



November 2, 2017

Pennsylvania Department of Environmental Protection  
Southcentral Regional Office  
Waterways and Wetlands Program  
909 Elmerton Avenue  
Harrisburg, PA 17110

***By email: RA-EPWW-SCRO@PA.GOV***

RE: Water Obstruction and Encroachment Applications:

- E06-716: Birdsboro Power, LLC
- E06-717: DTE Midstream Appalachia, LLC
- E06-718: Reading Area Water Authority

Erosion and Sediment Control General Permit

- ESG00011170001, DTE Midstream Appalachia, LLC

State Water Quality Certification

- WQ03-003. DTE Midstream Appalachia, LLC

*Note: These comments supplement comments already submitted by DRN. Please ensure all relevant PADEP personnel and files receive a copy of this comment in order to ensure full and fair review in all contexts and please ensure this comment is made part of the official file and record for all relevant reviews.*

Attention: Waterways and Wetlands Program Manager:

The Delaware Riverkeeper Network (DRN), a private non-profit organization, champions the rights of our communities to a Delaware River and tributary streams that are free-flowing, clean, healthy, and abundant with a diversity of life. DRN has nearly 20,000 members throughout the Delaware River Watershed including residents of Birdsboro and Berks County.

The Pennsylvania Department of Environmental Protection (DEP) is accepting comment not on the proposed Birdsboro power plant, as suggested by the headline of the press release announcing the

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November 2 public hearing,<sup>1</sup> but on the appurtenant structures that are necessary to support the proposed power plant: the water line extension, the 4-mile long 230 kV transmission line, and the 13.2-mile long natural gas pipeline. DRN submits these comments as a supplement to comments already submitted on these appurtenant structures and we ask that all relevant DEP personnel and files receive a copy of this comment in order to ensure full and fair review in all contexts. Please ensure this comment is made part of the official file and record for all relevant reviews.

### **Chapter 106 Permitting**

DRN again asks why the permitting of the proposed Birdsboro power plant project is being allowed to proceed without permitting under CHAPTER 106. FLOODPLAIN MANAGEMENT. Birdsboro Power proposes to deliver energy into the PJM interconnection in northeastern US. Chapter 106 defines a “Public utility service” as”

The rendering of the following services for the public:

- (i) Gas, electricity, or steam production, generation, transmission or distribution.<sup>2</sup>

A public utility is defined as “A person engaged in rendering a public utility service.”<sup>3</sup> A person is defined as “An individual, partnership, public or private association or corporation, firm, trust, estate, municipality, governmental unit, public utility or other legal entity which is recognized by law as the subject of rights, and duties.”<sup>4</sup>

Clearly, Birdsboro Power is a public utility under the definitions of Chapter 106 and therefore obligated to meet permitting requirements under this chapter:

- (a) No person may construct, modify, remove, destroy or abandon a highway obstruction or an obstruction in a floodplain without first applying for and obtaining a written permit from the Department.<sup>5</sup>

Birdsboro Power LLC proposes to construct an obstruction in the floodplain by bringing compacted soil fill sufficient to raise the land surface by 4 feet. As a result of this fill, the final grade is intended to be at least 1 foot above the regulatory flood elevation. Yet, Birdsboro Power has begun undertaking site work in the floodplain without undertaking the studies required under Chapter 106:

- (4) A hydrologic and hydraulic report which shall include:
  - (i) Data on size, shape and characteristics of the watershed.
  - (ii) The 100-year flood elevation.
  - (iii) An hydraulic analysis to show the effect of the highway obstruction or obstruction on the floodplain including a backwater analysis and an assessment of flood damage.<sup>6</sup>

Allowing this development within the 100-year regulatory floodplain will exacerbate flooding in the vicinity of the project site as well as downstream. Past flooding in Birdsboro has been attributed to

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<sup>1</sup> Pennsylvania Department of Environmental Protection. (n.d.). DEP to Hold Public Hearing for Proposed Berks County Natural Gas Power Generation Facility. <http://www.ahs.dep.pa.gov/NewsRoomPublic/articleviewer.aspx?id=21315&typeid=1>

<sup>2</sup> Title 25 Pa. Code § 106.1. Definitions.

<sup>3</sup> Title 25 Pa. Code § 106.1. Definitions.

<sup>4</sup> Title 25 Pa. Code § 106.1. Definitions.

<sup>5</sup> Title 25 Pa. Code § 106.11. Permit requirements.

<sup>6</sup> Title 25 Pa. Code § 106. 12(d)(4). Permit applications—information and fees.

backup of the Hay Creek from high stages of the Schuylkill River.<sup>7</sup> The proposed fill on this site will only exacerbate the issue of Hay Creek backup during high Schuylkill flows. The hydrologic and hydraulic report required under Chapter 106 would inform the public as to how the floodplain filling will worsen flooding in the vicinity.

Also absent from permitting documents is mapping required under Chapter 106 including:

(2) Plans showing the location, size and height of the proposed highway obstruction or obstruction and detailing the topographic features, elevations, and nearby structures so as to enable an appraisal of the hazard potential of the obstruction.<sup>8</sup>

Chapter 106 permitting also requires:

(3) A description of the floodplain within the municipality or area which may be affected by the project and a plan showing drainage patterns and flood elevations within the floodplain.<sup>9</sup>

Such documentation would be helpful for reviewers assessing the stormwater structures to be permitted under E06-716. Furthermore, as Chapter 106 defines transmission and distribution of electricity as public utility services, the requirements for permitting under Chapter 106 also apply to the proposed 230 kV transmission line and substation.

The transmission line will be comprised of approximately 29 steel monopoles that will be 110-foot to 140-foot tall. The 40-inch to 60-inch diameter monopoles will be placed on concrete pile foundations. DRN notes that monopole construction usually requires deeper foundations with greater mass than lattice structures. This means the smaller visual footprint may actually require more extensive excavation and concrete work, and therefore result in a greater area of disturbance.<sup>10</sup> Without the studies required for Chapter 106 permitting, DEP does not have the information to know what the impacts will be for construction, vegetation clearing, and soil compaction in the floodway and floodplain.

### **Discrepancies and Omissions**

DRN also notes a discrepancy between the Delaware River Basin Commission (DRBC) docket approved for the Birdsboro Power facility<sup>11</sup> and Birdsboro Power's *Joint Application for Pennsylvania Chapter 105 Water Obstruction and Encroachment Permit and U.S. Army Corps of Engineers Section 404 Permit* ("Chapter 105 application"). Birdsboro Power's draft docket identified just one monopole as being located in the floodplain. After DRN compared Birdsboro Power's proposed transmission line route, depicted on a map in which the applicant failed to indicate the floodway, with Federal Emergency Management Agency's (FEMA's) National Flood Hazard Layer (NFHL) mapping for the proposed transmission line route, DRN determined that nine of the 29 planned monopoles would actually be located in the regulatory floodway. The final docket indicated that seven monopoles would

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<sup>7</sup> U.S. Army Engineer District, Philadelphia, Pennsylvania. (1973). Draft Hay Creek Flood Control Project, Birdsboro: Environmental Impact Statement

<sup>8</sup> Title 25 Pa. Code § 106. 12(d)(2). Permit applications—information and fees.

<sup>9</sup> Title 25 Pa. Code § 106. 12(d)(3). Permit applications—information and fees.

<sup>10</sup> Molburg, J.C., et al. (2008). The design, construction, and operation of long-distance high-voltage electricity transmission technologies (No. ANL/EVS/TM/08-4). Argonne National Laboratory (ANL). Retrieved from [http://solareis.anl.gov/documents/docs/APT\\_61117\\_EVS\\_TM\\_08\\_4.pdf](http://solareis.anl.gov/documents/docs/APT_61117_EVS_TM_08_4.pdf)

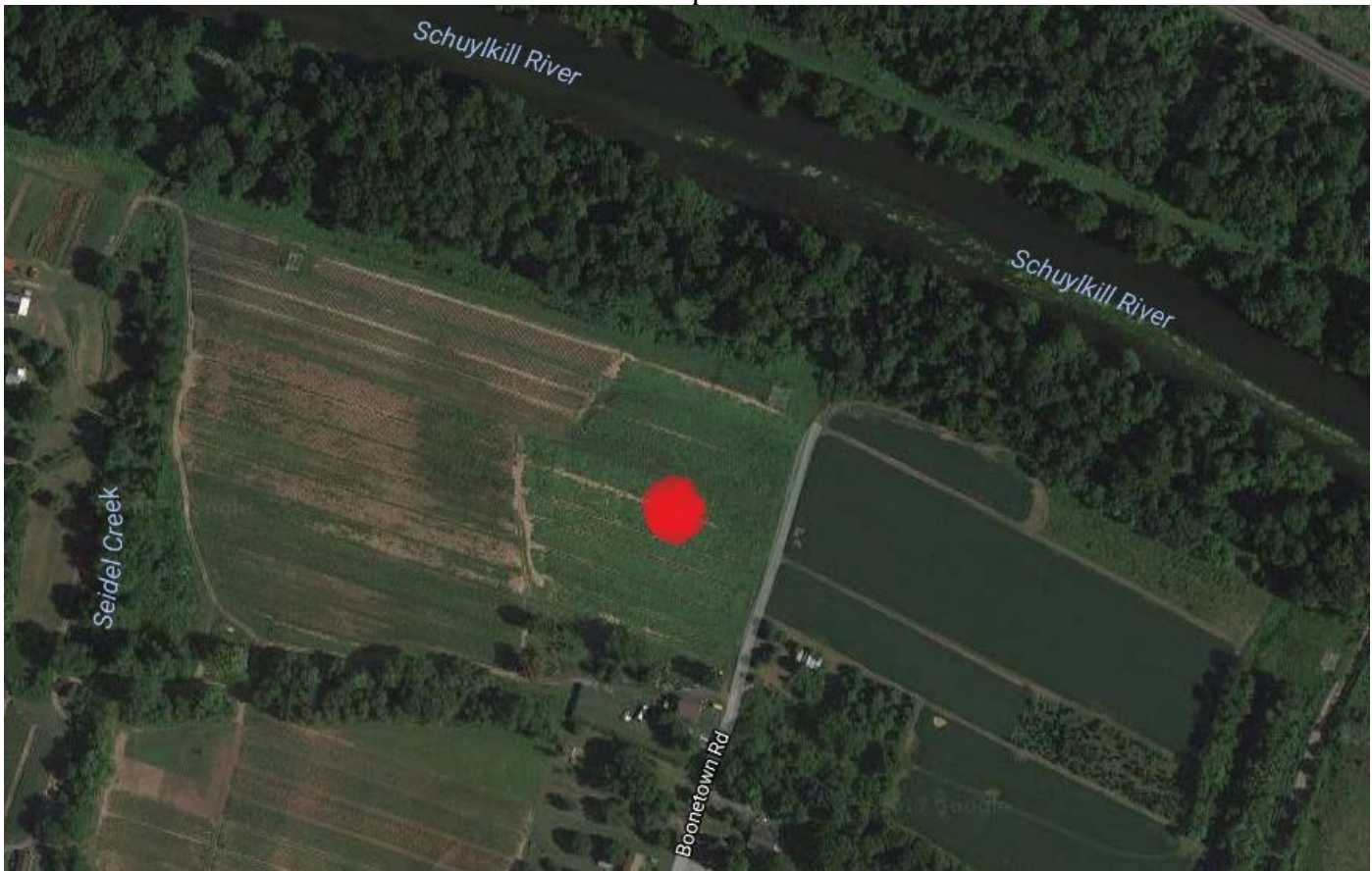
<sup>11</sup> Delaware River Basin Commission. (2016) DOCKET NO. D-2016-004-1

be located in the floodway. Now Birdsboro Power's Chapter 105 application identifies eight monopoles as being located in the floodway. Has the transmission line been modified since approved by DRBC or did the applicant provide conflicting information to DRBC and DEP?

DRN notes that the applicant indicates the total acres of earth disturbance for the transmission line as being 8.2 acres.<sup>12</sup> When the square footage to be impacted, as indicated on the Site Specific Plan, is totaled, the area of impact exceeds 9.5 acres.<sup>13</sup> This discrepancy should be corrected.

DRN also notes that, similar to DRBC's docket, Birdsboro Power's Chapter 105 application appears to omit important information about the site of the substation, information necessary for permitting. The completed substation is described as occupying approximately 5 acres.<sup>14</sup> However, the proposed impacts to that five acre site are not addressed in the Chapter 105 application. No wetland delineation was undertaken for the five acres site or it was not included in Birdsboro Power's application. The substation site is omitted from the mapping provided in the applicant's Site Specific Plan.

As no photos of the substation have been provided, DRN is providing an image with approximate location for the substation drawn from other descriptions.



Approximate location of proposed 230 kV ring bus substations. Map source: Google Maps

<sup>12</sup> PROJECT REVIEW FORM. Request to Initiate SHPO Consultation on. State and Federal Undertakings.

<sup>13</sup> Dawood Engineering, Inc. (8 November 2016). REQUIREMENT H: SITE PLAN AND DRAWINGS. Birdsboro Power, LLC Joint Application for Pennsylvania Chapter 105 Water Obstruction and Encroachment Permit and U.S. Army Corps of Engineers Section 404 Permit

<sup>14</sup> Delucas. S.F. (18 January 2017) "Robeson Township supervisors get plan for power substation." Reading Eagle. <http://www.readingeagle.com/news/article/robeson-township-supervisors-get-plan-for-power-substation>

The site of the proposed substation, in Robeson Township, is located in both the flood fringe and the flood way. Flooding has been documented as occurring at the site under current land use conditions even without a significant rain event.

The areas within the Robeson Township adjacent to the Schuylkill River are particularly low lying areas and are subject to minor flooding even after moderate rain or thaw conditions.<sup>15</sup>

Birdsboro Power has been aware of need for floodplain filling at the proposed substation site since at least December 2016 (emphasis added):

Initial surveys indicate portions of the AA2-115 interconnection substation site are in the 100-year flood plain of the Schuylkill River. Due to geology/topography and environmental impacts of the proposed substation site, the Developer must work through Transmission Owner on design details relative to the civil site development design requirements for raised elevation of the substation site and access road and associated environmental mitigation requirements.<sup>16</sup>

Robeson Township's Floodplain Management ordinance requires:

All other utilities such as gas lines, electrical and telephone systems shall be located, elevated (where possible) and constructed to minimize the chance of impairment during a flood.<sup>17</sup>

Filling the floodplain to comply with this requirement appears to be planned in order to secure Robeson Township zoning approval:

[T]he current [substation] design is, or can readily be made, generally consistent with the Robeson Township Floodplain Management and Stormwater Management Ordinances.<sup>18</sup>

Robeson Township will require Chapter 106 permitting from this public utility for permitting:

The Municipality shall require receipt of a complete plan, as specified in this Ordinance.

For any activities that require an NPDES Permit for Stormwater Discharges from Construction Activities, a PaDEP Joint Permit Application, a PennDOT Highway Occupancy Permit, or any other permit under applicable state or federal regulations or are regulated under Chapter 105 (Dam Safety and Waterway Management) or Chapter 106 (Floodplain Management) of PaDEP's Rules and Regulations, the proof of application for said permit(s) or approvals shall be part of the plan.<sup>19</sup>

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<sup>15</sup> Dawood Engineering, Inc. (December 2016). Hydrologic and Hydraulic Report for Birdsboro Power, LLC Electric Transmission Line

<sup>16</sup> PJM Interconnection. (December 2016). Generation Interconnection Facility Study Report For PJM Generation Interconnection Request Queue Position AA2-115 S. Reading-Boyertown 230 kV

<sup>17</sup> Township of Robeson. Municipal Ordinance, CHAPTER 8: FLOODPLAIN. § 503. Design and Construction Standards.

<sup>18</sup> Kraft, G.D. 4 Feb 2017. Letter to Toby R. Stutzman, Dawood Engineering, Inc., *Re: Birdsboro Power, LLC, KE File - A278c*

<sup>19</sup> Township of Robeson. Municipal Ordinance, CHAPTER 20-A: STORMWATER MANAGEMENT. § 404. Plan Submission.

The omission of the 230 kV ring bus station from Birdsboro Power's Chapter 105 application is a significant omission. DRN is concerned that an omission of this nature suggest larger problems with this Chapter 105 application, and DRN has noted other errors, omissions, and generalizations in prior comments. That the omission of documentation associated with the substation's development was not noted during DEP's completeness review further suggests that permitting for this complex project is being advanced too quickly.<sup>20</sup>

### **Contamination**

DRN has reviewed an analysis of soils data submitted to Federal Energy Regulatory Commission (FERC) in response to a request to identify any soil contamination within the planned pipeline corridor at the Birdsboro Facility. The soils on the Armorcast site remain so contaminated that DTE Midstream Appalachia LLC (DTE) is proposing to remove all soils from the pipeline right-of-way (ROW) on the site to ensure that future maintenance activities can occur without having to monitor and manage contaminated soils.<sup>21</sup>

This approach to dealing with contaminated soils ignores the potential for movement of contaminants from adjacent soils into the clean replacement fill. The soils analysis characterized only the level of contamination in soils in the ROW, ignoring nearby soils. Although DRN notes that the data would not meet the quality control criteria necessary for a valid sample (samples were not collected by lab personnel, absence of custody seals, and flags suggesting contamination in the processing of samples) the limited geoprobe data can serve as an indication of the level of contamination present. The issues with quality control criteria could also mean that the level of contaminant present could be significantly different (e.g., higher than indicated).

The limited geoprobe data raise questions about the level of contamination throughout the site. Concerns over levels of PCBs on site appear to have spurred further analysis and remediation, but it is unclear what that analysis revealed about other contamination. A Phase II Environmental Site Assessment (ESA) was prepared by AMO Environmental Decisions (AMO) on behalf of EmberClear, however that study appears to have focused only on PCBs.

A total of 113 soil samples, 8 groundwater samples, 4 surface water samples, 6 concrete lab samples, 26 crushed concrete/demolition material samples and 15 liquid samples from sumps/pits were collected for PCB analysis.<sup>22</sup>

It is unclear if the 2016 ESA revealed further details about contamination on site as it was not included in documents provided to DRN during a file review for the Birdsboro Army Tank Foundry Formerly Used Defense Site for which DRN had requested documents, writings, materials, correspondence, emails, files, photos, maps, and reports regarding:

- Contamination;
- Past uses and activities potentially resulting in contamination;
- The Army Corps of Engineers' activities, including contamination removal and remedial actions;

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<sup>20</sup> Muzic, E.J. (17 March 2017). RE: Incompleteness Review, Birdsboro Power and 230kV Bus Station and Transmission Line, Application No. E06-716, APS No. 932908, Birdsboro Borough and Robeson, Union, and Exeter Townships, Berks County. Received by James Palumbo

<sup>21</sup> Dawood Engineering Inc. (June 2017). Limited Geoprobe Investigation Report HDD Pit and Pipeline: Former Armorcast Site. DTE Energy.

<sup>22</sup> AMO Environmental Decisions. (July 2017). PCB Remediation Waste Cleanup Plan, Birdsboro Power LLC, Birdsboro, Pennsylvania Property.



- Uses and activities that impacted contaminated media, including any construction and development at the Birdsboro Power Plant and the Reading Area Water Authority water main;
- Erosion and sediment control, including water encroachment and construction permits;
- Related correspondence; and
- Any other records related to the site.

Anecdotal information provided to DRN suggested there are properties in the vicinity of the Armorcast site, including a nearby public ballfield, which draw their drinking water supplies from groundwater. Based on our review of the limited geoprobe, DRN is concerned that those living nearby might be consuming contaminated groundwater. DRN calls on DEP to more fully investigate soil and groundwater contamination on site and to comprehensively assess the threat to anyone living near the Armorcast site that is relying on groundwater.

### **Summary**

In closing, DRN urges the DEP to deny all of these permits because the water line extension, the 230 kV transmission line, and natural gas pipeline, and the power plant they all serve will have substantial adverse impacts on the rights of Pennsylvanians, now and in future generations, to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment.

At a minimum, DEP should reject Birdsboro Power's Chapter 105 application over the significant omission of the substation. DEP should also require Birdsboro Power to complete Chapter 106 permitting for all of Birdsboro Power's electricity production, generation, transmission, and distribution facilities proposed for floodplain areas. Finally DEP should determine the extent of soils and groundwater contamination on site and determine the extent to which the community has been exposed.

Thank you for the opportunity to provide these comments.

Submitted,



Maya K. van Rossum  
the Delaware Riverkeeper