

TO: Rick Wenzel
The Dow Chemical Company

FROM: Jim M. McDade
GSI Environmental Inc.

RE: Monthly Status Report, December 2017, Charlie Burch Site, Spring, Texas.
VCP No. 421.

Activities Completed During December 2017

- **Groundwater Pump-and-Treat System in Source Area:** The new air stripper, which is part of the Phase 4 Enhanced Anaerobic Bioremediation (EAB) construction, continued to operate per its design. Bi-weekly effluent sampling was completed on 14 and 28 December 2017, and a monthly operation and maintenance (O&M) system inspection was conducted on 20 December 2017.

Note that the treated effluent is currently being discharged to the Montgomery County Flood Control District's flood control channel until the TCEQ authorizes reinjection of the treated effluent to the infiltration trench located on the Rummell property east of the site via the site's Underground Injection Control (UIC) permit. An amendment to authorize reinjection of the treated effluent to the infiltration trench was submitted to the TCEQ on 19 December 2017.

- **Groundwater Pump-and-Treat System on the 13-Acre Tract:** The monthly O&M inspection was performed on 29 December 2017. Quarterly pre- and post-granular activated carbon (GAC) samples were collected during this monthly inspection event. Construction of an access road from Forestry Drive to the treatment compound was substantially completed in December 2017, and assessment of GAC vessels were performed in advance of carbon change-out to be scheduled upon completion of the access road from Forestry Drive.
- **Plume Remediation Activities:** Planning and preparation continued for the Phase 1 EAB refresh treatment on the Dyring property to monitor 1,2-dichloroethane (1,2-DCA) in groundwater migrating from the Wert Property and to optimize treatment near the Wert property boundary to prevent further downgradient migration. Planning continued for the expansion of Phase 5 EAB treatment on the ICG Partners property at the toe of the plume. A second meeting was held with Mr. Warren Wert in December 2017 regarding access to his property for implementation of the Phase 3 EAB treatment.

Began evaluating the results of the semiannual EAB performance groundwater monitoring for Phases 1, 2, 4, and 5, and began preparing the semiannual UIC report, which is due to the TCEQ by mid-February 2018.

- **Comprehensive Groundwater Monitoring:** Samples were collected on 20 December 2017 from the source area recovery wells (RW-CB-2R, 3R, 4R, 5R, and

3D). In addition, a site-wide static water level survey was conducted on 20 December 2017 to demonstrate water levels at the Charlie Burch site with the source area system fully operational. Continued to evaluate the results of the annual groundwater monitoring event and preparation of the 2017 annual groundwater monitoring report, which is due to the TCEQ by 1 March 2018.

- **Public Communications and Information Website:** The project website (see below for link) was updated with the prior period's monthly progress report and other relevant documents.

Link to website: <http://charlieburchproject.com/>

Activities Planned for January 2018

The following activities are planned during the next reporting period:

- **Groundwater Pump-and-Treat System in Source Area:** Startup operations of the updated system will continue to be performed and bi-weekly system effluent sampling and monthly system inspections will be conducted. Note that bi-weekly effluent sampling will continue until TCEQ authorizes reinjection of the system effluent into the infiltration trench located on the Rummell property via the UIC permit.
- **Groundwater Pump-and-Treat System on the 13-Acre Tract:** The system will continue to be operated, and routine inspections and maintenance activities will be conducted. Construction of an access road from Forestry Drive to the treatment compound will be completed in January 2018 to enable a carbon change-out to be performed safely.
- **Plume Remediation Activities:** Preparations for the Phase 1 EAB refresh treatment on the Dyring property will continue, and planning additional injections around the toe of the plume (i.e., Phase 5 EAB) on the ICG Partners property will also continue. Well installations are anticipated to begin in late January 2018. Discussions will continue with Mr. Wert regarding access to his property and detailed planning for Phase 3 EAB treatment on the Wert property will be renewed.

Results from the November 2017 semiannual EAB performance groundwater monitoring for Phases 1, 2, 4, and 5 will continue to be evaluated and preparation of the UIC semiannual report will continue.

- **Comprehensive Groundwater Monitoring:** Results of the annual groundwater monitoring event will continue to be evaluated, and preparation of the annual groundwater monitoring report, which will be submitted during the first quarter of 2018, will continue.
- **Public Communications and Information Website:** The information on the project website will be updated and maintained with the most recent information submitted to TCEQ.