# COMMONWEALTH OF PENNSYLVANIA

#### **Department of Environmental Protection**

570.621.3118 September 13, 2016

### PUBLIC HEARING REPORT

on

New Enterprise Stone & Lime Co., Inc. dba Eastern Industries, Inc.'s Revision & Renewal of NPDES Permit No. PA0224499

SUBJECT: New Enterprise Stone & Lime Co., Inc. dba Eastern Industries, Inc.

NPDES Permit Revision & Renewal Application No. PA0224499

Kutztown Quarry Operation

(Noncoal Surface Mining Permit Nos. 7774SM3A1 & 06940301) Maxatawny Township and Kutztown Borough, Berks County

TO:

File

FROM:

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Licensed Professional Geologist Pottsville District Mining Office

THROUGH: Nathan A. Houtz, P.G.

Environmental Group Manager District Mining Operations Pottsville District Office

This report is intended to summarize concerns expressed during the public comment period, including those at the public hearing held on August 10, 2016, and to provide responses and recommendations to comments received during the public comment period regarding New Enterprise Stone & Lime Co., Inc. dba Eastern Industries, Inc.'s (Eastern Industries) application for revision and renewal of its National Pollution Discharge Elimination System (NPDES) permit for its noncoal quarry operation known as the Kutztown Quarry located in Maxatawny Township and Kutztown Borough, Berks County.

# Background

The original NPDES Permit No. PA0224499 was issued to Eastern Industries on March 7, 2006, in association with the Large Noncoal Surface Mining Permit (SMP) No. 7774SM3A1 and SMP No. 06050301 pursuant to the Noncoal Surface Mining Conservation and Reclamation Act, The Clean Streams Law, and Chapter 77 of the Rules and Regulations of the Department. The NPDES permit covers both SMP areas. The Department renewed Eastern Industries' NPDES Permit on October 21, 2010, for an additional five (5) years.

The Kutztown Quarry is currently operated by Eastern Industries under two (2) SMPs:

- 7774SM3 Kutztown Quarry, permit issued Feb. 28, 1977, for an area of 205.0 acres,
- 06050301 Kutztown East Quarry, permit issued April 25, 2006, for an area of 54.1 acres.

The above two mining permits currently include a total of 259.1 acres of which 125.28 acres are planned to be directly affected by mineral extraction of dolomite of Allentown Formation (Cambrian sedimentary rock). The mine site is located on the Topton, Pennsylvania US Geological Survey 7.5 minute topographic map, approximately 1,000 feet southeast of the intersection of Quarry and Hinterleiter Roads.

The NPDES Permit covers the acreage of both Kutztown Quarry and Kutztown East Quarry (currently SMP Nos. 7774SM3A1 and 06050301).

The NPDES Permit includes one water discharge point and authorizes a discharge of 5,000 gallons per minute (gpm) of groundwater and precipitation water from the mine pit sump via a settling basin. The receiving stream for this NPDES discharge point is Sacony Creek, which is classified as Cold Water Fishes (CWF) and Migratory Fishes (MF) in 25 Pa. Code Chapter 93.

### **Current Application**

On December 9, 2015, Eastern Industries submitted an NPDES Permit renewal application No. PA0224499, and on April 25, 2016, sent a revision to the pending December 9, 2015, submission. The revised NPDES Permit renewal application requests an increase of the quarry discharge from the currently approved 5,000 gpm to 8,000 gpm. This request is related to pending applications for revision of the existing two (2) Large Noncoal Surface Mining Permits. The purpose of the first revision (SMP application No. 7774SM3C9) is to incorporate SMP No. 06050301 (Kutztown Quarry East) into SMP No 7774SM3 (Kutztown Quarry). The purpose of the second revision (SMP application No. 7774SM3C10) is to authorize an additional 50 foot depth increment for the entire quarry from the currently approved elevation of 350 feet Mean Sea Level (MSL) to an elevation of 300 feet MSL (depth correction application). The deepening of the quarry will necessitate an increase in the volume of water discharged to Sacony Creek from the currently approved 5,000 gpm to 8,000 gpm, and thus require revision of the NPDES Permit pursuant to the Noncoal Surface Mining Conservation and Reclamation Act, The Clean Streams Law, and Chapter 77 of the Rules and Regulations of the Department.

### **Application Highlights**

**Public Hearing Information** 

A public notice describing the NPDES Permit application was advertised by the applicant in the Reading Eagle on 5/2/2016, 5/9/2016, 5/16/2016 and 5/23/2016. A public hearing was requested in response to the public notice. Public notice of the hearing was advertised by the Department in

the Reading Eagle on July 27, 2016. The Public Hearing was held on August 10, 2016, at the Kutztown Area Middle School, 10 Deisher Lane, Kutztown, PA 19530.

At this public hearing, the Department was represented by the writer of this report and the following people: Michael J. Menghini, District Mining Manager (Pottsville District Mining Office); Nathan A. Houtz, P.G., Environmental Group Manager (Pottsville District Mining Office); Robyn Katzman Bowman, Supervisory Counsel (Southcentral Regional Office); Shawn G. Cable, Environmental Engineer Manager (Southcentral Regional Office, Safe Drinking Water Program); Derrick A. Havice, Licensed Professional Geologist (Southcentral Regional Office, Safe Drinking Water Program); Larry B. Smith, Licensed Professional Geologist (Southcentral Regional Office, Environmental Cleanup and Brownfields Program); and John M. Repetz, Environmental Community Relations Coordinator (Office of Communications) who also served as the Hearing Moderator.

The applicant, New Enterprise Stone & Lime Co., Inc. dba Eastern Industries, Inc. was represented by Jeffrey Detweiler, Pennsylvania President (New Enterprise Stone & Lime Co.); William R. "Rusty" Taft, Geo-Environmental Manager (New Enterprise Stone & Lime Co.); and Louis F. Vittorio, the applicant's consultant (EarthRes Engineering and Science).

Approximately 70 people attended the Public Hearing for the Eastern Industries NPDES Permit application for the Kutztown Quarry. The Moderator reviewed the hearing agenda and announced that the hearing would be transcribed by Sargent's Court Reporting Service. Jeffrey Detweiler, representing the applicant, was introduced by the Moderator and allowed to provide a short description of his company's profile and production goals. Following that introduction, the hearing was opened for attendees to provide comments regarding the NPDES Permit application that is pending before the Department.

At the end of the public hearing, the Department announced that the public comment period would be extended to September 10, 2016, in order to allow citizens additional opportunity to advise the Department of concerns relative to the NPDES Permit application under review. Numerous letters and emails were received during the extended comment period which have been made part of the hearing record.

Before the formal Public Hearing began and at the conclusion, the Department along with the applicant made themselves available to answer questions and to provide technical explanations regarding the NPDES Permit application and related pending surface mining permit revisions.

## **Concerns and Recommendations**

The comments and concerns raised at the Public Hearing and in the extended comment period are listed below. Recommendations for Department action regarding the concerns related to the pending NPDES Permit application immediately follow.

**Concern 1**: The quantity and quality of water will be affected by this quarry. In evaluating the proposed increase of water pumped from the quarry and discharged to Sacony Creek from the currently approved 5,000 gpm to 8,000 gpm, the Department must carefully consider that

- the aquifer from which the quarry draws water also supplies water for the Kutztown Borough wells and private wells in surrounding areas including Maxatawny Township.
- **Recommendation**: The depth correction application contains an evaluation of the affects that the proposed increase in groundwater pumping will have on the aquifer and surrounding wells. The applicant has included a groundwater model showing the expected zone of influence resulting from an increase in the depth of the quarry and pumped discharge. The Department is currently reviewing this information to determine whether the applicant has accurately characterized the groundwater hydrology.
- **Concern 2**: Discharging significantly more water into Sacony Creek increases the potential for pollutants to reach this waterway.
- **Recommendation**: The current NPDES permit contains effluent limits and provisions to prevent contaminated water from being discharged from the quarry to Sacony Creek. Any revisions to the existing NPDES permit will also contain appropriate effluent limits.
- **Concern 3**: There is already an agreement in place between the Borough and the Quarry owners which requires the discharges to be monitored for toxic pollutants. They (Eastern Industries, Inc.) do not follow the agreement conditions.
- **Recommendation**: The Department has no jurisdiction to enforce a private agreement between the Borough and Eastern Industries. The current NPDES permit contains effluent limits and provisions to prevent contaminated water from being discharged from the quarry to Sacony Creek. Any revisions to the existing NPDES permit will also contain appropriate effluent limits.
- **Concern 4**: Introducing more discharge into the Creek could throw the ecosystem out of kilter, adversely impacting aquatic life.
- **Recommendation:** The Department is currently reviewing the depth correction application to ensure that the proposed mining plan and related erosion and sedimentation controls are adequate in design to protect the receiving stream and its aquatic life.
- **Concern 5:** The Department must consider the legacy environmental impacts of approving this proposal. These impacts include among other things, long-term liability of the aquifer and lasting impact to the ecosystem of the creek.
- **Recommendation:** The Department is currently reviewing the depth correction application to ensure that the proposed mining plan and related erosion and sedimentation controls are adequate in design to protect the receiving stream and its aquatic life. The current reclamation plan for the quarry after mining is completed is to allow the quarry to fill with water, restoring groundwater levels in the immediate area of the quarry.
- Concern 6: Kutztown and the surrounding municipalities are dependent upon this local aquifer for our water, so that we have the water we will continue to need. We are requesting the Department of Environmental Protection to deny the New Enterprise Stone & Lime request for a revised NPDES Permit.

- Recommendation: The Department is currently reviewing the depth correction application to ensure that the effects of the proposed mining on the hydrologic balance, in particular, the potential to adversely affect the quality and quantity of any water supplies located within the anticipated zone of quarry influence (cone of depression) are addressed. As part of the hydrology module of the application, the applicant must identify all water supplies and sources located within 1,000 feet (305 meters) from the proposed surface mining permit boundary and within the anticipated cone of depression. Additionally, all available information related to well construction, yield, water quality, and a viable plan for the restoration or replacement of water supplies which may be detrimentally affected by mining activities must be included in the hydrology module.
- Concern 7: In December of 2015, the professional geologist and water supply specialists for the Kutztown Borough presented a report, dated December 9, 2015, to our Borough Manager. In this report the Borough geologist stated that within the 20.5 square mile contribution, the amount of groundwater available to the Borough wells through the local aquifer is estimated to be 10.4 mgd (million gallons per day). The current NPDES permit allows dewatering up to 7.2 mgd, which is approximately 69% of the available groundwater in our aquifer. Approving additional water discharge would dewater our local aquifer in excess of 100%.
- **Recommendation:** The depth correction application contains an evaluation of the affects that the proposed increase in groundwater pumping will have on the aquifer and surrounding wells. The applicant has included a groundwater model showing the expected zone of influence resulting from an increase in the depth of the quarry and pumped discharge. The Department is currently reviewing the above-referenced application to ensure that the effects of the proposed mining on the hydrologic balance, in particular, the potential to adversely affect the quality and quantity of the area aquifer, including all water supplies located within the anticipated zone of quarry influence (cone of depression), are addressed.
- **Concern 8:** Borough geologists discuss in the report that there is no empirical evidence that the Stonehenge formation separates the quarry from the Borough's wells, contrary to the mining company's assertion that the referenced above formation acts as a hydrogeological barrier.
- **Recommendation:** As part of the depth correction application, the applicant submitted geologic and hydrogeologic information that characterizes hydrogeologic properties of the geologic formations in the quarry and the surrounding area. This information includes hydrologic data collected from area wells. The Department will ensure that all available geologic and hydrogeologic info is taken into consideration during the application review.
- **Concern 9:** The cessation of pumping from the quarry is resulting in an immediate, steady rise in water levels within the Borough wells. This real information supports the theory that the quarry pumping has created a low flow depression in the water level observed within the Borough's wells.
- **Recommendation:** To date, the Department has not received any data supporting the above referenced claim from the Borough of Kutztown or its geologists.

- **Concern 10:** An increase in mine discharge water, dumped into the Sacony, may necessitate the floodplain boundaries for Kutztown Borough to be extended due to changes in overflow patterns from the creek.
- **Recommendation:** The Department will consider the effects that the additional discharge will have on Sacony Creek, and will ensure that an increase in the proposed discharge will not expand the actual size of the floodplain.
- **Concern 11:** The people's need for a reliable, clean water supply must be valued above the mining company's desire for greater profits.
- Recommendation: The Department is currently reviewing the depth correction application to ensure that the effects of the proposed mining on the hydrologic balance, in particular, the potential to adversely affect the quality and quantity of any water supplies located within the anticipated zone of quarry influence (cone of depression) are addressed. As part of the hydrology module of the application, the applicant must identify all water supplies and sources located within 1,000 feet (305 meters) from the proposed surface mining permit boundary and within the anticipated cone of depression. Additionally, all available information related to well construction, yield, water quality, and a viable plan for the restoration or replacement of water supplies which may be detrimentally affected by mining activities must be included in the hydrology module.
- **Concern 12:** At the present pumping level, the mine discharge water entering Sacony Creek at certain times during the year has cloudy sediment that creates a milky plume of water far downstream of the discharge point. This increase in sediment will likely cause an increase in turbidity of the stream
- **Recommendation:** The current NPDES permit contains effluent limits and provisions to prevent discharge of sediment-laden water from the quarry. Any revisions to the existing NPDES permit will also contain appropriate effluent limits. Any discharge that does not meet the approved NPDES limits will result in an enforcement action. The Department is currently reviewing the depth correction application to ensure that the proposed mining plan and related erosion and sedimentation controls are adequate in design to protect the receiving stream and its aquatic life.
- **Concern 13:** The mine discharge water is also known to contain perchloroethylene or PCE, which has the potential for further negative impact.
- Recommendation: The current NPDES permit contains effluent limits and provisions to prevent discharge of contaminated water from the quarry. Any revisions to the existing NPDES permit will also contain appropriate effluent limits. The water contamination from the Topton site, which is located to the southeast of the surface mining permit area, is being monitored by the Department's Southcentral Regional Office (SCRO) for volatile organic compounds (VOCs), including PCE. The Pottsville District Mining Office is working with the SCRO to determine the extent of monitoring that needs to be conducted at this Eastern Industries site. The Department will require Eastern Industries to revise the surface mining permit's surface and groundwater monitoring plan to include sampling for contaminants from the Topton site, where necessary. This will be in addition to the standard mining related water monitoring

parameters. The quarry discharge will be monitored for contaminants associated with the Topton site to ensure that regulatory standards are met and, if contaminated water does enter the pit sump, it will be treated as necessary under guidance of the SSouthcentral Regional Office.

- **Concern 14:** There is a monitoring well No. 3, which is supposed to be monitored monthly, if not more frequently. Today I went to the well and the weeds are high and I haven't seen anybody check that well in a year.
- **Recommendation:** The Department requires Eastern Industries to comply with the water monitoring requirements in the approved monitoring plan.
- **Concern 15:** This quarry is getting away with a lot of things. They took the fence down. It's the fence that is supposed to protect people from going into the quarry.
- **Recommendation:** Eastern Industries is required to comply with all mining regulations related to the safety of the public. The mine site fencing, however, is not required by the Department's regulations.
- Concern 16: This is not a reputable company. The Company is in major debt. It is actually the banks that are making all of the decisions since the company was taken by them in 2013. Okay, what I recommend to DEP is, which is in their regulations, that bonds are be put up.
- **Recommendation:** The Department requires that adequate reclamation bond be posted to reclaim the site to the approved reclamation plan. Prior to approval of any permit revision that results in an increase in reclamation bond, the additional amount bond has to be posted.
- Concern 17: How long it will take us to fight this company to get a new well in? The bond is needed. This bond is for the operation and maintenance costs in perpetuity. Permanent payment will be accomplished by the operator actually paying the ongoing increased operation and maintenance costs and will be assured by the operator posting a bond in the sufficient amount.
- **Recommendation:** When the Department determines that an operator has affected a water supply, the operator is required to replace the affected water supply, supply temporary water to the affected owner and, if required, cover any increased operation & maintenance costs associated with the replacement water supply in perpetuity. To cover the costs of the water supply replacement or restoration, the Department requires the operator to secure either a water replacement bond or obtain water loss insurance.
- **Concern 18:** Climate change is causing extreme weather phenomena. So the quarry will pump the most following heavy rainfall and this will reduce the recharge of groundwater.
- **Recommendation:** Pumping of surface water runoff following a heavy rainfall is a common occurrence with all stormwater management controls and does not reduce recharge of the aquifer.

- Concern 19: I, Kutztown University biologist, and my students have sampled the fish and the aquatic insects over the past year up and downstream of Sacony Creek from the mine discharge. The results show a higher number of parasites and diseases downstream. How changes in water flow and chemistry will affect the incidents of parasitism and amount of insects (fish source of food) is difficult to predict. So I urge not to disturb the balance of the species, and the population numbers should be equally important and taken into consideration.
- **Recommendation:** The current NPDES permit contains effluent limits and provisions to prevent discharge of contaminated water from the quarry. Any revisions to the existing NPDES permit will also contain appropriate effluent limits.
- Concern 20: Without water below ground to keep the surface soil in place, sinkholes can occur.
- **Recommendation:** Sinkhole repair plans are required for all noncoal surface mining permit applications where there is the potential for sinkholes to occur. The associated permit application for depth correction does contain a sinkhole repair plan.
- Concern 21: And thinking of potential financial burdens for the residents of the surrounding area, what escrow would DEP require of the mining company to set aside in order to cover the costs of testing the water and the redrilling of wells that go dry?
- **Recommendation:** To cover the costs of the water supply replacement or restoration, the Department requires the operator to secure either a water replacement bond or obtain water loss insurance.
- Concern 22: I moved here (Kutztown area) 20 -25 years ago and Sacony Creek had fresh (water) clams in it everywhere or fresh mussels. I fished many times down below the discharge and I don't see these fresh clams there. It's not to say that they're not there, but they're definitely not there at the same density.
- **Recommendation:** The current NPDES permit contains effluent limits and provisions to prevent discharge of contaminated water from the quarry. Any revisions to the existing NPDES permit will also contain appropriate effluent limits.
- **Concern 23:** If DEP decides to approve an increase in the discharge, I suggest that they could recommend that a study be conducted on the excess water for constructive use.
- **Recommendation:** The Department has no authority to require a study for utilization of quarry discharge water.
- **Concern 24:** What is the role of the DEP Mining Division decision relative to the Borough having approved source water protection plan?
- **Recommendation:** The Department is currently reviewing the depth correction application to ensure that the effects of the proposed mining on the hydrologic balance, in particular, the potential to adversely affect the quality and quantity of any water supplies located within the

anticipated zone of quarry influence (cone of depression) are addressed. The Pottsville District Mining Office had no involvement in the Borough's source water protection plan.

Concern 25: I feel vibration in my home and I'm still concerned that it will ruin my well.

**Recommendation:** This comment is not related to the proposed NPDES Permit revision and renewal application. The operator is required to adhere to the approved blast plan and the applicable regulations on explosives use and storage, Chapters 210 and 211 of Title 25 Pennsylvania Code, and the requirements for use of explosives on a noncoal mine site — Sections 77.561-565 of the Pennsylvania Code. Complaints concerning blasting can be directed to the Pottsville District Mining Office by phone (570-621-3118) or in writing (5 W. Laurel Boulevard, Pottsville, PA 17901).

**Concern 26:** In fact, you (Department) are constitutionally bound, to do so under Article One, Section 27 of the Pennsylvania Constitution, to do the right thing and reject this permit.

**Recommendation:** The Department will ensure that Eastern Industries complies with all regulations and that Article I, Section 27 is implemented as required to protect people's right to clean air, pure water, and the preservation of the natural, scenic, historic and esthetic values of the environment.

#### Summary

The pending NPDES Permit renewal application for Eastern Industries, Inc., Application No. PA0224499, is under review and will be carefully evaluated on the merits of the information submitted to the Department by the applicant and by other parties and agencies involved in the permit application review process. Concerns deemed to be within the jurisdiction of the Department as expressed in the public hearing testimony and any written submission by citizens, municipal officials, elected officials or federal or state agency representatives will be considered. Issuance of the NPDES Permit renewal will be held in abeyance until such time as the Department is fully satisfied that the application complies with all applicable requirements of the Noncoal Surface Mining Conservation and Reclamation Act, Title 25 of the Pa. Code, Chapter 77, Rules and Regulations of the Department, and the Clean Streams Law thereby ensuring compliance with Article I, Section 27 of the Pennsylvania Constitution.

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File
MS1-EII Kutz Hearing (12-16)

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