



July 15, 2015

Ms. Michelle Kaysen
USEPA Region 5, Mail Code LU-9J
77 West Jackson Boulevard
Chicago, IL 60604

RE: Second Quarter 2015 Progress Report, Hartford Petroleum Release Site

Dear Ms. Kaysen,

Trihydro Corporation (Trihydro) is submitting this quarterly report summarizing the progress and status of activities performed at the Hartford Petroleum Release Site (Hartford Site) on behalf of Apex Oil Company, Inc. (Apex) for the time period from April 1 to June 30, 2015.

1. Apex submitted the following deliverables during the Second Quarter 2015:

- The factsheet titled *Hartford Village Cleanup: Work Transition Update* was delivered to the Village of Hartford residents on April 17, 2015.
- The *First Quarter 2015 Progress Report* was submitted to the United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (Illinois EPA) on May 13, 2015 via email.
- The *First Quarter 2015 Sentinel Well Monitoring Summary Report* was submitted to the USEPA and the Illinois EPA on May 13, 2015 via email and standard mail.
- The *Community Engagement Framework* was submitted to the USEPA and the Illinois EPA on May 13, 2015 via email and standard mail.
- The *Summary of Soil Vapor Extraction System Effectiveness Zone 1 Expansion* was submitted to the USEPA and Illinois EPA on June 2, 2015 via email and standard mail.
- The *Draft Vapor Collection System Operation, Maintenance, Monitoring Plan* was submitted to the USEPA and Illinois EPA on June 10, 2015 via the Document Tool in Trihydro's Project Direct Site.

2. Apex submitted the following requests and notifications pertaining to activities at the Hartford Site:

- The USEPA and Illinois EPA were provided notification on April 1, 2015 that Monte McKillip of McKillip and Associates was contracted as the community outreach coordinator for Apex Oil Company, Inc.

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Home Office | 1252 Commerce Drive | Laramie, WY 82070 | phone 307/745.7474 | fax 307/745.7729 | www.trihydro.com



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- The USEPA and Illinois EPA were provided notification on April 22, 2015 that the homeowner at 125 West Birch Street and 125 West Birch Street (Rear) requested that in-home effectiveness monitoring no longer be conducted on a weekly basis. The homeowner agreed to quarterly in-home effectiveness monitoring, as well as monitoring activities conducted during river stage triggered monitoring events.
 - The USEPA and Illinois EPA were provided notification on May 6, 2015 that total organic vapor concentrations in indoor air measured at 117 and 119 West Birch Street during quarterly in-home effectiveness monitoring exceeded the notification threshold. Additional indoor air screening conducted by the field technicians confirmed alternative sources of the vapors and no further actions were necessary.
 - The USEPA contractor team members were provided an invitation for access to Trihydro's Environmental Information Management System (Project Direct) on May 13, 2015.
 - The USEPA, Illinois EPA, and USEPA contractor team members were provided an invitation for access to a remote desktop used to access the 3-dimensional model developed for the Hartford Petroleum Release Site on May 13, 2015.
 - The USEPA and Illinois EPA were provided notification of the schedule for the second quarter sentinel well monitoring event on May 19, 2015.
 - The USEPA and Illinois EPA were provided notification of initiation of a river stage triggered monitoring event (EBMP-24) and implementation of interim in-home event based monitoring activities on June 15, 2015.
 - The USEPA and Illinois EPA were provided daily notifications regarding field activities and monitoring results between June 17 and June 24, 2015 during river stage triggered monitoring event (EBMP-24). Notifications to the USEPA and Illinois EPA were conducted in accordance with the Final Interim In-Home Effectiveness Monitoring Plan, as well as the email dated February 7, 2014 outlining additional notification protocols for in-home monitoring.
3. Apex participated in the following meetings and teleconferences during the Second Quarter 2015:
- Monthly teleconferences with the HWG were conducted on April 21 and May 24, 2015.
4. Summary of In-Home Effectiveness Monitoring Activities:
- Weekly in-home effectiveness monitoring was performed within ten structures at the Hartford Site during the Second Quarter 2015.
 - Quarterly in-home effectiveness monitoring was performed within 30 structures at the Hartford Site between May 4 and 8, 2015.



- In-home monitoring was conducted within 32 structures at the Hartford Site in response to the river stage triggered monitoring event (EBMP-24) between June 16 and 23, 2015.
5. Summary of Additional LNAPL Recovery Pilot Test Implementation Activities:
- Monthly groundwater samples were collected from select Area A monitoring locations and analyzed to evaluate the influence of focused pumping on dissolved phase hydrocarbon concentrations between April 28 and 29, May 28 and 29, and June 23 and 24, 2015.
 - Weekly manual gauging of fluid levels, as well as field screening for total organic vapors at select Area A multiphase extraction wells and soil vapor extraction (SVE) wells was conducted following the completion of the LNAPL recovery pilot test.
6. Summary of Dissolved Phase Investigation Implementation Activities:
- Quarterly manual gauging of fluid levels within 378 groundwater monitoring wells and monitoring points was completed between April 6 and 7, 2015.
 - Monthly manual gauging of fluid levels in select groundwater monitoring wells and monitoring points was performed on May 12 and June 23, 2015.
 - Groundwater samples were collected and analyzed from the five sentinel monitoring wells between May 27 and 28, 2015.
 - Groundwater samples were collected and analyzed from six monitoring wells on June 25, 2015.
7. SVE System Operations, Maintenance, and Monitoring (OMM) Activities:
- Files and information pertaining to the OMM of the Hartford SVE system including vapor collection system and thermal treatment components were reviewed by Trihydro.
 - Subsurface utility locating activities for the vapor collection system components located beneath the Village of Hartford began April 7, 2015.
 - Routine monitoring activities for the vapor collection component of the SVE system were conducted including: (1) weekly fluid level gauging; (2) biweekly measurements of vacuum, air flow, and temperature; and (3) monthly screening of total organic vapors within SVE wells. These activities began on April 8, 2015.
 - Routine operations within the vapor collection components were conducted including adjustments to stingers and valve position within individual wells, as well as sweeping of the horizontal transmission lines to remove accumulated groundwater. These activities began on April 8, 2015.



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- SVE well vaults and system control vaults were inspected to assess any necessary repairs, as well as to define permitted versus non-permitted confined spaces associated with the vapor collection system between April 13 and 17, 2015.
- Regional effectiveness monitoring for the SVE system was conducted at 144 monitoring locations between May 6 and 13, 2015.
- Routine OMM of the thermal treatment system components by Apex Oil Company, Inc. began on June 1, 2015.
- A noise survey and evaluation of permitted versus non-permitted confined spaces was conducted at the thermal treatment system on June 12, 2015.

8. Activities Planned During the Third Quarter 2015 at the Hartford Site:

- Conduct routine OMM activities for the vapor collection and thermal treatment components of the SVE system in accordance with the approved *HSVE Monitoring and Maintenance Manual* (URS 2013) pending approval of the draft *Vapor Collection System Operation, Maintenance, Monitoring Plan for the Soil Vapor Extraction System*.
- Continue weekly in-home effectiveness monitoring within ten structures in accordance with the *Final Interim In-Home Effectiveness Monitoring Plan*.
- Conduct river stage triggered monitoring in accordance with the triggers established within the *Final Interim In-Home Effectiveness Monitoring Plan*.
- Conduct quarterly in-home effectiveness monitoring in August 2015 in accordance with the *Final In-Home Interim Effectiveness Monitoring Plan*.
- Continue implementation of the dissolved phase investigation activities in accordance with the *Final Dissolved Phase Investigation Work Plan* including: (1) monthly and quarterly fluid level gauging, (2) groundwater sampling, and (3) data reduction, analysis, and reporting.
- Conduct quarterly groundwater monitoring of the five sentinel monitoring wells south of the Hartford Site in September 2015.
- Conduct regional effectiveness monitoring for the SVE system in accordance with the approved *Effectiveness Monitoring Plan* (URS 2014) in August 2015.
- Participate in routine teleconferences and meetings with the USEPA and Illinois EPA.



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We appreciate your continued engagement with this project. If you have any questions or require any additional information, please contact me at (513) 429-7452.

Sincerely,

Paul Michalski, P.G.
Team Leader
Trihydro Corporation

cc: James F. Sanders, Apex Oil Company, Inc.
Tom Miller, Illinois Environmental Protection Agency
Chris Cahnovsky, Illinois Environmental Protection Agency