesel No. 1, kerosene, and heating oil may require analysis as both GRO and DRO depending on the range of petroleum components present (range can be measured by NWTPH-HCID). (See footnote 17 on analytical methods.)
- (2) The following petroleum products are common examples of DRO: Diesel No. 2, fuel oil No. 2, light oil (including some bunker oils). To be in this range, 90 percent of the petroleum components need to be quantifiable using the NWTPH-Dx quantified against a diesel standard. Products such as jet fuel, diesel No. 1, kerosene, and heating oil may require analysis as both GRO and DRO depending on the range of petroleum components present as measured in NWTPH-HCID.
- (3) The following petroleum products are common examples of the heavy oil group: Motor oils, lube oils, hydraulic fluids, etc. Heavier oils may require the addition of an appropriate oil range standard for quantification.
- (4) Mineral oil means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors.
- (5) The waste oil category applies to waste oil, oily wastes, and unknown petroleum products and mixtures of petroleum and nonpetroleum substances. Analysis of other chemical components (such as solvents) than those listed may be required based on site-specific information. Mixtures of identifiable petroleum products (such as gasoline and diesel, or diesel and motor oil) may be analyzed based on the presence of the individual products, and need not be treated as waste and unknown oils.
- (6) When using Method A, testing soil for benzene is required. Furthermore, testing ground water for BTEX is necessary when a petroleum release to ground water is known or suspected. If the ground water is tested and toluene, ethyl benzene or xylene is in the ground water above its respective Method A cleanup level, the soil must also be tested for that chemical. When using Method B or C, testing the soil for BTEX is required and testing for BTEX in ground water is required when a release to ground water is known or suspected.

(7)(a) For DRO releases from other than home heating oil systems, follow the instructions for GRO releases in Footnote (6).

(b) For DRO releases from typical home heating oil systems (systems of 1,100 gallons or less storing heating oil for residential consumptive use on the premises where stored), testing for BTEX is not usually required for either ground water or soil. Testing of the ground water is also not usually required for these systems; however, if the ground water is tested and benzene is found in the ground water, the soil must be tested for benzene.

- (8) Testing is required in a sufficient number of samples to determine whether this chemical is present at concentrations of concern. If the chemical is found to be at levels below the applicable cleanup level, then no further analysis is required.
- (9) Testing for n-hexane is required when VPH analysis is performed for Method B or C. In this case, the concentration of n-hexane should be deleted from its respective fraction to avoid double-counting its concentration. n-Hexane's contribution to overall toxicity is then evaluated using its own reference dose.
- (10) Volatile fuel additives (such as dibromoethane, 1-2 (EDB) (CAS# 106-93-4) and dichloroethane, 1-2 (EDC) (CAS# 107-06-2)) must be part of a volatile organics analysis (VOA) of GRO contaminated ground water. If any is found in ground water, then the contaminated soil must also be tested for these chemicals.
- (11) Methyl tertiary-butyl ether (MTBE) (CAS# 1634-04-4) must be analyzed in GRO contaminated ground water. If any is found in ground water, then the contaminated soil must also be tested for MTBE.
- (12)(a) For automotive gasoline where the release occurred prior to 1996 (when "leaded gasoline" was used), testing for lead is required unless it can be demonstrated that lead was not part of the release. If this demonstration cannot be made, testing is required in a sufficient number of samples to determine whether lead is present at concentrations of concern. Other additives and blending compounds of potential environmental significance may need to be considered for testing, including: tertiary-butyl alcohol (TBA); tertiary-amyl methyl ether (TAME); ethyl tertiary-butyl ether (ETBE); ethanol; and methanol. Contact the department for additional testing recommendations regarding these and other additives and blending compounds.
  - (b) For aviation gasoline, racing fuels and similar products, testing is required for likely fuel additives (especially lead) and likely blending compounds, no matter when the release occurred.
  - (13) Testing for carcinogenic PAHs is required for DRO and heavy oils, except for the following products for which adequate information exists to indicate their absence: Diesei No. 1 and 2, home heating oil, kerosene, jet fuels, and electrical insulating mineral oils. The carcinogenic PAHs include benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, benzo(k)fluoranthene, benzo(a)anthracene, and benzo(b)fluoranthene.
- (14)(a) Except as noted in (b) and (c), testing for the non-carcinogenic PAHs, including the "naphthalenes" (naphthalene, 1-methylnaphthalene, and 2-methyl-naphthalene) is not required when using Method A cleanup levels, because they are included in the TPH cleanup level.
  - (b) Testing of soil for naphthalenes is required under Methods B and C when the inhalation exposure pathway is evaluated.
  - (c) If naphthalenes are found in ground water, then the soil must also be tested for naphthalenes.
  - (15) Testing for PCBs is required unless it can be demonstrated that: (1) the release originated from an electrical device manufactured for use in the United States after July 1, 1979; (2) oil containing PCBs was never used in the equipment suspected as the source of the release (examples of equipment where PCBs are likely to be found include transformers, electric motors, hydraulic systems, heat transfer systems, electromagnets, compressors, capacitors, switches and miscellaneous other electrical devices); or, (3) the oil released was recently tested and did not contain PCBs.
  - (16) Testing for other possible chemical contaminants may be required based on site-specific information.
  - (17) The analytical methods NWTPH-Gx, NWTPH-Dx, NWTPH-HCID, VPH, and EPH are methods published by the Department of Ecology and available on the department's Internet web site: http://www.ecy.wa.gov/programs/tcp/cleanup.html.