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January 10, 2011

Mr. Thomas Taccone
Western New York Remediation Section
Emergency and Remedial Response Division
United States Environmental Protection Agency - Region II
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Mr. Taccone:

Re: Quarterly Report – Fourth Quarter 2010 (October through December)
Administrative Orders Hooker Chemical/Ruco Polymer Corporation Site
Index Nos. II-CERCLA-80216, II-CERCLA-94-0210, and II-CERCLA-02-2001-2018

Consistent with Sections 42, 91, and 55 of the above-referenced orders, respectively, and the USEPA approved 100% Biosparge System Design Report, this submittal provides the Quarterly Progress Report covering October through December 2010 for the Hooker/Ruco Site. This report covers OU-1, OU-2 and OU-3. Please note that the next Quarterly Progress Report will be submitted by April 15, 2011 and will cover January through March 2011.

Quarterly Progress Report

The following activities were performed in October through December 2010.

Operable Unit-1 (On-Site Soil)

All work has been successfully completed. OU-1 is closed.

Operable Unit-2 (Soils Impacted by On-Site Release of PCBs)

All work has been successfully completed. OU-2 is closed.

Operable Unit-3 (Off-Site Groundwater)

Supplemental Treatment System

- Operation and monitoring of the GP-1/GP-3 supplemental air treatment system continued
- The motor and wiring of the supplemental treatment system's blower failed and were replaced in October
- The carbon bed was changed out on November 8, 2010
- Evaluations of possible upgrade alternatives for the supplemental treatment system are ongoing

Biosparge System (see Figure 1 for system layout and Figure 2 for system cross-section)

Installation of the wells for the biosparge system expansion started on September 20, 2010. As of December 31, 2010, injection well nests IW-15, IW-20, IW-21, and IW-22 and monitoring well nests MW-85/VZ-12, MW-86, and MW-89/VZ-17 were completed.

The bid documents for the remaining components of the biosparge system were provided to potential bidders on October 14, 2010. Bids were received on November 5, 2010 and the contract was awarded on December 6, 2010 to WHM Plumbing. WHM's mobilization to the Site is scheduled for February, 2011.

Permission was received from the Town of Oyster Bay on October 22, 2010 to move the location of IW-14 to the west side of Jefry Avenue (see Figure 1). Based on the vinyl chloride concentrations being less than $40\,\mu\text{g/L}$ at this location, the borehole was completed as monitoring well MW-86 and concludes the western extent of the middle fence injection/monitoring system. No well will be needed at the IW-13 location.

On the eastern end of the middle fence, a request for access permission from Northrop to install another well nest approximately 100 feet east of IW-22, was made to Northrop on October 28, 2010. This additional well was requested to confirm that only low level vinyl chloride concentrations are present to the west of IW-22 location (which had VCM concentrations up to $22 \,\mu g/L$).

USEPA comments were received October 25, 2010 on the QAPP Addendum for the evaluation comparing low-flow purging to permeable diffusion bag/HydraSleeve™ sample results. A final QAPP Addendum was submitted to the USEPA on October 26, 2010.

Notification of the semi-annual biosparge performance monitoring event was submitted to the USEPA on November 1, 2010. The notification included the passive diffusion bag (PDB) trial sampling program.

PDBs were installed on November 15, 2010 in four of the 15 biosparge performance monitoring wells for the semi-annual sampling event that was being performed for the second half of 2010. Low Flow Purging/Sampling Techniques were used to collect the samples from the remaining 11 wells in the monitoring program. The LFP samples were collected between November 15 and 24, 2010. In accordance with the sampling protocols, the PDBs were to be removed from

the wells on November 29. Only one of the PDBs was successfully removed (and submitted for analysis). The remaining three PDBs were locked into the well and had to be forcefully removed with the driller's assistance. Discussions are ongoing to determine the next steps, including the possibility of using narrower PDBs to obtain the trial program samples.

Access permission was received in December, 2010 for groundwater monitoring well nests MW-92 and MW-93.

Summary of Biosparge Pilot System

To date, the biosparge system has operated successfully as demonstrated by the following:

- i. Dissolved oxygen (DO) levels in the groundwater have increased and, in general, are greater than the target concentration of 2 milligrams per liter (mg/L see attached chemical concentration plot figures)
- ii. The vinyl chloride monomer (VCM) concentrations are decreasing as a result of the microbial biodegradation processes (see attached chemical concentration plot figures)

Planned First Quarter 2011 Activities

- The following activities are planned for the first quarter of 2011:
 - i. Continue operation and monitoring of the GP-1/GP-3 supplemental air treatment system.
 - ii. Changeout of the supplemental treatment system carbon bed is tentatively planned for the week of January 31, 2011.
 - iii. Continue with the installation of injection and monitoring wells along the middle and north fence.
 - iv. Mobilize contractor and start installation of the vaults, piping, conduit, etc. for the remainder of the biosparge system middle fence and the north fence.
 - v. Complete the semi-annual groundwater performance monitoring event that was initiated in November 2010 by collecting by LFP method groundwater samples from three wells from which the PDBs were forcefully removed.
- The following activities are pending an approval or review by the USEPA. The follow-up schedule is based on receipt of the review or approval:
 - i. No activities for this quarter.

Should you have any questions on the above, please do not hesitate to contact me at (972) 687-7511 or e-mail at Jeffrey_Kogut@oxy.com.

Sincerely yours,

Jeffrey A. Kogut

KDS/cb/006883/13

Encl.

cc:

P. Olivio (USEPA)

K. Lynch (USEPA)

M. E. Wieder (USEPA)

S. Scharf (NYSDEC - pdf on CD)

M. Popper (CDM)

T. Kelly (Nassau County)

W. Baldwin (Bayer)

J. Kay (CRA)

GLENN SPRINGS HOLDINGS INC. HOOKER/RUCO SITE HICKSVILLE, NEW YORK

Groundwater Investigations Beyond the Ruco Property (OU-3)

	Task and Activity	Percentage of Activity Completed		eduled etion Date Completion Date
•	Work Plan	100	July 1993	September 23, 1993
•	Borehole/Well Installation (MW-50, MW-53, MW-54 and MW-55)	100	September 30, 1994	June 19, 1995
•	Well Development, Sampling and Analysis	100	July 10, 1995	August 9, 1995
•	Water Level Measurements	100	August 15, 1995	April, 1996
•	Interim Report	100	May 23, 1995	June 15, 1995
•	Interim Report - Addendum No. 1	100	July 28, 1995	August 2, 1995
•	Grumman Production Wells Sample Collection and Analysis	100	August 1, 1995	October 4, 1995
•	Well Installation (MW-51, MW-52, MW-56 and MW-57)	100	August 30, 1995	January 26, 1996
•	Regional Groundwater Level Monitoring Event	100	October 3, 1995	October 3, 1995
•	Well Development, Sampling and Analysis	100	January 22, 1996	July 5, 1996
•	Grumman Groundwater Model	100	July 27, 1995	November 20, 1997
٠	Phase I Report	100	February 21, 1996	April 26, 1996
•	Supporting Documentation Regarding the Effectiveness of In Situ Remediation	100	June 10, 1996	August 9, 1996
•	Phase II Report	100	February 21, 1996	August 12, 1996
•	Comments on DEC Draft Supplemental Feasibility Study	100	September 23, 1996	October 17, 1996
•	Responses to Northrop Comments on the Phase I Report	100	April 17, 1997	June 6, 1997
•	Comments on DEC Supplemental Feasibility Study	100	June 1, 1997	June 20, 1997
٠	Comments on Navy Regional Groundwater Feasibility Study	100	July 28, 1997	October 8, 1997
•	Revised Pages for Navy Regional Groundwater Feasibility Study	100	July 28, 1997	November 3, 1997
٠	Comments on Groundwater Flow Model Report	100	November 20, 1997	December 5, 1997
•	Comments on Draft Final Regional Groundwater Feasibility Study	100	March 27, 1998	May 1, 1998
•	Comments on Northrop Letter Report	100	May 20, 1998	June 4, 1998
•	Evaluation of MW-52 Area Groundwater Extraction System	100	July 1, 1998	July 29, 1998
•	Remedial Investigation Report	100	December 1, 1998	January 21, 1999
•	Feasibility Study Report	100	December 1, 1998	March 16, 1999
•	Groundwater Treatability Study (GTS)	100	December 16, 1998	July 19, 1999
•	Responses to EPA Comments on RI Report	100	May 25, 1999	June 11, 1999
٠	Responses to EPA Comments on FS Report	100	June 21, 1999	July 7, 1999
٠	Scope of Predesign Investigative Activities - Initial - Revised	100 100	June 1, 1999 February 16, 2001	June 11, 1999 May 28, 2001
٠	Revised RI Report	100	May 25, 1999	November 16, 1999
•	Revised FS Report	100	July 7, 1999	December 22, 1999

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	Task and Activity	Percentage of Activity Completed		cheduled pletion Date Completion Date
•	Responses to EPA Comments on GTS	100	October 14, 1999	November 3, 1999
•	Responses to EPA Comments on FS Report Responses	100	October 14, 1999	November 3, 1999
•	Obtain access agreements	100	June 1999	December 2001
•	Final RI Report	100	March 15, 2000	July 21, 2000
•	Final FS Report	100	April 10, 2000	July 25, 2000
•	PRAP	100		July 28, 2000
•	ROD	100		September 29, 2000
•	Unilateral Administrative Order	100		April 26, 2001
•	Evaluate VCM presence in GP-3	100		August 15, 2001
•	Design Supplemental System for VCM in GP-3	100	August 15, 2001	December 2001
٠	EPA Conditional Approval for Predesign Activities	100		September 28, 2001
•	Issued Request for Bid for Well Installation	100		October 26, 2001
•	Contractor Arrangements	100		January 15, 2002
•	Arrangements for Biosparge Testing of Existing Wells	100		April 12, 2002
•	Biosparge Testing of Existing Wells	100	April 15, 2002	August 13, 2002
٠	Phase 1 Well Installation	100	February 4, 2002	June 28, 2002
•	Upgrade of GP-1/GP-3 Treatment System	100	April 8, 2002	July 9, 2003
•	Sample Wells	100	June 17, 2002	July 12, 2002
•	Evaluate Pre-Design Information / Develop Scope of Biosparge Remedy	100		November 22, 2002
•	Install 2 Additional Wells (MW-67/68)	100	December 18, 2002	February 14, 2003
٠	Sample Wells MW-67 & MW-68			March 25/26, 2003
•	Responses to EPA comments on Predesign Information Report	100	March 6, 2003	March 27, 2003
•	EPA Meeting			April 17, 2003
•	Closed Well T-1	100		May 12, 2003
•	MW-67/68 Installation Report	100		May 23, 2003
•	Responses to EPA comments on March 27, 2003 Responses	100	June 25, 2003	July 29, 2003
٠	Pre-Final (95%) RD Report	100	July 7, 2003	October 31, 2003
•	Responses to EPA comments on 95% RD Report	100	April 12, 2004	May 27, 2004
•	Submitted Due Diligence Request to Northrop	100		May 10, 2004
•	Follow up Due Diligence Clarification to Northrop 6/11 Data Package	100		June 25, 2004
•	Offer to Northrop for Property Purchase	100		October 1, 2004
•	Sample 13 Wells and Submit Results	100	August 23, 2004	October 14, 2004

GLENN SPRINGS HOLDINGS INC. HOOKER/RUCO SITE HICKSVILLE, NEW YORK

Groundwater Investigations Beyond the Ruco Property (OU-3)

	Task and Activity	Percentage of Activity Completed	Start Date	Scheduled Completion Date	Completion Date
•	Responses to EPA Comments on 95% RD Report	100	November 17, 2004		December 6, 2004
•	Revised Property Purchase offer submitted to Northrop	100	December 22, 2004		December 22,2004
•	Prepare 100% RD Report	100	Ĵanuary 12, 2005		May 27, 2005
•	Property Purchased	100			June 2005
•	100% Design Approved	100			July 7, 2005
•	Obtain Building Permits	100	July 11, 2005		November 10, 2005
•	Arrange Contractors	100	January 2005		July 22, 2005
•	Well Installation	100	September 13, 2005		April 28, 2006
٠	Biosparge System Installation	100	November 2005		May 2006
•	Closure of On-Site and Off-Site Wells	100	November 2005		May 10, 2006
٠	OU-1 Soil Borings	100	November 2005		January 11, 2006
•	Background Groundwater Sampling	100	March 27, 2006		June 14, 2006
•	Pre-Start Sampling	100			October 24, 25, and 26, 2006
•	Final Inspection	100			October 27, 2006
•	Biosparge System Start-Up	100			October 27, 2006
•	First Monthly Sampling	100			November 28 to 30, 2006
•	Second Monthly Sampling	100			December 20 and 21, 2006
•	Noise Survey	100			January 18, 2007
•	2007 First Quarterly Sampling	100			January 23 to 30, 2007
•	Submission of Phase I Construction Documents	100			February 1, 2007
•	2007 Second Quarterly Sampling	100			April 18 to 27, 2007
•	2007 Third Quarterly Sampling	100			July 16 to 27, 2007
•	2007 Fourth Quarterly Sampling	100			October 8 to 18, 2007
•	Evaluation/Recommendation for Design Modifications	100			January 15, 2008
•	2008 First Quarterly Sampling	100			January 22 to 28, 2008
•	2008 Second Quarterly Sampling	100			April 16 to 25, 2008
•	2008 Third Quarterly Sampling	100			July 15 to 18, 2008
•	2008 Fourth Quarterly Sampling	100			October 21 to 30, 2008
•	Construction of North Fence Underground Components	100			December 23, 2008
•	2009 First Semi-Annual Sampling	100			April 7 to 14, 2009
•	Response to USEPA Biosparge System Comments	100	August 27, 2009		September 23, 2009
•	2009 Second Semi-Annual Sampling	100			October 13 to 21, 2009

TABLE 1 Page 4 of 4

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Groundwater Investigations Beyond the Ruco Property (OU-3)

Task and Activi	ity	Percentage of Activity Completed	Start Date	Scheduled Completion Date	Completion Date
Submittal of Biodegradation Supporting Info	rmation	100			November 30, 2009
Submittal of Revised Schedule		100			February 3, 2010
Submittal of PDB/HydraSleeve TM Evaluation	ı	100			February 11, 2010
Trailing Edge Proposal		100			March 15, 2010
Distribution of RFP for Biosparge System We	ll Installation	100			June 25, 2010
Contracted Well Driller		100			August 3, 2010
Install Biosparge System Wells		45	September 20, 2010		



















