

Florida Department of Environmental Protection

> Central District 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767

Rick Scott Governor

Jennifer Carroll Lt. Governor

Herschel T. Vinyard Jr. Secretary

June 22, 2012

Sent by e-mail to: matt.borchert@railamerica.com

FLORIDA EAST COAST RAILWAY LLC 7150 PHILLIPS HIGHWAY JACKSONVILLE FL 32256 OCD-GW-12-0039

ATTENTION: MATT BORCHERT MANAGER OF ENVIRONMENTAL COMPLIANCE

Volusia County – Groundwater Contamination Cleanup Florida East Coast Railway, New Smyrna Beach <u>Pilot Test Report</u>

Dear Mr. Borchert:

Department of Environmental Protection (Department) personnel have reviewed the "Pilot Test Report" for the period of September 7, 2011 through March 13, 2012 for the New Smyrna Beach Locomotive Maintenance – South Yard received on May 8, 2012 and noted the following requirements.

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- To provide greater flexibility for remediation goals it is recommended that a Modification of Conditions of the existing Consent Order be drafted and submitted to the facility management for acceptance. This will provide additional alternatives for site closure. Department personnel have this document drafted but it cannot be issued until the name of the responsible party that will sign the document is provided. Please provide the name of the responsible party to Anil Desai.
- Dependent on the locations of wells MW-60S, MW-77S, MW-5S, MW-6I, P-1S and P-4S that were discovered damaged or destroyed during the 2010 sampling event, these wells may need to be repaired or replaced sometime in the future if determined to be a part of the ongoing remediation process. This may also apply to well MW-70S in which roots are growing.
- The report recommends discontinuing the use of recovery well RW-2. It is thought that hydraulic control of the plume can be maintained by the continued use of recovery well RW-1 based on the distribution of the contaminants of concern and the potentiometric gradients shown on Figures 3 and 4. The Department agrees with this recommendation.
- It is proposed to initiate groundwater extraction from new recovery well RW-4. This well is installed just above the clay confining layer and appears to be the most effective method to increase the dissolved oxygen distribution in the intermediate zone of the surficial aquifer. This appears to be the most cost effective method also. The Department agrees with the recommendation to connect this new recovery well to the current groundwater treatment system.
- The report recommends installation and operation of a second biosparge well. Data is needed for the design, location and depth of the second biosparge well. More information is needed about the site conditions just above the clay confining layer. The installation of 4 new intermediate wells and 3 new shallow wells is proposed to provide this needed information. The locations of these wells are depicted on Figure 6.

The location of proposed well MW-88S is up gradient and is needed to determine if there are contaminants of concern or a source of contamination up gradient of well MW-63S.

The locations of proposed wells MW-86S and MW-89S are to provide definition of the extent of contaminants of concern, namely chlorobenzene in the shallow zone of the surficial aquifer. Proposed wells MW-87I and MW-90I will be installed to the bottom of the intermediate zone of the surficial aquifer to monitor concentrations. Proposed wells MW-91I and MW-92I will be used to evaluate the influence of new recovery well RW-4 and the existing biosparge well. The Department agrees with the locations of the new wells.

- Soil borings will be conducted before installation of the 4 intermediate wells to determine the bottom of the intermediate zone of the surficial aquifer. This will ensure that the wells are installed to the proper depth.
- Table 12 contains a revised monitoring schedule for geochemical monitoring and groundwater sampling. It is proposed to begin geochemical monitoring 2 to 4 weeks after the additional wells are installed and prior to the start up of new recovery well RW-4. After start up of the new recovery wells geochemical monitoring will be conducted a minimum of every other month.

The newly installed wells will be sampled 2 to 4 weeks after installation and before the start up of new recovery well RW-4. Groundwater elevation data will also be collected.

After approximately 6 months of operation of new recovery well RW-4 another groundwater sampling event will be conducted. Groundwater elevation data will also be collected. The Department approves the revised monitoring schedule in Table 12.

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• Approximately 2 months after the last sampling event a report will be submitted containing the operation and maintenance of the groundwater treatment system and the biosparge system. The report will also include recommendations for future activities, proposed adjustment to the monitoring program and a schedule for proposed remedial action modifications. If the data continues to support the installation of a second biosparge well the proposed well design and installation data will be included.

If you have any questions please do not hesitate to contact Anil Desai, P.G., Program Manager of the Groundwater Section, at (407) 897-4116 or Marsha Johnson at (407) 897-4118.

Sincerely,

Christianne C. Ferrard

Christianne C. Ferraro, P.E. Program Administrator Water Resource Management

CCF/AKD/mj

cc: Paula Bond, P.G., SAIC (<u>paula.j.bond@amec.com</u>) Clarence Anderson, FDEP Wastewater Compliance/Enforcement Gary Miller, FDEP Wastewater Compliance/Enforcement