



MARYLAND DEPARTMENT OF THE ENVIRONMENT

Oil Control Program, Suite 620, 1800 Washington Blvd., Baltimore MD 21230-1719

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Deputy Secretary

November 28, 2006

Mr. Dave Dodson
Environmental Compliance Manager
Sheetz, Inc.
5700 Sixth Avenue
Altoona PA 16602

RE: CORRECTIVE ACTION PLAN APPROVAL

Case No. 2006-0056-CL

Sheetz Store No. 177

3281 Main Street, Manchester

Facility I.D. No. 6297

Dear Mr. Dobson:

The Oil Control Program recently completed a review of the case file, including the *Corrective Action Plan – September 8, 2006*; the *Site Status Report Third Quarter 2006 – September 29, 2006*; and the *Request for Preliminary Corrective Action Plan Design Meeting – October 25, 2006* for the above-referenced property located in Carroll County.

The Department's records indicate that three monitoring wells (MW1-MW3) were installed on-site in April 2005. In August 2005, four additional monitoring wells (VMW4 and MW5-MW7) and two soil vapor extraction wells (SVE1 and SVE2) were installed. In September 2005, pilot testing was conducted on MW2 for the purpose of determining soil permeability and radius of influence in preparation for future remedial activities. In May 2006, four additional monitoring wells (MW8-MW11) were installed on-site and three monitoring wells (MW12-MW14) were installed off-site. The analytical results of the most recent sampling event completed on August 31, 2006 detected a maximum concentration of methyl tertiary-butyl ether (MTBE) in the groundwater at 150,000 parts per billion (ppb). For the effective removal of dissolved-phase hydrocarbons on-site, the *Corrective Action Plan (CAP)* proposes implementation of the following activities:

- (A) Activation of a vacuum enhanced groundwater extraction (VEGE) remediation system connected to six on-site monitoring/recovery wells (RW2, RW5, RW8, RW9, RW10, and RW11);
- (B) Operation of a soil vapor extraction (SVE) system connecting the SVE points (SVE1 and SVE2), the tank field, and the monitoring/recovery wells listed in (A) above;
- (C) Use of particulate filters, liquid phase granular activated carbon and an air stripper on the VEGE and SVE systems for treating groundwater and/or vapors;
- (D) Submittal of *Quarterly Monitoring Reports* summarizing the status of remediation activities.

Based on our review, the Department hereby approves the proposed *CAP* for immediate implementation contingent upon the following modifications:

- (1) The Oil Control Program acknowledges receipt of the correspondence from the Administrator for the Town of Manchester dated October 17, 2006. Several concerns in the letter (e.g., noise and air pollution, water appropriation and wastewater discharge) fall outside the regulatory authority of the Oil Control Program. Nevertheless, it is the responsibility of Sheetz, Inc. to ensure that the proposed on-site remedial activities are completed in accordance with the requirements of all applicable State, County, and local regulations and ordinances. Specifically, the quantity of discharged wastewater expected to be generated by the SVE and groundwater extraction system and the need for air discharge permits. Please ensure that the necessary approvals are acquired and adequate written notification is provided to the Department concerning the resolutions on water appropriation, wastewater discharge, and discharged air issues prior to the SVEGE system being brought online.
- (2) Maintenance personnel must be available (particularly after normal working hours) to address issues that may result from the operation of the on-site treatment system and cause adverse impact to nearby residences. Emergency numbers must be made available for this purpose and clearly posted on-site. Please provide this emergency contact information to appropriate representatives of the Town of Manchester, the Carroll County Health Department, and the Oil Control Program.

Site Conceptual Model:

- (3) Concurrent with proposed *CAP* activities, Sheetz, Inc. must develop a *Site Conceptual Model (SCM)* reflecting current site conditions. The purpose of the *SCM* is to provide a document that progressively interprets the status of the contaminant plume and evaluates how on-site remedial activities are affecting the source, fate, and transport of contaminants of concern. The *SCM* not only includes a compilation of all currently known and/or available analytical data for the site, but also incorporates visual representation of this information, including photographs, boring logs with lithologic descriptions and geologic cross sections, and illustrative maps showing groundwater interpretations (e.g., groundwater contour maps, cross sections of hydrogeologic conditions, predicted contaminant plume contour, etc.). The *SCM* for this site must address the following issues:
 - (a) Source(s) of petroleum contamination;
 - (b) Any surface and subsurface features and pathways that may have influenced the transport of groundwater and contaminants. Include a description of local aquifers of concern, overland flow across the property, and aquifer parameters.
 - (c) The fate and transport (known and/or predicted) of contaminants;
 - (d) Proposal for supplemental data to fill in gaps to further prove and refine the *SCM*.

The *SCM* is normally created at the beginning of any site investigation and continually refined with the acquisition of data until resolution. It is understood that additional data may change predictions as a normal result of the process. The Oil Control Program requests that the comprehensive and detailed *SCM* be submitted as part of the first *Quarterly Monitoring Report* generated, following implementation of proposed *CAP* activities.

Well Sampling:

- (4) Continue sampling all monitoring wells and all tank field monitoring pipes on a quarterly basis. All samples must be analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 8260B and for total petroleum hydrocarbons/diesel and gasoline-range organics (TPH/DRO and TPH/GRO) using EPA Method 8015B.

When submitting *Quarterly Monitoring Reports* to the Oil Control Program, please provide two hard copies and an electronic copy on a compact disc (CD) for updating the Oil Control Program’s “Remediation Sites” list on the Internet. Also, please provide a copy of the *Quarterly Monitoring Reports* to the Carroll County Health Department and the Town of Manchester.

If you have any questions, please contact the case manager, Mr. Jim Richmond, at 410-537-3337 (Email: jrichmond@mde.state.md.us) or the project geologist, Mr. Ken Carter at 410-537-3670 (Email: kcarter@mde.state.md.us).

Sincerely,

Yolande J.C. Norman, Chief
Remediation and State-Lead Division
Oil Control Program

JWR/nln

- cc: Ms. Carianne M. King (GES, Inc.)
- Mr. Tedd Reed (Town of Manchester DPW)
- Mr. Brian Flynn (Carroll County Health Dept.)
- Ms. Barb Weber (MDE-Water Supply Program)
- Mr. John Grace (MDE-Water Supply Program)
- Ms. Susan Bull
- Mr. Herbert M. Meade
- Mr. Horacio Tablada

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