



HAZARDOUS MATERIAL SPILLS INFORMATION REQUEST

PIZZA HUT /EXXONMOBIL
610 NORTH UNION STREET

OLEAN, NY NO ZIP PROVIDED

Spill Number: 9306639

Close Date:

ADDRESS CHANGE INFORMATION

Revised street: NO CHANGE

Revised zip code: 14760

Source of Spill: COMMERCIAL/INDUSTRIAL

Notifier Type: Responsible Party

Caller Name: BILL EVANS

DEC Investigator: TEDIEFFE

Spiller: EXXONMOBIL/CULP,EVANS&DUE

Notifier Name:

Caller Agency: PIZZA HUT

Contact for more spill info:

Spiller Phone: (716) 763-1640

Notifier Phone:

Caller Phone: (716) 763-1640

Contact Person Phone:

Category: Known or probable release, where, without action, there is a potential for a fire/explosion hazard (indoors or outdoors), contamination of drinking water supplies, or significant release to surface waters.

Class: Willing RP – DEC Field Response – Corrective Action Initiated, Taken Over, or Completed by RP or Other Agency

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards		Penalty Recommended	
08/03/1993		UNKNOWN	NO		NO	

Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
GASOLINE	PETROLEUM	0.00	POUNDS	0.00	POUNDS	GROUNDWATER
MTBE (METHYL-TERT-BUTYL ETHER)	HAZARDOUS MATERIAL	0.00	UNKNOWN	0.00	UNKNOWN	GROUNDWATER

Caller Remarks:

SITE ASSESSMENT SHOWS PETROLEUM CONTAMINATION.

DEC Investigator Remarks:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was TED 09/28/93: NO RESPONSE FROM SUN OR PIZZA HUT.

04/01/94: HAZARD EVALUATION,INC. TO SUBMIT WORK PROPOSAL TO BILL EVANS.

01/09/95: REPORT RECEIVED; POSSIBLE UST. HIGH BTEX IN ONE MW. REQUIRE ADDITIONAL WORK.

01/09/95: RECEIVED REPORT FROM HAZARD EVALUATIONS, INSTALLED BW-7 AND FOUND TANK DURING MAY, 1995, SAMPLED ALL FIVE WELLS FOR 8021, OVER 40 PPM IN BW-4 AND OVER 20 PPM IN BW-7.

01/02/96: RECIEVED REPORT FROM HAZARD EVALUATIONS, TANK REMOVED 11/09/95 FROM SOUTHEAST CORNER OF PROPERTY, SAMPLE RESULTS FOR STARS1 SHOW EXCEEDANCES, CONTAMINATED SOIL DISPOSED

09/20/96: DEC letter to Mobil oil confirming their agreement to assume responsibility for site remediation, requested work plan for additional investigation.

10/15/96: Received letter from Mobil Oil confirming their willingness to remediate contamination resulting from operation of former Mobil service station.

04/10/97: Received site investigation work plan.

07/02/97: Received site investigation report.

07/29/97: Received Remedial Action Work Plan proposing air sparging (AS) and soil vapor extraction (SVE).

07/31/97: DEC sent letter requesting air sparging and SVE pilot test work plan .

09/02/97: DEC sent letter approving AS and SVE pilot test work plan .

01/22/98: AS and SVE pilot test conducted.

03–04/98: AS and SVE remedial system installed.

05/06/98: SVE started. AS was not started due to presence of petro product in sparge wells SP–2 & SP–3.

07/27/98: Stipulation Agreement fully executed between DEC and Mobil OIL.

01/28/99: High vacuum pilot test conducted.

02/08/99: High vacuum pilot test result report recommending high vac blower.

05/20/99: SVE modified to include groundwater extraction and higher vac extraction blower.

11/7–8/01: Vacuum–enhanced groundwater extraction (VEGE) pilot test conducted.

03/11/02: Received VEGE pilot test results, recommended second test.

03/20–21/02: Second VEGE pilot test conducted, system shut down pending completion of modified Remedial Action Plan (RAP).

07/10/02: Meeting with ExxonMobil & GES. Received second VEGE pilot test report. GES said they estimated 30gpm continuous GW extraction rate required (report estimated 15–25 gpm) to operate VEGE system. ExxonMobil & GES would like to evaluate Groundwater circulation well remedial system.

09/16/02: Groundwater circulation well (GCW) pumping test submitted.

09/26/02: DEC approved GCW pumping test with installation of two piezometers inside annulus between borehole and the GWC.

10/7–8/02: GCW and two piezometers installed.

11/4–5/02: Groundwater circulation well (GCW) test conducted.

02/19/03: Received report of GCW test results. Concluded GCW would not be effective propose revised RAP consisting of VEGE.

05/23/03: RAP submitted consisting of VEGE and AS.

07/03/03: DEC letter requesting RAP modifications to include well installations.

08/01/03: DEC approved revised RAP.

08–09/03: Additional extraction and monitoring wells installed.

05/05/04: Initial pumping test conducted.

08/30/04: Revised RAP submitted. RAP still consisting of VEGE and AS with proposed construction details and work schedule.

11/22/04: DEC approved Revised RAP.

4/15/04: ExxonMobil submitted monitored natural attenuation proposal.

6/22/05: Site meeting w/ DEC, ExxonMobil (Eric Errico) and GES. Agreed to off–site MW installations, SVE testing using existing piping and development of ORC slurry injection plan. Results of off–site MW installations and SVE testing to be used in development of revised RAP.

09/05: Below grade piping components installed for SVES.

10/29/05: Off–site MWs installed.

1/25/06: DEC approved 1/20/06 revised sampling plan with following changes: BW–4 to be left in place and MW–4 to be sampled quaterly.

3/6/06: Subsurface Investigation/Revised Remedial Action Plan submitted. Report included results from 2 off–site borings and MW installations and SVE operation and ORC slurry injection.

4/3/06: DEC letter approving SVES portion of Remedial Action Plan Disapproved ORC slurry injection noting existing wells could not be used for both injection and monitoring. Requested submittal of revised ORC slurry injection plan. Also, requested additional off–site contaminant delineation.

6/15/06: Wells SP–4, SP–5, GP–2, VP–5, VP–6, VP–7 AND VP–8 abandoned.

8/11/06: Remedial action selection document submitted reviewing prior remedial technologies implemented at site. Recommended evaluation of in–situ chemical oxidation (ISCO).

8/17/06: DEC letter to ExxonMobil requesting evaluation of surfactant flushing in addition to ISCO.

9/29/06: Letter from GES stating they believe that logistics involved in surfactant flushing at Pizza Hut site make surfactant flushing impractical.

10/10/06: DEC letter requesting ExxonMobil proceed with ISCO evaluation.

1/19/07: ISCO evaluation work plan submitted.

2/23/07: Off-site supplemental subsurface investigation work plan submitted.

2/27/07: DEC letter sent approving off-site supplemental subsurface investigation work plan.

03 – 06/: Implemented supplemental subsurface investigation.

06/18/07: DEC ISCO evaluation work plan comment letter sent. Requested response prior to proceeding with test.

6/20/06: Off-site supplemental subsurface investigation report submitted.

11/6/07: Response received to DEC ISCO evaluation work plan comment letter.

1/9/08: Off-site supplemental subsurface investigation work plan submitted.

1/25/08: DEC ISCO evaluation work plan approval letter sent.

1/28/08: DEC Off-site supplemental subsurface investigation work plan approval letter sent.

5/14/08: ISCO pilot test performed, favorable results.

6/25/08: Off-site supplemental subsurface investigation report submitted.

07/08: Nested well CIW-3 installed by over-drilling well SP-3. Off-site Hampton Inn wells developed.

08/22/08: Re-issued Off-site supplemental subsurface investigation report submitted to correct miss-reported soil VOC concentration values in original report.

09/08: First ISCO event completed, utilized injection wells CW-1, CW-2, CW-3.

11/23/08: Fire occurred inside Pizza Hut resulting in power outage and shut-down of remedial (SVES) system.

12/24/08: RAP submitted for implementation of off-site ISCO.

01/09: Electrical power to remedial system restored. SVES remains shut-down.

05/20/09: DEC approval of off-site RAP.

06/1/09: DEC letter to new owners of Pizza Hut requesting new owner allow ExxonMobil access for continued remediation and site monitoring.

06/09: Second ISCO event completed, utilized injection wells CW-1, CW-2, CW-3.

9/8/09: Soil Vapor Investigation Report submitted. Six points installed around outside perimeter of restaurant by hand augering to depth of 5 feet. Tip of sample probe covered with 6 inches of sand and remainder of hole grouted with hydrated bentonite to grade. Vapor points purged of at least 3 air volumes before sampling. Samples analyzed for petroleum VOCs via USEPA Method TO-15. Benzene ranged from 1.1 – 25 ug/cubic meter. Total petroleum VOCs ranged from 32 – 173 ug/cubic meter. Based on results requested only operate SVES in standby mode during ISCO injections.

9/14–23/09: Off-site MWs OWS-13, OWS-14 & OWS-15 installed in Hampton Inn parking lot. Off-site hydrogen injection wells IP1, IP-2, IP-3 & IP-4 installed in Hampton Inn parking lot between Pizza Hut and Hampton Inn.

9/22–25/09: Third ISCO event completed, utilized injection wells CW-1, CW-2, CW-3 and new injection wells IP1, IP-2, IP-3 & IP-4.

4/20–23/10: Fourth ISCO event completed, utilized injection wells CW-1, CW-2, CW-3, IP1, IP-2, IP-3 & IP-4.

10/3–8/10: Fifth ISCO event completed, utilized injection wells CW-1, CW-2 & CW-3.

8/1–5/11: Sixth ISCO event completed, utilized injection wells CW-1, CW-2 & CW-3.

12/21/11: DEC letter sent approving request to decommission monitoring wells OSW-5, OSW-8, OSW-9 & OSW-11 located in Hampton Inn northern parking lot. Requested injection wells on Hampton Inn property be utilized during next ISCO event due to increasing trends in total BTEX concentration in wells OSW-1, OSW-4 & OSW-13 on Hampton Inn property.

02/16/12: Letter from GES. Will include injection points on Hampton Inn property per DEC 12/21/11 letter. Will postpone decommissioning monitoring wells OSW-5, OSW-8, OSW-9 & OSW-11 and use them as ISCO monitoring points but drop them from quarterly monitoring and sampling. Planning two ISCO injection events, one in April and one in Oct. 2012.

05/01/12: Received Nov. 2011 to March 2012 SMR

04/24–27/12: The seventh In-Situ Chemical Oxidation (ISCO) event was conducted on the Pizza Hut and Hampton Inn property. A total of 6,750-gallons of 17.5% hydrogen peroxide solution and a total of 2,800-gallons of 20% sodium persulfate solution were injected into injection wells CIW-1, CIW-2, and CIW-3 on the Pizza Hut Property. A total of 5,750-gallons of 17.5% hydrogen peroxide solution and a total of 2,200-gallons of 20% sodium persulfate solution injected into injection wells IP-2, IP-3 and IP-4 on the Hampton Inn property. **Vapors were detected in the Christopher Columbus Lodge** (two properties south of the Pizza Hut property) during injection on the Pizza Hut property and **vapors were detected in four rooms of the Hampton Inn** (closest to the injections) during injection on the Hampton Inn property. The vapors were mitigated by venting the respective areas. GES is evaluating options to prevent this in the future. Near the end of the injection event on Day One on the Pizza Hut Property (approximately 250 gallons left of 3,000-gallons), a representative from the Christopher Columbus Lodge spoke with on-site GES engineer that **they smelled gas odors in their basement**. GES investigated and noted elevated PID readings (approximately 10–15ppm) in the basement. Further investigation indicated vapors were apparently entering from where a sewer pipe went through the foundation. Readings of approximately 250 ppm were observed when monitoring directly next to the pipe. GES went to Home Depot and bought a can of foam sealant (Great Stuff) to seal around the pipe. After applying the sealant, continued monitoring indicated the elevated readings were dropping. After approximately 30 minutes elevated readings were no longer evident. The remainder of the injection was completed. On Day two of injections on the Pizza Hut property no elevated PID readings were detected in the basement of the Lodge so GES proceeded with injecting. Again, near the end of the event, vapors were noted in the basement of the lodge and GES could not determine where the vapors were coming from however it was noted that the foundation was not in the best condition. There were additional injections on the Pizza Hut property planned for day three, but due to the vapor issues, GES decided to move over to the Hampton Inn property and finish the event there. The final two days of injection were completed on

the Hampton Inn property without incident until when the crew was cleaning up, a Hampton Inn representative indicated they smelled gas odors in a couple of rooms closest to where the injections were being completed. GES scanned the rooms and noted elevated PID readings in the 5–10 ppm range. There was no apparent source of the vapors. The windows were opened and the rooms were aired out for about 20–30 minutes. Continued monitoring indicated vapors had been mitigated. Hampton Inn was given GES phone number to call if they continued to have an odor issue. GES did not receive any calls from the Hampton Inn.

6/12/12: Groundwater monitoring and sampling was completed at wells MW–1, MW–3, MW–4, OW–1, OW–4, OSW–1 through OSW–4, OSW–6, OSW–7, OSW–10 and OSW–12 through OSW–15. A non-measurable amount of product was detected in MW–1, MW–3 and OW–2. The product was bailed from MW–1 and MW–3 prior sampling the wells. Product was not detected in OW–2 during gauging, however during purging, product was drawn into the well, and thus the well was not sampled. An adsorbent sock was placed in the wells for future product removal. If product is still being detected during the next sampling event in MW–1 MW–3, OW–2, or any other wells, GES will provide recommendations in the report. The average depth to water on June 12, 2012, was 14.28 feet below top-of-casing (ft. BTOC). The calculated water table elevation averaged 83.68 feet (ft). The apparent groundwater flow direction is to the northeast which is consistent with the previous measurements. Volatile organic hydrocarbons (VOCs) were detected above DEC standards in 13 of the 16 monitoring wells sampled (MW–1, MW–3, MW–4, OW–1, OW–4, OSW–1, OSW3, OSW–4, OSW–6, OSW–7, OSW–13, OSW–14 and OSW–15). Total benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations ranged from 3.28 micrograms per liter (ug/l) at OW–1 to 39,237 ug/l at MW–3. MTBE (methyl tert-butyl ether) was not detected in any of the monitoring wells. The next groundwater monitoring and sampling event is planned for the third quarter 2012.

08/17/12: Groundwater monitoring and sampling was completed on at wells MW–1, MW–3, MW–4, OW–1, OW–4, OSW–2 through OSW–4, OSW–6, OSW–7 and OSW–12 through OSW–15. Well OSW–10 was not sampled due to damage to the manway cover and well pad. The well was covered with a plastic lining and cold patch to protect it until repairs could be made. The average depth to water was 14.84 feet below top-of-casing. The water table elevation averaged 83.28 feet relative to the site benchmark. The apparent groundwater flow direction was to the northeast, consistent with the June 2012 monitoring event. Separate phase hydrocarbons (SPH) were detected in monitoring wells MW–1, MW–3 OSW–1 and OW–2 during the sampling event. The product was bailed from MW–1 and MW–3 prior to sampling the wells. Due to the SPH in OSW–1 and OW2, these wells were not sampled. Adsorbent socks were placed in the wells for future product removal, with the exception of OW–2, which already had an adsorbent sock. Approximately 2 gallons of SPH were removed from MW–1 and approximately 4.5 gallons were removed from OW–2. Less than a cup was removed from both MW–3 and OSW–1. Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in 11 the 16 wells sampled (MW–1, MW–3, MW–4, OW–1, OSW–2, OSW–3, OSW–4, OSW–6, OSW–7, OSW–13 & OSW–14). BTEX concentrations ranged from 4.20 ppb at OSW–14 to 47,350 ppb at MW–1. MTBE was not detected in any of the monitoring wells. The SPH were able to be bailed and removed from MW–1 and MW–3 prior to sampling, however OSW1 and OW–2 were not sampled. GES will begin routine gauge and bail events to bail SPH from MW–1, MW–3 OSW–1 and OW–2. Additionally, any other well having detectable SPH during quarterly sampling events will be added to the gauge and bail list.

11/05/12: Groundwater monitoring and sampling was completed at wells MW–3, MW–4, OW–1, OW–4, OSW–1, OSW–2 through OSW–4, OSW–6, OSW–7, OSW10, and OSW–12 through OSW–15. Upon arrival at the laboratory, OSW–12 through OSW–15 samples were broken, thus OSW–12, OSW–13 and OSW–14 were resampled on November 13, 2012. A car was parked over OSW–15 so it could not be resampled. The average depth to water was 14.59 feet below top-of-casing. The water table elevation averaged 84.14 feet relative to the site benchmark. The apparent groundwater flow direction was to the northeast, consistent with prior measurements. Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in 11 the 14 wells sampled (MW–3, MW–4, OW–1, OW–4, OSW–1, OSW–3, OSW4, OSW–6, OSW–7, OSW–13 and OSW–14). BTEX concentrations ranged from 7.65 ppb at OSW–14 to 8,014 ppb at OSW–1. MTBE was not detected in any of the monitoring wells. SPHs were detected in MW–1, MW–3, OSW–1, and OW–2 during the November 5 and November 13, 2012 sampling events. The SPH was able to be bailed and removed from MW–3 and OSW–1 prior to sampling, however MW–1 and OW–2 were not sampled. Based on decreasing volume of recovered product during the bi-weekly gauge and bail events, GES will conduct monthly gauge and bail events starting in 2013. GES will submit a workplan in the first quarter of 2013 for the eighth In-Situ Chemical Oxidation Event tentatively scheduled for the second quarter of 2013.

04/17/13: Received Nov. 2012 – Feb. 2013 Site Monitoring Report. Groundwater monitoring and sampling was completed on 02/26/13 at wells MW-1, MW-3, MW-4, OW-1, OW-2, OW-4, OSW-1, OSW-2, OSW-3, OSW-6, OSW-7, OSW-10, and OSW-12 through OSW-15. Well OSW-4 was not sampled as it was under a snow pile and was unable to be uncovered on the sampling date. The average depth to water was 13.53 feet below top-of-casing (ft. BTOC). The water table elevation averaged 84.49 feet (ft) as compared to the site benchmark. The apparent groundwater flow direction is to the northeast. Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in 13 of the monitoring wells (MW-1, MW-3, MW-4, OW-1, OW-2, OSW-1, OSW-2, OSW-3, OSW-6, OSW-7, OSW-10, OSW-13 and OSW-14). Detectable total benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations ranged from 5.43 ppb at OSW-7 to 32,570 ppb at OW-2. MTBE (methyl tert-butyl ether) was not detected in any of the monitoring wells. SPHs were detected in MW-3 during the February 26, 2013 sampling event. The SPHs were able to be bailed and removed from MW-3 prior to sampling. GES proposed completing a Soil and Groundwater Management Plan (SGWMP) to address the remaining impacts followed by spill number inactivation.

04/23/13: TED telecon w/ Steve Leitten (GES), product still showing up intermittently and contaminant concentrations too high on Pizza Hut property to discontinue active remediation at this time. SVES blower system shutdown on-site at Pizza Hut during last April 2012 ISCO event. Will get SVES blower operational and conduct another ISCO event June/July this year. ISCO events will be discontinued at Hampton Inn property at this time.

05/07/13: Groundwater monitoring and sampling was completed at wells MW-1, MW-3, MW-4, OW-1, OW-2, OW-4, OSW-1 through OSW-3, OSW-6, OSW-7, OSW-10, and OSW-12 through OSW-15. The average depth to water associated with on-site and off-site monitoring wells was 13.07 feet below top-of-casing (ft. BTOC). The calculated water table elevation averaged 84.89 feet (ft) as compared to the site benchmark. The apparent groundwater flow direction is to the northeast. Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in 15 of the 17 monitoring wells sampled (MW-1, MW-3, MW-4, OW-1, OW-2, OSW-1, OSW-2, OSW-3, OSW-4, OSW-6, OSW-7, OSW-10, OSW-13, OSW-14, and OSW-15). Detectable total benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations ranged from 1.21 micrograms per liter (ug/L) at OSW-7 to 35,240 ug/L at MW-1. MTBE (methyl tert-butyl ether) was not detected in any of the monitoring wells. Separate phase hydrocarbons (SPHs) 0.18 feet were detected in MW-3 during the May 7, 2013 sampling event. The SPHs were bailed and removed from MW-3 prior to sampling. GES completed repairs to the remedial system at the site in preparation for the next In-Situ Chemical Oxidation (ISCO) event expected to be completed in the third quarter of 2013.000

08/6-8/13: The eighth ISCO event was conducted on the Pizza Hut and Hampton Inn properties. The SVE system was ran during the event. A total of approximately 9,000 gallons of 20% sodium persulfate solution (activated with 8% hydrogen peroxide) were injected into injection wells CIW-1, CIW-2 and CIW-3 on the Pizza Hut property.

08/29/13: Groundwater monitoring and sampling was completed at wells MW-1, MW-3, MW-4, OW-1, OW-2, OW-4, OSW-1 through OSW-3, OSW-6, OSW-7, OSW-10, and OSW-12 through OSW-15. The average depth to water associated with on-site and off-site monitoring wells was 15.04 feet below top-of-casing (ft. BTOC). The calculated water table elevation averaged 82.93 feet (ft) as compared to the site benchmark. The apparent groundwater flow direction is to the northeast. Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in 13 of the 17 monitoring wells sampled (MW-1, MW-3, MW-4, OW-1, OW-2, OW-4, OSW-1, OSW-2, OSW-3, OSW-4, OSW-6, OSW-13 and OSW-15). Detectable total benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations ranged from 5.42 micrograms per liter (ug/L) at OW-1 to 54,110 ug/L at OW-2. MTBE (methyl tert-butyl ether) was not detected in any of the monitoring wells. Separate phase hydrocarbons (SPHs) were detected in OW-2 during the May 30 and June 27, 2013 gauge and bail events. Approximately 1/8 of a cup of SPHs were recovered from OW-2 on both May 30 and June 27, 2013.

11/06/13: Received Site Monitoring Report for August 29 to October 1, 2013. Gauge and bail of MW-1, MW-3, OW-2 and OSW-1 completed on September 20. Separate Phase Hydrocarbons (SPHs) were detected in MW-1 (0.26 ft), OW-2 (0.10 ft) and OSW-1 (0.17 ft). Approximately 1/8 of a cup of SPHs were recovered from MW-1 and OSW-1, and approximately 2 cups of SPHs were recovered from

OW-2. Groundwater monitoring and sampling was completed on October 1, 2013 at wells MW-1, MW-3, MW-4, OW-1, OW-2, OW-4, OSW-1 through OSW-3, OSW-6, OSW-7, OSW-10, and OSW-12 through OSW-15. The average depth to water in both on-site and off-site monitoring wells was 15.25 feet below top-of-casing (ft. BTOC). Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in 14 of the 17 monitoring wells sampled (MW-1, MW-3, MW-4, OW-1, OW-2, OW-4, OSW-1, OSW-3, OSW-4, OSW-6, OSW-7, OSW-10, OSW-13 and OSW-14). Detectable total benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations ranged from 1.11 micrograms per liter (ug/L) at OSW-7 to 37,000 ug/L at MW-1. MTBE (methyl tert-butyl ether) was not detected in any of the monitoring wells. SPHs were detected in OSW-1 (0.15 ft) during the October 1, 2013 groundwater sampling event. Product was bailed from OSW-1 (less than 1/8 cup) before sampling the well.

04/22/14: Received Site Monitoring Report for October 1, 2014 to March 7, 2014. Gauge and bail of MW-1, MW-3, OW-2 and OSW-1 was completed on November 15 and December 19, 2013, and January 17, 2014. Due to ice in the well man-way, OSW-2 was not able to be gauged or bailed on December 19, 2013 and January 17, 2014. Due to ice and snow cover, GES did not perform a gauge and bail event in February 2014. Measurable separate phase hydrocarbons (SPHs) were detected in OSW-1 (0.31 ft) during the January 17, 2014 gauge and bail event. Approximately 1/4 of a cup of SPHs were recovered from, and a sorbent pad was placed in, OSW-1 on January 17, 2014. There were no other observed or measured detections of SPHs during the referenced gauge and bail events. Groundwater monitoring and sampling was completed on March 7, 2014 at wells MW-1, MW-3, MW-4, OW-2, OW-4, OSW-1 through OSW-3, OSW-6, OSW-7, OSW-10, and OSW-12 through OSW-15. The average depth to water in both on-site and off-site monitoring wells was 13.59 feet below top-of-casing. Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in 12 of the 15 monitoring wells sampled (MW-1, MW-3, MW-4, OW-2, OSW-1, OSW-2, OSW-3, OSW-6, OSW-7, OSW-10, OSW-13, and OSW-14). Detectable total benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations ranged from 3.30 micrograms per liter (ug/L) at OSW-14 to 46,680 ug/L at OW-2. MTBE (methyl tert-butyl ether) was not detected in any of the monitoring wells. Based on the results from the March 7, 2014, sampling event, GES is considering installation and operation of a Soil Vapor Extraction and Air Spar.ge (SVE/ AS) system in place of further In-Situ Chemical Oxidation (ISCO) applications. Details of the system installation will be forwarded under separate cover.

06/17/14: Received Site Monitoring Report for March 7, 2014 to May 15, 2014. Gauge and bail of MW-1, MW-3, OW-2 and OSW-1 was completed on April 10, 2014. No measurable Separate Phase Hydrocarbons (SPHs) were detected in any well on April 10, 2014. Approximately 1 ounce of product was removed via the sorbent pad in monitoring well OSW-1. Groundwater monitoring and sampling was completed on May 15, 2014 at wells MW-1, MW-3, MW-4, OW-1, OW-2, OW-4, OSW-1 through OSW-4, OSW-6, OSW-7, OSW-10, and OSW-12 through OSW-15. The average depth to water in both on-site and off-site monitoring wells was 12.11 feet below top-of-casing. Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in 11 of the 17 monitoring wells sampled (MW-1, MW-3, OW-1, OW-2, OSW-1, OSW-3, OSW-4, OSW-6, OSW-10, and OSW-13). Detectable total benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations ranged from 1.62 micrograms per liter (ug/L) at OW-4 to 31,150 ug/L at OW-2. MTBE (methyl tert-butyl ether) was not detected in any of the monitoring wells. GES is still considering installation and operation of a Soil Vapor Extraction and Air Spar.ge (SVE/ AS) system in place of further In-Situ Chemical Oxidation (ISCO) applications. Details of the system installation will be forwarded under separate cover.

10/01/14: Received Site Monitoring Report for May 16, 2014 to September 30, 2014. GES decommissioned seven off-site wells located on the Hampton Inn (OSW-5 and OSW-7 through OSW-12) on June 6 and June 9, 2014. The details of the well abandonment activities are summarized in the Well Abandonment Letter submitted by GES to NYSDEC on June 17, 2014. Gauging of wells MW-1, MW-3, OW-2 and OSW-1 was completed on July 11, 2014. A measurable amount of Separate Phase Hydrocarbons (SPH) was detected in well OW-2 during the gauging event and approximately 8-ounces of product were removed from the well. Groundwater monitoring was completed on August 28, 2014, at wells MW-1, MW-2, MW-3, MW-4, OW-1, OW-4, OSW-1 through OSW-4, OSW-6, and OSW-13 through OSW-15. The average depth to water of on-site and off-site monitoring wells monitored The calculated water table elevation averaged 85.24 feet as compared to the site benchmark. Well OW-2 was found to contain SPH during the monitoring event. The well was bailed and approximately 16- ounces of product were removed from the well. The apparent groundwater flow direction at the site is toward the northeast. Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in samples from ten

wells (MW-1, MW-3, OW-1, OSW-1, OSW-2, OSW-3, OSW-4, OSW-6, OWS-13 and OSW-15) of the 13 wells sampled. The total concentration of the sum of detectable benzene, toluene, ethylbenzene and total xylene (BTEX) ranged from 1.20 micrograms per liter (ug/L) at OSW-15 to 13,274 ug/L at MW-1. Methyl tert-butyl ether (MtBE) was not detected in any of the wells sampled. Gauging of wells MW-1, MW-3, OW-2 and OSW-1 was completed on September 17, 2014. No measurable amount of SPH was detected in any of the wells gauged. Approximately 2-ounces of product were removed via the sorbent pads from wells OSW-1 and OW-2.

01/16/15: Received Site Monitoring Report for October 1, 2014, to December 9, 2014. Gauge and bail of MW-1, MW-3, OW-2 and OSW-1 was completed on October 10 and November 6, 2014. No measurable Separate Phase Hydrocarbons (SPHs) were detected in any well gauged on the aforementioned dates. Approximately 1 ounce of product was removed via the sorbent pad in monitoring well OW-2 on October 10, 2014. Less than a half an ounce (immeasurable amount) was removed via the sorbent pad in OW-2 on November 6, 2014. It should be noted that the June 9 and the September 17, 2014 gauge and bail events were not discussed in the May 16 to September 30, 2014 Site Monitoring Report. On June 9, 2014, 0.01 feet of measurable SPHs were detected in OW-2. Approximately 4 ounces of product were bailed from OW-2 and stored in the product drum onsite. On September 17, 2014, no measurable SPHs were detected in any of the wells on the gauge and bail schedule. Approximately 1 ounce of product was bailed from OW-2, and approximately 0.5 ounce of product was bailed from OSW-1. Groundwater monitoring and sampling was completed on December 2 and December 9, 2014, at wells MW-1, MW-3, MW-4, OW-1, OW-2, OW-4, OSW-1, OSW-2, OSW-3, OSW-4, OSW-6, OSW-13, OSW-14, and OSW-15. Due to equipment failure, offsite wells could not be sampled on December 2 and were sampled on December 9, 2014. The average depth to water was 14.34 feet below top-of-casing (ft. BTOC). Of the 14 wells sampled for laboratory analysis, volatile organic hydrocarbons (VOCs) were detected above groundwater standards in monitoring wells MW-1, MW-3, MW-4, OW-1, OW-2, OSW-1, OSW-2, OSW-3, OSW-4, OSW-6, and OSW-13. Detectable total benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations ranged from 2.37 micrograms per liter (ug/L) at OSW-14 to 32,711 ug/L at OW-2. MtBE was not detected in any of the monitoring wells. No SPHs were detected in any well during the December 2014 sampling events. A soil vapor extraction/air sparge (SVE/AS) remedial system will be installed at the site. GES is in the process of finalizing the design and scheduling the the installation of the SVE/ AS system. As the schedule is finalized, GES will notify NYSDEC.

05/05/15: Received Site Monitoring Report for December 9, 2014 to March 26, 2015. A gauge and bail event at MW-1, MW-3, OW-2 and OSW-1 was completed on January 30 and February 12, 2015. No measurable Separate Phase Hydrocarbons (SPHs) or visual product was detected. Due to excessive snow cover, MW-1 was unable to be located during the February 12, 2015 gauge and bail event. Groundwater monitoring and sampling was completed on March 26, 2015, at wells MW-1, MW-3, MW-4, OW-2, OW-4, OSW-1, OSW-2, OSW-3, OSW-6, OSW-13, OSW-14, and OSW-15. Due to frozen snow piles on OW-1 and OSW-4, these monitoring wells were unable to be sampled. The average depth to was 13.24 feet below top-of-casing (ft. BTOC). Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in seven of the 12 wells sampled (MW-1, OW-2, OSW-1, OSW-3, OSW-6, OSW-13, and OSW-15). Detectable total benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations ranged from 1.29 micrograms per liter (ug/L) at OSW-15 to 13,664 ug/L at OW-2. GES is in the process of finalizing the design and scheduling the installation of the SVE/ AS system.

06/22/15: DEC received Remedial Action Plan Amendment (RAP Amendment) dated September 25, 2014. The proposal calls for the installation and operation of a Soil Vapor Extraction and Air Sparge (SVE/AS) system in place of further In-Situ Chemical Oxidation (ISCO) applications. An attempt will be made to reuse current wells on site for this purpose, and the ISCO wells will be left in place in case additional ISCO events need to be conducted. Also included was a request to reduce groundwater monitoring and sampling from quarterly to biannually as well as submission of Biannual Site Monitoring Reports (SMRs).

06/25/15: DEC sent letter accepting SVE/AS remedial system proposal but requested following: 1. Construction details for the SVE/AS wells; and 2. Proposed SVE/AS system monitoring parameters and explanation of how performance monitoring data will be collected (negative and positive pressures, air flow rates, air effluent contaminant concentrations, system run times, etc.). Also requested quarterly sampling and SMR submission continue for the first four quarters of SVE/AS system startup with a re-evaluation of sampling and reporting frequency thereafter.

08/06/15: Received Site Monitoring Report for March 27, 2015 to June 26, 2015. A gauge and bail event at MW-1, MW-3, OW-2 and OSW-1 was completed on April 10, 2015 and May 21, 2015. No measurable Separate Phase Hydrocarbons (SPHs) or visual product was detected. Groundwater monitoring and sampling was completed on June 25, 2015, at wells MW-1, MW-3, MW-4, OW-1, OW-2, OW-4, OSW-1, OSW-2, OSW-3, OSW-4, OSW-6, OSW-13, OSW-14. OSW-15 was not sampled during this sampling event due to a vehicle parked on top of the well casing. The average depth to was 13.61 feet below top-of-casing (ft. BTOC). Volatile organic hydrocarbons (VOCs) were detected above groundwater standards in eleven of the 13 wells sampled (MW-1, MW-3, MW-4, OW-1, OW-2, OSW-1, OSW-3, OWS-4, OSW-6, OSW-13, and OSW-14). Detectable total benzene, toluene, ethylbenzene and total xylene (BTEX) concentrations ranged from 4.17 micrograms per liter (ug/L) at MW-4 to 5,437 ?g/L at OW-2. GES is currently making revisions to the September 25, 2014, Remedial Action Plan (RAP) Amendment to address the DEC June 25, 2015 comments regarding the SVE/AS remedial system proposal.

NYSDEC FALL 1998 MTBE SURVEY INFORMATION FOR 9306639

Maximum MTBE concentration: 1300.0 PPB Current MTBE concentration: 6.0 PPB
 BTEX offsite: Yes

Source of MTBE		Number of private drinking water wells impacted: 0
		Number of public water supply wells impacted: 0
Steel Underground Storage Tank -		Number of private drinking water wells impacted: 0
Fiberglass Underground Tank -		Number of replacement wells drilled: 0
Aboveground Storage Tank -		Number of water main extensions: 0
Piping -		Number of water main hookups: 0
Source not identified - X		Number of residences provided w/ bottled water: 0
Other source -		Number of people affected: 0

Indoor Air Impacts : No
 Aquifer Impacts : No

Ongoing remediation: Yes

Monitoring Frequency
 Monthly - Quarterly - Semi-annual - Annual - Other -

Remedial Action used
 No Action -

Groundwater		Soil	
Pump and Treat -		Soil Vapor extraction	- X
Air sparging - X		Excavation and disposal	- X
Bioreactor -		Bioremediation	-
Natural attenuation -		Low temp thermal desorption	-
Oxygen injection -		Oxygen injection	-
Biosparging -		Other	-
Dual phase extraction -			
Other -			

Under investigation: No

Dept. of Health involvement: No

Dept. of Health Remarks: No remarks given for this spill

General Remarks: No remarks given for this spill