

US EPA ARCHIVE DOCUMENT



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October 11, 2012

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Christopher Black  
USEPA Region 5  
Corrective Action Section 2  
Remediation and Reuse Branch, LU-9J  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

**Re: Third Quarter 2012 Progress Report, Chevron Cincinnati Facility**

Dear Mr. Black:

Chevron is submitting this quarterly progress report in accordance with Section 19.b of the November 2006 Administrative Order on Consent (AOC), for the time period from July 1 to September 30, 2012. The progress and status of the various activities performed for this time period are presented herein.

1. Chevron sent the following correspondence to the United States Environmental Protection Agency (USEPA) in the third quarter of 2012:
  - A letter dated July 2, 2012 presenting the *Second Quarter 2012 AOC Progress Report*.
  - An email dated July 16, 2012 providing notification that the nested vapor wells in Hooven were sampled the week of July 2 and the horizontal soil vapor extraction (HSVE) system was started on July 11, 2012 in accordance with the approved Operations, Monitoring, and Maintenance Plan (OMM Plan). Chevron also provided notification regarding transition of high-grade pumping from production well PROD\_25 in the Central High-Grade Area to production wells PROD\_19 and PROD\_24 in the Southwest High-Grade Area.
  - An email dated July 19, 2012 providing an electronic copy of the *Second Quarter 2012 AOC Progress Report*.
  - A phone call on July 31, 2012 discussing Chevron's request to collect field measurements of fixed gases and total organic vapor from nested wells VW-96 and VW-99 during HSVE operation instead of soil vapor samples for laboratory analysis. Mr. Black asked for clarification regarding the dates that soil vapor samples were collected in 2011. Finally, Chevron provided an update regarding high-grade operations during 2012.
  - An email dated August 28, 2012 providing an update to the high-grade operations including light

non-aqueous phase liquid (LNAPL) recovery estimates from production wells in each high-grade area. A status update regarding operation of the HSVE system was also provided. Finally, Chevron provided notification that the monthly soil vapor samples were being collected from nested wells VW-96 and VW-99.

- A report dated September 26, 2012 presenting the *Second 2011 Semiannual Monitoring Report, Chevron Cincinnati Facility, Hooven, Ohio*.
2. The USEPA completed the following communications with Chevron during the third quarter of 2012.
    - An email dated July 18, 2012 requesting an electronic copy of the *Second Quarter 2012 AOC Progress Report*.
  3. Other agency correspondence in the third quarter of 2012 included:
    - A letter from Ohio EPA dated July 10, 2012 approving the Financial Assurance and post-closure cost estimates for the Chevron Cincinnati Facility.
    - A letter to Hamilton County Environmental Services dated July 17, 2012 presenting the *Semiannual Report (January 2012 through June 2012) for the Permit-to-Install and Operate Source P010 (HSVE System)*.
    - A letter from Ohio EPA dated July 24, 2012 presenting the results of the 2012 Land Treatment Unit (LTU) compliance evaluation inspection.
    - A letter to Hamilton County Environmental Services dated August 8, 2012 providing the *Annual Air Permit Fee for Premise #:1431080082 (Chevron Cincinnati Facility)*.
    - An email to Ohio EPA dated August 13, 2012 providing notification of a tentative groundwater sampling schedule for the LTU.
    - A letter from Ohio EPA dated August 21, 2012 presenting the results of the August 13, 2012 National Pollution Discharge Elimination System (NPDES) compliance evaluation inspection at the Chevron Cincinnati Facility (NPDES Permit 1IG00000\*GD, OH0009326).
  4. The following monitoring and assessment activities were conducted in the third quarter of 2012:
    - Continued operation of the Gulf Park bioventing system that was started in accordance with the OMM Plan on April 18, 2012. The system was temporarily shut down during a high water event and re-started again on May 29, 2012.
    - Continued operation and monitoring of high-grade pumping since initiation on June 25, 2012 utilizing production well PROD\_25 in the Central High-Grade area with transition to pumping within the Southwest High-Grade Area using production wells PROD\_19, PROD\_20, PROD\_21, and PROD\_24, once trigger levels were reached in triggers wells located in this area.
    - Annual monitoring of selected nested soil vapor monitoring wells in Hooven (including wells VW-93, VW-96, VW-99, VW-128, and VW-129) during the week of July 2, 2012.
    - Startup of the HSVE system on July 11, 2012 in accordance with trigger groundwater elevations

established in the AOC Order amendment dated June 23, 2010.

- Installation of the remaining three injection wells to complete the southern expansion of the Gulf Park bioventing system was completed on July 20, 2012. These wells could not be installed previously due to proximity to a soccer field being used in the Park.
- Bi-monthly fluid level gauging was performed across the facility, Hooven, Southwest Quad, and Gulf Park on July 30, 2012 and September 26, 2012.
- Annual groundwater sampling of the LTU groundwater monitoring network was completed between August 15 and 16, 2012.
- Monthly monitoring of selected intervals in nested soil vapor monitoring wells VW-96 and VW-99 in August and September 2012 during operation of the HSVE system.
- Annual groundwater monitoring in the Gulf Park groundwater and barrier wall monitoring wells was completed on September 20, 2012.
- Weekly high-grade, HSVE, and Gulf Park systems trigger level monitoring.

#### **Planned Activities – Fourth Quarter 2012**

1. The following monitoring and assessment activities are planned for the fourth quarter of 2012:
  - Weekly high-grade, HSVE, and Gulf Park systems trigger level monitoring; in addition to bi-weekly monitoring of additional wells within the high-grade areas during active pumping.
  - Bi-monthly fluid level gauging within the shallow monitoring network across the former refinery, Hooven, Southwest Quad, and Gulf Park in November 2012.
  - Semiannual groundwater monitoring and collection of rainwater infiltrate samples from lysimeters.
  - Continued operation and monitoring of the HSVE system and nested wells in Hooven (consisting of monthly monitoring of selected intervals in nested soil vapor monitoring wells VW-96 and VW-99).
  - Continued operation and monitoring of the Gulf Park biovent systems.
  - Gulf Park soil vapor respirometry testing using shallow soil gas probes installed near the biovent system wells.
  - Continued operation and monitoring of high-grade pumping within the Southwest High-Grade Area using production wells PROD\_19, PROD\_21, and PROD\_24, or the Central High-Grade Area utilizing production well PROD\_25.
  - Semiannual monitoring of the Rapid Optical Screening Tool (ROST) transects in the Southwest Quad.

- Semiannual sampling from the barrier wall groundwater monitoring network installed along the west bank of the Great Miami River at the former refinery.
2. Review and validation of the laboratory analytical data, as well as routine reporting associated with implementation of groundwater corrective measures will continue to be conducted as necessary.

We appreciate your continued engagement on this project. If you have any questions or require any additional information, please contact me at (713) 432-2631 or Matt Mitchell (Trihydro Corporation) at (513) 353-1323, ext. 23.

Sincerely,



Gene Choquette – Site Manager  
Chevron Cincinnati Facility

cc: Jeffery Stark – Ohio EPA