Construction Monitoring and Waste Management Addendum

Construction Monitoring and Waste Management Addendum Birdsboro Pipeline – Armorcast Site Birdsboro, Berks County, PA February 01, 2018

Introduction

This is an addendum to the "Limited Geoprobe Investigation Report, HDD Pit and Pipeline, Former Armorcast Site, Birdsboro Pipeline, Berks County" completed by Dawood Engineering Inc. (Revised July 2017). This addendum was prepared to address the elevated review by the Pennsylvania Department of Environmental Protection (PADEP) as described in correspondence dated January 30, 2018. It should be noted that the Armorcast site is being remediated under the PADEP's Land Recycling and Remediation Standards Act Program (Act 2) by Birdsboro Power LLC to achieve nonresidential statewide health standards (SHS) sitewide. Related to this work, since the time the Limited Geoprobe Investigation Report was completed Birdsboro Power LLC has removed additional surface debris and soils from the right-of-way and managed these soils in accordance with Act 2 standards. This addendum addresses the pipeline construction project and the limited area involved with that project. No site remediation activities beyond those performed within the context of this plan are proposed as part of the Birdsboro Pipeline Project.

Nature of Impact

Within the pipeline right-of-way, only borings AC2 and AC3 had constituents exceeding the PADEP Statewide Health Standards. These borings are several hundred feet from the proposed horizontal drilling location. Fill material consisting of sand and clay with metal and construction debris were observed along with gray staining in certain areas. The fill thickness ranged from 1 foot to up to 6 feet in depth.

Polycyclic aromatic hydrocarbons (PAH) were the only contaminants identified in the samples (AC2 and AC3) that exceeded SHS and were associated with dark staining and the presence of asphalt roof shingles. Polychlorinated biphenyls (PCBs) were identified in one sample (AC2) but were below the PADEP statewide health standards.

A decision was made to remove historic fill material from within the pipeline right-of-way prior to performing the pipeline installation to address concerns associated with possible impacts from the Armorcast facility that might occur during pipeline installation if legacy contamination from historical operations was encountered. As indicated, Birdsboro Power LLC has initiated the removal. The following monitoring and management procedures have been developed to identify and manage any potential impacts from the pipeline right-of-way and to prevent the possibility of spreading of contamination.

Fill Removal and Construction Monitoring

Prior to initiating pipeline construction, the fill material identified in the right-of-way north of the existing gravel road will be removed to native material. The fill material is readily identifiable based on the brownish color (versus the reddish color of native soil), sandy texture, and the presence of construction debris and/or metal scrap. The fill material within the right-of-way will be removed,

stockpiled, and characterized (sampled to determine proper management). Removal of this material prior to imitation of construction will eliminate the potential to contact impacted soils or spread contamination during construction activities.

The chemical analyses performed to date confirm that the fill material meets the PADEP Statewide Health Standard and can be reused on the Birdsboro Power LLC site. All material identified as fill will be permanently removed from the pipeline right-of-way. Stockpile areas and appropriate management of fill/waste in accordance with PA DEP regulatory requirements will be documented.

HDD Fluid Management

The HDD drilling machine and associated fluids are not expected to contact impacted soil or groundwater associated with the Armorcast Site while executing the Schuylkill River HDD. Soil samples collected from the HDD bore pit and drill path did not return analytical levels exceeding clean fill or Act 2 health standards. Fill material will be removed prior to excavation of the pit further limiting the potential to contact impacted soils. An environmental observer will monitor HDD drilling fluids for visual and olfactory evidence of degradation of water quality. Additionally, an organic vapor meter will be used to detect concentrations of VOCs and SVOCs above background levels. All drilling return water will be captured, tested, and disposed of at an approved facility. Since the drilling machine and fluids are not expected to contact impacted soil and recovery fluid will be captured and disposed of at an approved facility, the potential spread of contamination from the Armorcast Site is not anticipated.

Fill Material and Handling Procedures

A health and safety plan will be developed for the removal of the fill material. The material will be mechanically removed with the assistance of an environmental observer to identify when the native material has been reached. The environmental observer will visually screen the material for evidence of oils or staining and waste debris. Large debris will be segregated and stockpiled separately for disposal. An organic vapor meter will be employed to screen soils as they are removed. Volatile organic compounds were not identified in the soil borings previously but fill material will be screened to monitor for and prevent unforeseen conditions from causing the spread of contamination. The stockpile area will be lined with plastic within a bermed area and covered to prevent runoff during precipitation events in accordance with the PPC Plan. Appropriate E&S controls will also be employed. Soil materials will be tested for characterization and either reused on the Birdsboro Power LLC site or disposed of in accordance with applicable Department policies. All waste and construction debris will be segregated from the soil material and will be disposed offsite, in accordance with DTE's Control and Disposal Plan that is currently on file with the Department. As was previously committed to, fill material will be removed from the pipeline right-of-way for the long-term management and maintenance of the pipeline right-of-way and that remains the approach within the pipeline right-of-way.

Soil material to be reused on-site will be tested for volatile organic compounds, semi-volatile organic compounds, metals, and PCBs in accordance with protocols presented in PADEP's "Management of Fill Policy" (Document Number 258-2182-773). Fill materials destined for off-site disposal will be tested for RCRA waste characteristics and any additional criteria required by the selected disposal facility and by PA DEP. No site remediation activities beyond those performed within the context of this plan are proposed as part of the Birdsboro Pipeline Project.