US ERA ARCHIVE DOCUMENT

Glenn Springs Holdings, Inc.

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October 10, 2011

Mr. Kenneth S. Bardo U.S. Environmental Protection Agency Region 5 77 West Jackson Boulevard Corrective Action Section (LU-9J) Chicago, IL 60604-3590

RE: Occidental Chemical Corporation, Montague, Michigan - MID 006 014 906 2011 Third Quarter Corrective Measures Implementation Progress Report

Dear Mr. Bardo:

The following is a progress report for the corrective measures implementation (CMI) at the Occidental Chemical Corporation site in Montague, Michigan. This report is submitted pursuant to the United Sates Environmental Protection Agency's (U.S. EPA's) Administrative Order (Docket No. V-W-009-'93) Section VI.D.2 and Attachment 4 to the Order and to the "Amended Final Decision and Response to Comments for Occidental Chemical Corporation, Montague Township, Michigan" (October 2010). Glenn Springs Holdings, Inc (GSH) is submitting this quarterly report on behalf of Occidental Chemical Corporation (OCC).

1. A description of the CMI completed to date and projected work.

On October 12, 2010, U.S. EPA issued the Amended Final Decision and Response to Comments for Occidental Chemical Corporation Montague Township, Michigan. Under the Amended Final Decision, progress reports are due quarterly. GSH continues to implement the requirements of the Amended Final Decision, including the voluntary actions.

<u>Operations and Monitoring</u>: During the quarter, GSH continued to collect and treat contaminated groundwater using the existing purge well system located at White Lake. GSH also continued to perform long-term groundwater monitoring in accordance with the Groundwater Monitoring Plan approved by U.S. EPA in January 2004, revision 01. These activities will continue in the next quarter.

Energy Audit: GSH is continuing an energy audit and assessment of waste management practices to optimize the existing purge well system. To date, the Montague facility has inticiated a significant process upgrade to the groundwater purge network. This work involves replacement of all forcemain piping and process control equipment. A significant component of the new control equipment is the use of variable speed drives to control the well pumps. These devices are anticipated to created significant reductions in electricity usage in our purge network process. To further improve the efficiency and safety of our process, the power distribution system for the purge network will be replaced in 2012. Through 2011, GSH anticipates making changes to the purge well system in response to this process and will submit a summary report upon completion of upgrades.

Soil Vapor Evaluation: During the quarter, GSH continued implementation of the *Work Plan for Soil Gas Investigation South of Old Channel Trail near Montague, Michigan* dated February 7, 2010 and approved by the

U.S. EPA on February 28, 2011. The first round of soil gas samples had been collected during the previous quarter during the week of May 23, 2011; results from the first round of soil gas were provided to the U.S. EPA on July 8, 2011. These results were discussed with the U.S. EPA during a series of calls during July, and an approach was developed to include a third round of soil gas sampling during August that included three new SGMPs at each of two additional locations on the eastern side of the site. The six new SGMPs were installed during August (SGMP-08 S, I, and D and SGMP-09 S, I, and D), and all an additional round of soil gas samples were collected.

The Work Plan for Soil Gas Investigation South of Old Channel Trail near Montague, Michigan includes a round of soil gas samples to be collected in the fall, and this work is scheduled to proceed during November, 2011. With the November soil gas samples, GSH will have three rounds of soil gas samples that document the variation between different seasons, and GSH will prepare the final report on the soil gas sampling.

Abandon Two Residential Wells: GSH contacted the owners of two residential wells on McFall Dr. GSH has arranged to have one well plugged and the abandonment report is attached. GSH the second owner has declined to have the second well abandoned and wishes to keep it available for sample collection.

Periodic Technical Review Assessment Report: The first three-year technical review assessment report is due to U.S. EPA in January 2014. GSH is continuing to monitor technical developments and work toward completing the following elements that will be included in the report:

- Literature review to assess whether potentially applicable technologies have become available
- Research programs funded by GSH to study DNAPL at the OCC facility in Montague
- Technical review of long-term groundwater monitoring program and integrity of the remedy

<u>Financial Assurance</u>: This task has been completed, and will be removed from future quarterly updates.

<u>Voluntary Conservation Easement</u>: GSH continues to work toward development of a conservation easement to formalize preservation of the undeveloped and natural setting along portions of Occidental's lakefront property. GSH has been in discussion with the Muskegon Conservation District who will be the easement holder. GSH plans to have the conservation easement finalized and in place by 2012.

Voluntary Environmental Stewardship Program through Muskegon Conservation District (MCD): During the fourth quarter of 2010, GSH assisted the MCD in creating and staffing a White Lake Community Outreach and Environmental Stewardship Coordinator position. This position will support and promote the ongoing efforts of the White Lake Public Advisory Council while:

- Assist in coordination of White Lake Great Lakes Restoration Initiative (GLRI) shoreline projects
- Establishing monitoring for White Lake GLRI sites
- Assisting in coordination of White Lake AOC delisting criteria
- Working with Public Advisory Council to delist appropriate Beneficial Use Impairments (BUIs)
- Facilitating seeking funds for restoration and research projects necessary to delist BUIs
- Coordinating BUI work with public and private stakeholders
- Coordinating community wildlife and fisheries enhancement projects and facilitating community-wide partnerships for the long-term conservation, preservation, and restoration of White Lake.

GSH has provided MCD funding, in advance for this position through 2013. A summary of work completed during this quarter is attached.

Additional Voluntary Shoreline Habitat Improvement: GSH continues to work with the Muskegon Conservation District (MCD) as they implement the "White Lake AOC Habitat Restoration Initiative for BUI Delisting: Great Lakes Restoration Initiative EPA-R5-GL2010-1". GSH is coordinating with MCD in shoreline restoration activities that will include shoreline owned by OCC. This work will improve the habitat in the area where GSH is preparing the voluntary conservation easement. The work has been awarded, but agency permits to commence work are still pending.

2. Monitoring Data

The purge well performance report is attached.

3. Summaries of all changes made to the CMI.

None.

4. Summary of problems or potential problems and actions being taken to rectify.

GSH initiated additional soil gas sampling in response to discussions with the U.S. EPA on the initial sample results. This included the installation of six new SGMPs (three SGMPs at each of two locations) and the collection of an additional round of soil gas samples.

5. Changes in personnel.

None.

If you have any questions concerning this information, please contact me at (972) 687-7506.

Sincerely,

Glenn Springs Holdings, Inc.

Clint Babcock Project Manager

Enclosures

cc: Dan Dailey, MDEQ (P.O. Box 30241, Lansing, MI 48909) James Tolbert, AECOM

2011 Quarterly (July-September) List of Projects in the White Lake Area

- Collecting data along White Lake watershed sites
- Research of Karner Blue Butterfly for habitat creation
- Private landowner Phragmites treatments started, continued and finished along White Lake for 2011 season
- Continued talks with property owners about Phragmites removal for 2011-2012 along White Lake
- Checking engineering plans for calculations and correctness on site plans for Mill Pond and Tannery Bay-East site
- Site checks and on sight project modifications for White Lake AOC sites
- Continued preparation work for White River Watershed Monitoring Project
- Continued finalizing engineering plans for the White Lake AOC Habitat Restoration Initiative
- Continued work with Tanya Cabala on education and outreach service aspects (creating websites, etc.)
- Continued Phragmites and Cattail treatment at Svensson and Causeway site
- Conducting survey work in reference to invasive species, erosion issues, buffers, etc.
- Teleconference with Jay Truty about Karner Blue Butterfly possible habitat sites on property
- Attending pre-bid meetings for construction and planting on White Lake sites
- 2011 marsh monitoring data has been finalized and sent in for the White Lake area
- Continued finalizing engineering plans and taking soil samples for the White Lake AOC Habitat Restoration Initiative
- Attended kickoff meeting for White Lake AOC Habitat Restoration Initiative
- Continued work with Tanya Cabala on education and outreach service aspects
- Phragmites and Cattail treatment at Svensson and Causeway site
- Vacation to Ecuador (July 8 July 19)