



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

March 2, 2016

Rella Scassellati  
via Email  
scassellatir@gmail.com

Re: Comment Response Document  
NPDES Permit PA0275727 for Industrial Wastewater Discharge from the Proposed  
Lackawanna Energy Power Generation Plant  
Borough of Jessup, Lackawanna County

Dear Sir/Madam:

Thank you for providing comments regarding NPDES Permit No. PA0275727 associated with the industrial wastewater discharge from the power generation plant by Lackawanna Energy Center LLC, in the Borough of Jessup, Lackawanna County.

Enclosed for your information, please find a copy of the Comment and Response Document regarding the comments received by the Department pursuant to the November 7, 2015 public notice and the January 4, 2016 public hearing.

After review of the permit application and considering the public comments, the Department has decided to take an action in the form of issuing the permit.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bharat Patel".

Bharat Patel, P.E.  
Environmental Program Manager  
Clean Water Program

Enclosure: A copy of the Comment Response Document

***Comment Response Document***

***Commonwealth of Pennsylvania  
Department of Environmental Protection***

***Lackawanna Energy Center, LLC  
Permit Decision  
Permit PA0275727  
Borough of Jessup, Lackawanna County***

***Public Comment Period Dates  
November 7, 2015 – December 7, 2015  
Public Hearing on January 4, 2016***

**March 1, 2016**

## Department of Environmental Protection

[www.depweb.state.pa.us](http://www.depweb.state.pa.us)

### PROJECT DESCRIPTION

On November 7, 2015, the Department of Environmental Protection (“Department or DEP”) published in *The Pennsylvania Bulletin* a Notice of Intent to Issue National Pollution Discharge Elimination System (“NPDES”) Permit No. PA0275727 to Lackawanna Energy Center, LLC (“Lackawanna Energy” or “Permittee”) to discharge stormwater and industrial wastewater associated with the construction of the Lackawanna Energy Center power generation facility in the Borough of Jessup, Lackawanna County, as described in the Permittee’s November 11, 2014 (revised August 10, 2015) Permit Application and subsequent supplemental submissions. The proposed Permit authorizes the discharge of air-cooled condenser cooling tower blowdown, low flow industrial wastewater and stormwater to Grassy Island Creek, which has a protected water use designation of Cold Water Fishery (“CWF”), and for which certain water quality criteria designed to protect that use applies.

Comments were received during a 30-day written comment period following publication of the Department’s Notice of Intent to Issue. A petition signed by 29 local residents was received on September 22, 2015 requesting a meeting and hearing on the draft permit. On January 4, 2015, the Department held a public meeting and hearing at the Valley View High School concerning the proposed Permit No. PA0275727. The hearing was advertised in a local paper of general circulation.

This document briefly summarizes written comments received during the Department’s public comment period and oral testimony presented during the public hearing, and provides the Department’s responses to relevant comments received. The comments are not intended to be a complete summary of each individual’s testimony, but rather to identify the issue or comment raised and provide the context for the Department’s response. The Department’s responses are generally limited to the NPDES Industrial Wastewater Permit Application process and the Department’s authority under the Pennsylvania Clean Streams Law, the regulations promulgated thereunder, the federal Clean Water Act, and the federal regulations promulgated thereunder. The testimony of each individual was transcribed, is available in its entirety at the DEP’s Northeast Regional Office, and may be accessed by any person wishing to review it by scheduling a file review with the Department at (570) 826-2511.

### LIST OF COMMENTERS

**The following is a list of individuals who provided comments to the Department on NPDES Permit PA0275727**

1.	Bob Bolus
2.	Ron Sebastianelli
3.	Ron Armizzani
4.	Rich Demboski

5.	Emily Palermo
6.	Bernard McGurl (Both testimony and written comments submitted to DEP)
7.	Charles Charlesworth (Both testimony and written comments submitted to DEP)
8.	Timothy Seamans (Both testimony and written comments submitted to DEP)
9.	Allison Petryk
10.	Joshua Seamans
11.	Mike Guida
12.	John Mellow (Written comments submitted to DEP)
13.	Rella Scassellati

## **Public Comments and Department Responses**

### **1. Comment**

*General concern about the environmental impacts to Grassy Island Creek and the Lackawanna River. (Ron Sebastianelli, Ron Armizzani, Rich Demboski, Rella Scassellati, and Emily Palermo)*

### **Response**

The protection of the environment is fundamental to permitting under the Federal Clean Water Act (“CWA”) and the Pennsylvania Clean Streams Law. Permitting programs under those statutes are designed and implemented with the protection of public health and the environment as overarching goals. The NPDES Permit could not be issued unless the Department determined that the proposed project will satisfy all applicable regulations and the discharge will not degrade the current water quality of Grassy Island Creek, the receiving stream, and the downstream Lackawanna River.

Grassy Island Creek is currently classified as a CWF, and the Lackawanna River is classified as High Quality (HQ) and CWF in the proposed discharge area. The discharge limitations in the NPDES permit are based on the most stringent guidelines established by EPA’s Effluent Limitation Guidelines (“ELGs”), Water Quality Modeling, and the Grassy Island Creek Total Maximum Daily Load (“TMDL”) water quality criteria at the point source. Additionally, an Anti-Degradation Analysis was performed at the confluence of Grassy Island Creek with the Lackawanna River to account for the HQ nature of the River in the effluent limits.

### **2. Comment**

*General concern about use of Pennsylvania American Water as the source for cooling water and drought conditions. (Bob Bolus, Rella Scassellati, and Allison Petryk)*

### **Response**

While this subject is not specifically regulated under the NPDES permitting program, the Department is providing a response.

DEP does not regulate the use of Pennsylvania American Water through the NPDES permitting program. A Public Water Supplier, such as Pennsylvania American Water, is required to have a Drought Contingency Plan as per 4 Pa. Code Chapter 118. The objective of the Drought Contingency Plan is to conserve water, to balance demand with limited available supplies, and to assure that sufficient water is available to serve essential health, safety and economic needs.

### **3. Comment**

*General concern about the land development and erosion and sedimentation controls during construction. (Bernie McGurl, Timothy Seamans, Allison Petryk)*

## **Response**

While this subject is not specifically regulated under the NPDES permit associated with industrial stormwater discharge, the Department is providing a response.

The Lackawanna County Conservation District, in accordance with a Delegation Agreement with the DEP, has reviewed and approved the NPDES storm water permit application (PAG02003515016) for adequate erosion and sedimentation controls and storm water discharges associated with construction activities for the Lackawanna Energy facility.

## **4. Comment**

*General concern about discharge monitoring and testing, and adherence to permit conditions. (Allison Petryk, Rich Demboski, Bernie McGurl, Charles Charlesworth, and Tim Seamans)*

## **Response**

The Pennsylvania Clean Streams Law and its implementing regulations, as well as the federal Clean Water Act and its implementing regulations, require the Department to include monitoring, recordkeeping, and reporting provisions in the Permit that will assist in demonstrating compliance with the discharge limits in the Permit. DEP's Operation and Monitoring Section oversees compliance by the Permittee, and has the authority to take appropriate enforcement action, including measures to compel compliance or assessing civil penalties for any noncompliance with permit conditions or regulatory requirements.

In addition to recordkeeping and reporting requirements, the discharge from Lackawanna Energy will be monitored at the various frequencies listed in the Permit using EPA approved testing methodologies. Lackawanna Energy is required to submit Discharge Monitoring Reports ("DMRs") to the Department on a monthly basis for review. The Department will also conduct unannounced inspections of the facility to ensure that it is operating in accordance with applicable regulations and the terms of its Permit.

The frequency and variety of monitoring required is consistent with the quantity and quality of discharge associated with a project of this size.

## **5. Comment**

*Concern about mercury emissions creating methylmercury in the environment. (Ron Armizzani)*

## **Response**

While this subject is not specifically regulated under the Department's NPDES permitting program, the Clean Streams Law or the federal Clean Water Act, the Department is providing a response.

The Department's Air Quality Program has analyzed the Hazardous Air Pollutants ("HAPs"), such as mercury, under the Air Plan Approval. The proposed project burns natural gas as a fuel

source, which does not contain appreciable amounts of mercury, and there is no equipment or processes at the project that contain mercury.

## **6. Comment**

*General concern about the presence of an industrial wastewater stream discharge rather than directing the wastewater to a sewage treatment plant or alternate disposal method, such as wetlands or infiltration. (Rich Demboski, Bernie McGurl, Charles Charlesworth, and Allison Petryk)*

## **Response**

The NPDES permit program, created under the Clean Water Act, is a federal program administered by the Commonwealth to address water pollution by regulating point sources that discharge pollutants to waters of the United States. The purpose of the NPDES program, and implementing regulations at 25 Pa Code Chapter 92a, is to control water pollution. Pursuant to the requirements of the NPDES program and Chapter 92a regulations, Lackawanna Energy was required to analyze the proposed stream discharge and alternate disposal methods, as well as perform an anti-degradation analysis.

Several soil borings, monitoring wells, and site investigations were completed on the site in support of the anti-degradation analysis. The borings revealed the site is hydrologically and geologically unsuitable for infiltration or land application of wastewater. Additionally, there is insufficient suitable land for constructing wetland treatment. This information was reviewed by the Department during the NPDES permit application review process.

## **7. Comment**

*Concern about components of the wastewater discharge and its effect on the Chesapeake Bay. (Rich Demboski)*

## **Response**

The industrial wastewater (IW) effluent is comprised of air-cooled condenser cooling tower blowdown, low volume industrial wastewater (discharges from oil/water separator, reverse osmosis system, electrode ionization system, evaporative cooler, wash water and miscellaneous plant wastewaters), and chiller effluent. The IW effluent will be subject to the current effluent limitations for the steam electric power generating point source category found 40 CFR Part 423. The IW will be treated with an oil/water separator and by a proposed onsite wastewater treatment facility. Effluent limitations were set using the most stringent ELGs TMDL, Anti-degradation Best Available Combination of Technologies (“ABACT”), and Non-degradation or Water Quality-Based Effluent Limitations (“WQBEL”) for each parameter of concern.

As this is a new discharge, there will be no assigned cap-load for nutrients, and the facility is not considered a Significant Chesapeake Bay facility, which is a facility that discharges more than 75 lbs/day of total nitrogen or 25 lbs/day of total phosphorous on an average annual basis.

## 8. Comment

*General concern about temperature limits. (Bernie McGurl, Charles Charlesworth, Allison Petryk, Tim Seamans)*

### Response

Temperature limits are established by applying criteria in 25 Pa. Code Chapters 92a, 93, and 95, as well as the Thermal Discharge Limit Calculation spreadsheet developed from DEP's Implementation Guidance for Temperature Criteria , DEP-ID 391-2000-017. A mass balance calculation is performed that accounts for:

- the discharge flow;
- the low-flow of the stream (Q7-10);
- the ambient seasonal temperature based on the stream classification and the downstream combined flow; and
- maximum temperature based on season and stream classification.

This is used to limit the highest temperature discharge from Outfall 001 in order to protect aquatic life.

## 9. Comment

*General concern about the pH limits. (Bernie McGurl, Charles Charlesworth, Allison Petryk, Tim Seamans)*

### Response

A pH range of 6-9 S.U. is the standard range for discharges to streams designated CWF like Grassy Island Creek and the Lackawanna River, which is designated HQ, CWF, pursuant to Table 3 in 25 Pa. Code § 93.7 and 25 Pa. Code § 95.2.

In the permit, the pH range limits are expressed as a minimum of 6 S.U. and a maximum of 9 S.U. at all times.

## 10. Comment

*Concern about the Total Dissolved Solids (TDS) limit. (Bernie McGurl)*

### Response

Chapter 95 of the Department's regulations (25 Pa. Code Chapter 95) addresses wastewater treatment requirements, including those applicable to new and expanding mass loadings of TDS, which are found at 25 Pa. Code § 95.10. TDS limits included in the NPDES permit are more conservative than the requirements in 25 Pa. Code § 95.10 and are protective of the receiving



stream. Therefore, the Department does not anticipate any issues of concern resulting from the TDS limit.

#### **11. Comment**

*Concern about the use of a once through cooling system rather than a closed loop. (Josh Seamans, Tim Seamans)*

#### **Response**

While this subject is not specifically regulated under this NPDES permit application review, the Department is providing a response.

Lackawanna Energy will not use a once-through cooling system, nor a closed loop (evaporative cooling tower) system. Lackawanna Energy will use Air Cooled Condensers which require less water and do not discharge as much as either a once-through or a closed loop evaporative cooling tower system.

#### **12. Comment**

*Concern regarding the operations, maintenance, and clogging of reverse osmosis system. (Bob Bolus)*

#### **Response**

There will be a reverse osmosis system at the station designed to create highly purified water for use in the steam cycle at the plant. This process is commonly used in the power industry. In Part B-Management Requirements, Section D-Proper Operation and Maintenance of the NPDES Permit, the Permittee is required at all times to properly operate and maintain all facilities and systems of treatment and control.

#### **13. Comment**

*General concern regarding potential spills. (Emily Palermo)*

#### **Response**

As required by the NPDES and other environmental permitting processes, Lackawanna Energy has prepared and submitted a Preparedness, Prevention and Contingency Plan ("PPC Plan") and Spill Response Plan to DEP. This plan includes an Emergency Response Plan and a Spill Prevention, Control and Countermeasures ("SPCC") Plan consistent with DEP policy and federal regulations.

These plans provide procedures to prevent and mitigate any possible spills from the site and ensure all chemicals will be stored according to DEP and federal regulations. This includes providing secondary containment around chemical storage vessels, cover areas as necessary,

unloading containment, instruments to detect any leakage before it can leave the site, and coordination with local emergency responders and DEP as necessary.

#### **14. Comment**

*Concern regarding Lackawanna Energy's ability to treat other wastewater under the existing permit. (Bernie McGurl)*

#### **Response**

While the NPDES permit contains standard language in Part A that is applicable to the treatment of other wastewater, Lackawanna Energy's permit only allows for the treatment of air-cooled condenser cooling tower blowdown, low volume industrial wastewater (discharges from oil/water separator, reverse osmosis system, electrode ionization system, evaporative cooler, wash water and miscellaneous plant wastewaters), and chiller effluent generated on site.

Changes to the waste stream or taking in outside wastes would require a permit amendment and potentially anti-degradation analysis.

#### **15. Comment**

*Concern regarding the metals TMDL for Grassy Island Creek. (Bernie McGurl, Charles Charlesworth)*

#### **Response**

Grassy Island Creek is affected by abandoned mine drainage. The Grassy Island Creek TMDL addresses the three primary metals (iron, manganese, and aluminum) associated with abandoned mine drainage.

Limits for total iron, total manganese, and total aluminum were added to the NPDES permit. As a new discharge, there is no Waste Load Allocation assigned to this facility as part of the TMDL and it is not expected to contribute to further metals impairment.

#### **16. Comment**

*General concern about discharge quantity. (Tim Seamans and Rella Scassellati)*

#### **Response**

The Permittee may discharge up to 0.29 MGD of industrial wastewater including stormwater associated with the industrial activities. There is no discharge limit set for stormwater, which is separate from and in addition to any industrial wastewater discharge. Any request to increase the industrial wastewater discharge would require another anti-degradation analysis and a permit amendment.

## **17. Comment**

*General concern about reuse of water obtained from Pennsylvania American Water. (Bob Bolus, Josh Seamans)*

### **Response**

While this subject is not specifically regulated under this NPDES permit application review, the Department is providing a response.

The raw water from Pennsylvania American Water will be reused to the greatest extent possible. Lackawanna Energy's discharge of industrial waste (IW) is limited to 0.29 MGD.

The permit application included an evaluation of a zero liquid discharge system as a non-discharging alternative consistent with the requirements of DEP's anti-degradation policy. The evaluation concluded that the system was not feasible due to the additional environmental impacts (excessive energy consumption and solids disposal).

## **18. Comment**

*Concerns about stormwater basin size and retention times. (Tim Seamans)*

### **Response**

While this subject is not specifically regulated under this NPDES permit application review, the Department is providing a response.

The Department's Waterways and Wetlands Program and the Lackawanna County Conservation District have determined adequate basin size and retention time for management of stormwater from the site. This will provide for ground water recharge through infiltration and peak- rate attenuation from pre-construction condition to post-construction condition changes of impervious area on the site.

Non-polluting stormwater will be discharged from the facility through two (2) outfalls. The Lackawanna Energy is required to install, operate and maintain BMPs as required under 25 Pa Code Chapter 102 for stormwater treatment and discharge associated with construction activities and to install, operate and maintain BMPs for industrial stormwater treatment and discharge from the facilities. The BMPs and associated monitoring required under the PAG-03, General Permit for Discharge of Stormwater Associated with Industrial Activity, have been incorporated into this permit.

## **19. Comment**

*How has a statistically significant number of site specific background concentrations been determined. (John Mellow)*

## **Response**

Ambient water quality, or background concentrations, were determined utilizing Water Quality Network Station data from 0181 Little Bushkill Creek as the reference station. The Little Bushkill Creek has a large watershed, is in the same physiographic province as most of the Lackawanna River watershed, and has similar land use. Data collection for the selected values began in 2010 and ended in 2014.

## **20. Comment**

*Concern about the difference in limits generated by PENTOX versus USEPA models. (John Mellow)*

## **Response**

The values in Pennsylvania-specific PENTOX are generally more stringent than the national USEPA models due to the Commonwealth-specific nature of the data.

## **21. Comment**

*Concern about the compliance history of the applicant. (John Mellow)*

## **Response**

During the permit application review process, the applicant's compliance within the Commonwealth is considered. Unpermitted wetlands disturbance violation during geotechnical testing of the site dated August 15, 2014 by Lackawanna Energy have been restored by Lackawanna Energy and have been confirmed by DEP through a follow-up inspection on July, 2015. Lackawanna Energy currently does not have any open violations within the Commonwealth.

## **22. Comment**

*What limits would be applicable to potential contaminants (such as benzene, toluene, methane, VOCs and Semi-VOCs) if sampled and found above appropriate detection levels? Would this take into consideration USEPA Region III Risk Based Concentrations or Agency for Toxic Substances and Disease Registry (ATSDR) risk levels? (John Mellow)*

## **Response**

Several of the parameters mentioned are included in EPA's 126 Priority Pollutant list found in 40 CFR Part 423, Appendix A. As per 40 CFR 423.13(d)(1), there are to be no detectable amounts of the 126 priority pollutants contained in chemicals added for cooling tower maintenance, with the exception of Total Zinc and Total Chromium. The Department has expanded this condition

to the IW discharge, and added a permit condition that if any of the 126 priority pollutants are utilized, daily monitoring will be required for no detectable amount in the effluent.

There is also a limit for Oil and Grease for the industrial wastewater discharge included in the permit.

Any limits applied to the discharge would be based on using the most stringent ELGs, TMDL, ABACT, and QBEL for each parameter of concern.

### **23. Comment**

*Concern about the excavation of the old landfill at the proposed location. (Rich Demboski)*

#### **Response**

While this subject is not specifically regulated under this NPDES permit application review, the Department is providing a response.

A Waste Management plan describing in detail how any waste that might be encountered during the development of the site will be handled was submitted to the Department, reviewed by the Department's Waste Management Program, and approved. The Waste Management plan includes details of how the activities will be monitored to ensure the safety of the workers on site, the community, and the environment. There will be trained personnel on site at all times when any old waste material is disturbed. These trained individuals will monitor the air for potential worker exposure to hazardous chemicals and they will assess any waste material encountered to determine if it is typical municipal waste or waste that needs to be further evaluated. If waste materials need to be further evaluated, it will be segregated and tested. Depending on the nature of material that is removed or excavated, proper storage, transportation, and disposal procedures will be determined. If hazardous materials are encountered, the area where the materials are found will be evaluated for potential further remediation measures.

### **24. Comment**

*Concern about water resource impacts from Marcellus gas drilling induced by the project. (Allison Petryk)*

#### **Response**

Water resource impacts from other off-site activities, which are not owned or controlled by Lackawanna Energy, are separately regulated and consideration of those activities under this permit application is not appropriate. Undefined Concerns about possible impacts on unspecified water resources from Marcellus gas drilling that may allegedly be induced by this project are very speculative and not within the scope of the Department's review of this permit application for this facility.

## **25. Comment**

*General concern about endangered species and general impacts to plants and animals. (Bob Bolus)*

### **Response**

Lackawanna Energy has performed a Pennsylvania Natural Diversity Inventory (“PNDI”) search of the project area and consulted with other state and federal agencies responsible for wildlife management. The latest PNDI search was conducted on May 11, 2015. It identified potential impacts to the Small-Footed Bat and both the Colin’s Sedge and Tuckerman’s Pondweed species of plants. These potential impacts were forwarded to the PA Game Commission and PA Department of Conservation and Natural Resources for further review, whereby both agencies responded that no impacts are likely from the proposed Lackawanna Energy plant.

## **26. Comment**

*These individual’s comments are in support of the Project. (Mike Guida)*

### **Response**

The Department acknowledges the individual who submitted comments in favor of the project.

## **FINAL DETERMINATION**

Pursuant to 25 Pa. Code Chapter 127, all comments submitted during the public comment period and received at the public hearing have been reviewed, considered and addressed appropriately in this document. After consideration of all comments received and revisions made to the permit application, the Department is issuing NPDES Permit PA0275727 to Lackawanna Energy Center, LLC for the construction and operation of its proposed power generation facility in the Borough of Jessup, Lackawanna County. Pursuant to its NPDES Permit, Lackawanna Energy is permitted to discharge up to 0.29 MGD industrial wastewater discharge to Grassy Island Creek and it shall meet the discharge limitations and the conditions set forth in the NPDES Permit, as well as comply with all applicable State and Federal water quality regulatory requirements.