United States Environmental Protection Agency Region III POLLUTION REPORT

Date: Tuesday, October 11, 2011 **From:** Charlie Fitzsimmons, OSC

Subject: Continuation of work

Sykesville Oil Spill

580 Obrect Rd, Sykesville, MD Latitude: 39.3839000 Longitude: -76.9783000

POLREP No.: 57 **Site #:** E043Z1

Reporting Period: April - September, 2011 D.O. #:

Start Date:Response Authority:OPAMob Date:Response Type:Time-CriticalDemob Date:NPL Status:Non NPLCompletion Date:Incident Category:Removal Action

CERCLIS ID #: Contract #

RCRIS ID #: Reimbursable Account #

FPN# E043Z1

Site Description

See previous POLREPS.

Current Activities

During this reporting period approximately 1 gals of oil and 92gals of contaminated water were retrieved. The new updated totals are now as of Sept. 30, 2011: 4,561 gals of oil and 52,183 gals of contaminated water retrieved.

Via letter dated May 18, 2011 the Responsible Party requested soil monitoring at Fogle's farm portion of the AOC be terminated. The AOC binding cleanup level specific to TPH is 5mg/kg. Most recent soil sample results attained thus far, at the farm, show levels in the average of 64 mg/kg with a high result of 220mg/kg TPH. It appears that natural attenuation has run its course. EPA and MDE agree that a more aggressive treatment approach of bio remediation would bring the numbers down to the desired level. The OSC, after consult with the MDE, requested that a Work Plan be submitted which would include the following:

- 1. Permits: Either an approved Farm Plan from the local Soil Conservation Service or a Grading Permit (may require other information e.g storm water management plan, etc.) approval by Carroll County shall be received prior to any implementation.
- (Hugh Murphy, hydrogeologist, Carroll County Government, 410-386-2868 is point of contact)
- 2. Cell Construction: One or more remediation cells which will employ perimeter straw bales and 6-mil polyethylene as a cell floor and draped over the bales. Determine if silt fencing will be required surrounding each cell.
- 3. Initial: Depth of oil-contaminated soil (OCS) shall be 8 12 inches maximum in each cell and shall be enhanced with fertilizer having N:P:K ratio per each ton of soil as follows: 10 pounds nitrogen, 1 pound phosphorous; 1 pound potassium. The total amount of OCS to be treated in each cell shall be determined based on the size of the cell. The fertilizer must be thoroughly mixed with the soil and the soils covered with 6-mil polyethylene and anchored to prevent wind and water intrusion.
- 4. Monthly: Treated soils must be actively turned/aerated. Urea and 10:10:10 (N:P:K) fertilizer must be applied at this time to enhance microbial activity. Treatment soils shall be maintained at neutral/slightly alkaline pH through the addition of lime. Moisture content shall be maintained between 50-80% of water holding capacity. Treatment soils to remain covered after each turning event.
- 5. 6 months: Collection and analysis of soil samples from the remediation cell(s) to determine remediation progress. Samples from each cell may be composited; the number of samples will be dependent on the size of the cell(s) and approval by USEPA and MDE. Initial sampling analysis will include TPH-GRO and

TPH-DRO by EPA Method 8015B, and napthalene. Within 30 days of receipt of sample analyses, a remedial progress update report will be provided by Fogles to the USEPA and the MDE which shall include aeration events accomplished to date,; times and amounts of bio-enhancement; numbers of samples collected, a table summarizing the analytical data; copies of the analytical data; and a to-scale map showing sample locations.

- 6. Disclaimer: Depending on the startup of the project, it is expected that the active treatment for the first 6 months will occur during the winter months and that the treatment may need to be extended into the 2012 summer months to reach compliance.
- 7. Post-treated soils: MDE does not have specific restrictions for these soils, however, confirmation from the Soil Conservation Service and/or the Maryland Department of Agriculture shall be made with respect to spreading this soil onto land used for crop or animal production.
- 8. Final Sample Plan: Once post-treated soils have been removed, a final sampling plan will need to be approved with respect to the soils underlying this area as it is MDE's understanding that no barrier was installed when the oil-contaminated soils were first transported to this location.
- 9. Alternative: As an alternative, in the event that Fogle does not want to move forward with a remediation plan, the oil-contaminated soils will need to be accepted by a permitted facility either for treatment or daily cover (if allowed) and removed from this location. A final sample plan will still be required.

In addition the RP was given the option of off site disposal at permitted facility for either treatment or final cover material.

No problems were encountered during this reporting period.

response.epa.gov/sykesvilleoil