



IVY INDUSTRIAL PARK AGREEMENTS Bostik CACP, Sandvik CACP and Bostik/Sandvik COA Public Informational Meeting ~ July 13, 2011

Site History / Background

- The Ivy Industrial Park Site contains certain **volatile organic chemicals** in the soils and groundwater, including Perchloroethylene (PCE) and Trichloroethylene (TCE). Some or all of the hazardous substances are in one or more groundwater plumes which have impacted certain private water supply wells in and around the site in Scott, South Abington, North Abington and Waverly Townships, Lackawanna County.
- **Bostik Inc.** owns a facility in the South Abington Twp. portion of Ivy Industrial Park that manufactured adhesives from 1977 until it was closed in 2003. **Sandvik Inc.** owns and operates a steel products manufacturing facility on approx. 35 acres of the Scott Twp. portion of Ivy Industrial Park.
- DEP alleges that, in the past, **Bostik and Sandvik released substances that contained PCE and/or TCE** into the soils and groundwater within the site.
- Bostik and Sandvik have conducted environmental investigations of their properties, as well as at various other locations within the affected area, that included the installation of monitoring wells and soil borings. DEP and the companies have **sampled more than 500 private residential and business production wells** at the site, and they have given DEP **site characterization reports** that identify various concentrations of PCE, TCE, cis-1, 2-Dichloroethylene (cis-1, 2-DCE) and various other contaminants in the site soils and groundwater.
- In April 2008, DEP received a **supplemental soil boring investigation and groundwater sampling activities report from Metso Paper**. Interior soil sampling was conducted to determine whether there were any source areas associated with drains present in several of the facility rooms.
- In April 2008, DEP signed a Consent Order and Agreement (COA) with Bostik for characterization and remediation activities previously outlined in the May 2007 Administrative Order. **Testing of hydraulic properties of the site began in Nov. 2008** and this data was used, in part, to develop their site conceptual model. Tests included conductivity testing for each of their 26 on-site wells and completion of several pumping tests at select wells in order to evaluate the interconnectivity of bedrock fractures between monitoring wells.
- In Sept. 2008, Pennsylvania America Water Company met with DEP to discuss potential source water options for the proposed water line. In Nov. 2008, a bid was put out for the source water evaluation and **Gannett Fleming was awarded the bid** in Jan. 2009.
- In Feb. 2009, DEP approved an extension request from Bostik to conduct additional site characterization. In **March 2009, all three companies took part in a joint water gauging event** to examine groundwater flow across the site.
- In April 2009, a cost-benefit analysis was conducted for potential source water for the proposed water line. In May 2009, DEP issued an approval for a pilot test to determine whether aeration of a surface water source was viable. The pilot study, from June to Sept. 2009, determined that trihalomethanes were not consistently reduced, so an alternate water source was evaluated. It was decided that a **groundwater source from an operating water supply well, south of the industrial park, could provide the water needed**; and additional water from the Waverly distribution system, also supplied by groundwater wells outside the industrial park, would be used to make up any difference needed.
- In May 2009, EPA completed its final report that included installation of 14 monitoring wells as well as geophysics of those wells and eight residential wells that were abandoned after hook-up to existing public water. **EPA's work better defined the extent of the TCE and PCE plumes originating from Ivy Industrial Park**. One conclusion consistent with the potentially responsible parties is the significant vertical downward hydraulic gradient, partially driven by the industrial

park's elevation, which is approx. 100 to 300 feet higher than most of the affected residential wells. **This elevation difference will continue to drive contaminants into surrounding areas until the source areas are remediated.**

- In Sept. 2009, Gannett Fleming completed an ecological health evaluation screening report, which entailed habitat evaluation, chemical fate and transport and exposure pathways of potential receptors. **Surface water and sediment data were collected and analyzed for inorganic parameters and, early in the study, volatile organic compounds (VOCs).** VOCs were not detected in surface water from the wetlands, ponds or streams that would exceed the water quality chronic or maximum concentration criteria. Therefore, aquatic organisms are not at risk from exposure to VOCs in surface water.
- In Oct. 2009, DEP received Bostik's site characterization report and additional characterization work was conducted. An **additional groundwater monitoring well still needed to be installed** on the northern portion of their property.
- In Nov. 2010, DEP received a report from Metso Paper documenting rock matrix sampling that was conducted in two areas where groundwater was highest on their property. **DEP agrees with the interpretation that the data suggests there are no significant sources on the Metso Paper property.**
- In March 2011, DEP approved Bostik's site conceptual model and remediation plan with modifications. Remediation will be a **combination of soil excavation and chemical oxidation to treat bedrock and groundwater in the source area.**
- Sandvik submitted a revised site characterization report and a remedial action plan in Aug. and Nov. 2010, respectively. DEP commented on these and they were revised in early 2011, then approved with modifications in April 2011. Remedial activities at Sandvik will include **soil excavation and thermal resistive heating to address groundwater and bedrock contamination.**
- **Bostik and Sandvik continue to sample quarterly groundwater from residential wells** that either have treatment systems or are part of the perimeter sampling of the affected area, to ensure the plume has not migrated any further.
- DEP recently entered into **settlement agreements with the companies.**

Requirements of the Agreements

- Within 60 days of the Consent Order and Agreement's (COA) effective date, Bostik and Sandvik shall submit a work plan for the installation of a new water source and water mains. **The companies will pay to install a new water main**, approx. 21 miles long; provide for a new water source outside the affected area; and offer a connection to approx. 500 properties.
- **Bostik and Sandvik will contact the owner of each property** being served by a private well that is located within the affected area; seek an agreement with the property owner; and pay to abandon, decommission and/or disconnect the existing groundwater well on the property. They will also install meters and piping from the property to the water main.
- The companies shall **restore excavated areas** as close to pre-excavation condition as possible by performing site restoration and re-vegetation and will **reimburse DEP's past and future costs.**
- Through two separate Consent Assessments of Civil Penalty (CACP), DEP is **seeking civil penalties totaling \$2.5 million** from Bostik and Sandvik. The companies shall pay DEP a civil penalty of \$1.25 million.

Public Comment

- A 60-day comment period runs from June 4 to Aug. 3, 2011. **Comments may be submitted in writing** to Jeremy Miller, PA DEP Hazardous Sites Cleanup Program, 2 Public Square, Wilkes-Barre, PA 18701.
- The COA and CACP documents are available for public review at DEP's Northeast Regional Office in Wilkes-Barre. Interested parties can contact the DEP Records Management Section to arrange for an appointment to review the documents by calling **(570) 826-5472**. The documents are also available at the **municipal buildings in Scott, Waverly North Abington and South Abington townships** and online at www.depweb.state.pa.us by clicking on "Regional Resources," then "Northeast Region" and "Community Information."