

# TEXTRON ROCHESTER UPDATE

## June 2013

### Update on Water Line Project

Textron is committed to providing residents a safe and reliable water supply in the area of the Torx plant. Textron has pursued this objective through the extension of the existing City of Rochester water line, the purchase of City water, and the establishment of a Conservancy District. The water line construction and water system start-up was completed during the first calendar quarter of 2013. All properties within the Conservancy District are now provided with municipal water. Textron has hired a State of Indiana Certified Water Distribution System Operator to operate the water distribution system, Rich Martin, with RK Martin Water Services, LLC. If there are any water services related problems or questions, Rich may be contacted via telephone at (574) 276-0894. Rich is putting together a water management plan, which will include an emergency notification plan in the event there is ever an issue that requires immediate notice to system users. He will be contacting property owners to obtain their contact information so that the District has it in case such notification is ever required.

The South Richland Conservancy District, which provides supervision on the operation of the water distribution system, is managed by a board comprised of three Directors. The next District Board of Directors' meeting is scheduled for Wednesday, August 21, at 5:30 pm. at the Fulton County Library's Rochester branch at 320 W. 7th Street.

### Update on Groundwater Remediation Project

Textron is committed to the remediation of groundwater impacts in the vicinity of its former plant. In support of the full scale remediation to address the chlorinated volatile organic compounds (VOCs) in groundwater at the Torx facility, AMEC Environment & Infrastructure, Inc. completed a remedial pilot study at the Torx facility during the last eight months. In addition to the pilot study, additional investigations to support the final design of the remedy were performed during this timeframe. This pilot work included the drilling of 58 soil borings and the installation of 34 monitoring/observation wells.

The remedial pilot study evaluated the two in-ground remediation approaches recommended in the Feasibility Study that were approved by the Department of Environmental Management. The first approach that was evaluated was a biological-based-remediation alternative that involved the injection of a mixture of a food grade compound (ethyl lactate) into groundwater. These injections were performed at three points near the facility where the contaminant concentrations are highest. Injection of this mixture stimulates naturally occurring microorganisms to degrade the chlorinated VOCs in groundwater.

The second approach involved injection of a mixture of zero valent iron (ZVI) and ethyl lactate into groundwater. This mixture promotes the complete breakdown of chlorinated solvents in groundwater through a combination of chemical reaction and biological degradation. This mixture was injected in 14 points installed on Textron-owned property east of the plant.

In order to evaluate the effectiveness of the bio-stimulant and ZVI injections, a performance groundwater monitoring program has been implemented over the last seven months. The results of the monitoring program demonstrated that natural VOC consuming bacteria in the groundwater responded favorably to the addition of the amendment (ethyl lactate). Bacterial population density increased by one thousand to ten thousand times in response to the injections at both locations. The chemistry of the aquifer also responded to the pilot test injections by progressing from a mildly oxygen deficient condition to a strongly deficient one, which also promotes the bioremediation of the VOCs in the groundwater.

The results of the pilot test and performance groundwater monitoring data will be used to prepare the design of the full scale remediation work plan. The remediation work plan will describe the number of injection wells, spacing, and depths along with the desired amount and mixture of the biostimulant material. Also detailed will be the ZVI permeable reactive zone injection design and subsequent performance groundwater monitoring. Because of the positive results of the pilot test for the biostimulant application, it appears that only one ZVI permeable reactive zone will be required to be installed as part of the full scale remediation.

The remediation work plan is anticipated to be submitted to IDEM in July 2013. Full scale remediation implementation should commence in the fall.

*For additional information regarding the investigation, please visit our website at:*  
[www.torxremediationproject.com](http://www.torxremediationproject.com)

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