

## SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street . Harrisburg, Pennsylvania 17110-1788 Phone (717) 238-0423 • Fax (717) 238-2436 Web http://www.srbc.net

#### Groundwater Withdrawal Application Summary

Source Name: Laflin Well 5 SRBC Pending No.: 2022-128

This summary is only a portion of the application materials and is meant to provide general information about the proposed project.

1.1 Project Sponsor

Company Name: New Enterprise Stone & Lime Co., Inc.

Mailing Address Line 1: PO Box 77

Mailing Address Line 2:

City: New Enterprise

State: PA ZIP Code: 16664

Contact Person:

First Name: Carolyn Last Name: Speicher

Title: Geo-Environmental Manager

Telephone: 814-224-6828

Fax: Mobile:

CSpeicher@nesl.com E-mail:

### 1.3 Existing and Projected Facility Water Use

The usage should be entered in million gallons per day (mgd) and rounded off to the nearest one thousand gallons (three decimal places).

Projected Heage

Projected Design Year:

2036

<b>Total Project Water Usage</b>	Existing Usage (mgd)	For Design Year (mgd):
Maximum 30-day Average Water Demand :	0.933	1.03
Maximum Daily Water Demand:	1.07	1.18
System Capacity:	1.71	1.71
1.4 Requested Withdrawal Amour	nt:	

#### 1.4 Requested Withdrawal Amount:

Estimated Daily Hours of Operation per Day (Ex. = 5): 10 Maximum Instantaneous Withdrawal Rate (gpm): 475 Maximum 24-Hour Day (mgd): 0.684 Maximum 30-Day Average (mgd): 0.209

#### 2.2 Facility Location

Please enter the address of the parcel where the Project Facility is located.

Street Address: 215 East Saylor Ave, Wilkes-Barre

State: PA

County: Luzerne

Municipality: Laflin Borough

Zip Code: 18702

Subbasin: Middle Susquehanna



# Description of the Laflin Quarry Facility, and the Water Needs and Usage Summary, Wilkes-Barre, Pennsylvania

## Introduction and Background

NESL is the owner of the Laflin Quarry mining facility and will be the owner for the foreseeable future. The facility has been mined for aggregate since 1991, started by Pioneer Aggregates. The facility mines sandstone and siltstone by open pit quarrying methods. Historical abandoned coal mines dating back to the late 1800s and early 1900s exist beneath the facility. The site is located in the Wilkes-Barre, Pennsylvania area, and is accessible from Exit 170 off of Interstate 81 Northbound.

After Continental Placer (2018; Figure 1), the top-down order of the coal veins and associated mines beneath the facility is: the Marcy coal vein and mine, the 3-Foot vein (no mine), the Ross vein and mine, the Top Red Ash vein and mine, and the Bottom Red Ash vein and mine. Six deep wells, W1 through W6, have been drilled in a cluster to form a well field, and the wells penetrate to roughly 200 ft below grade into the mine pool. The wells were installed by the former owners of the mining operation, and submersible pumps in the wells supply the facility with needed water for aggregate processing plant for aggregate washing, wheel washing, and dust suppression on the crusher and conveyors and roadways inside the mining facility. A small exposure of the upper portion of the abandoned mine complex is found in the Laflin quarry pit, but the mine pool is not exposed as it lies below the planned ultimate depth of the quarry. The small exposure of the mine complex has created an opportunity for mine pool groundwater to be returned to the mine pool after use. The mine pool groundwater is collected at the processing plant and conveyed by a pipeline back to the infiltration basin at the quarry pit. A small portion of the pumped mine pool water is consumed by internal uses such as aggregate washing, but the large majority is returned to the mine pool through the infiltration basin.

The wells W1 through W6 have a total combined capacity of about 2,850 gpm (about 4.1 MGD, assuming a 24 hour work day). For a 10 hour work day, which is more typical, the well field has a combined yield of about 1.71 MGD. Currently the water needs are substantially less



than this combined capacity; however, for the projected design year 2036, the facility is expected to require the 1.71 MGD to meet the need for crushing, washing, and dust suppression.

Sincerely,

KCF GROUNDWATER, INC.

Jim L. Lolcama, MS, P.G. Principal and Hydrogeologist

## References and Citations

Continental Placer Inc., (2017) Project Bedrock Proposed Core-Hole Locations for Valley Stone Quarry Pioneer Aggregates, Inc. Wilkes-Barre, PA.

Continental Placer Inc., (2018) Geological Cross Sections A, B, C, D – Figure 1; In-House Site Characterization Report, for NESL – Laflin Aggregates, Wilkes-Barre, PA.