



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>

Surface Water Withdrawal Application Lycoming Creek Project Summary

SRBC Pending No.: 2020-003

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

Project Sponsor

Company Name: Green Leaf Water LLC

Address: 130 Maple Ave

Suite EB -2

State: NJ

City: Red Bank

Zip Code: 07701

Contact Person: Charlie McCague

Title: Member

Telephone: 7326732701

Fax: 7327410633

Mobile: 7326732701

Email: cmccague@fcrllc.com

Requested Surface Water Withdrawal Quantity

Projected Design Year: 2035

Existing Withdrawal Quantity: 0.9(mgd)

Requested Withdrawal Quantity: 0.9(mgd)

Maximum Instantaneous Withdrawal Rate: 695(gpm)

Estimated Daily Operation: 24(hours/day)

Requested Consumptive Use Quantity - No

Existing Consumptive Use: 0(mgd)

Requested Consumptive Use: 0(gpm)

Pre-Compact/Grandfathered CU: 0

Facility Location

Street Address: 71 Yoder Road, Cogan Station

State: PA

County: Lycoming

Municipality: Lewis Township

Zip Code: 17728

Surface Water Withdrawal Source Information

Source Name: Lycoming Creek

Source Type: stream

Subbasin: West Branch Susquehanna

Greenleaf Water LLC

2.1 Project Facility Description

Green Leaf was approved to take over Black Bear Water LLC permit in 2016.

SRBC's approval # is 20160601 for Green Leaf Water LLLC

Only change to attached facility description is added 4" Octave meters on the discharge dispensers

BLACK BEAR WATERS, LLC.
2702 Woolley Road
Wall, NJ 07719
732-539-6321

Mr. Jay Cook
Susquehanna River Basin Commission
1721 North Front Street
Harrisburg, PA 17102-2391

Dear Mr. Cook:

RE: **BLACK BEAR WATERS, LLC (#20120303)**
71 Yoder Road, Cogan Station, PA 17728
Metering Plan

Introduction

Black Bear Waters, LLC (Approval # 20120303) has been permitted by the Susquehanna River Basin Commission (the "Commission") for a surface water withdrawal permit of up to 0.900 million gallons per day (mgd) (peak day) from the Lycoming Creek. The maximum instantaneous withdrawal rate as approved by the Commission is 695 gallons per minute (gpm). The project location is located at 71 Yoder Road, Cogan Station, PA, 17728. The following outlines the intake design, metering procedures, water storage and dispensing operations for this surface water withdrawal site.

1.0 Intake Design

Black Bear Waters, LLC will operate and maintain a permanent, submerged intake system constructed in the Lycoming Creek. A 2' x 4' standard concrete inlet box will be installed flush with the existing stream bed approximately 20' from the western side of the creek edge of water. A Hendricks Architectural Products, perforated, stainless-steel plate with openings of 3/32 of an inch will be installed over the inlet box. The maximum flow rate through the 1.1% open space of the grate has been calculated at .30 ft/sec. Intake calculations can be referenced in Attachment A.

Black Bear Waters has been notified that regular inspection/maintenance of the intake plate will be necessary to ensure the plate does not get clogged with debris. To assist with maintenance of the intake screen, an air line will be installed from the stream bank into the base of the inlet box. When necessary, air supplied by a portable generator, can be connected to this line so that debris can be cleared from the intake.

Water will enter the box via gravity and flow through 12" diameter ductile iron pipe (DIP) encased in concrete at a 1% slope to a wet well, installed in the western stream bank. It is estimated that the wet well will be 16 - 18 feet deep. A duplex pump system will be installed in the bottom of the wet well, which will pump water to a 500,000 gallon storage tank. A dual-stall dispensing island will be constructed that will accommodate two hauling truck connections at the same time. The Intake System Cross Section and Detail Sheet can be referenced in Attachment B.

2.0 Duplex Pump System

Water will fill the wet well until equilibrium with the adjacent stream water level is reached. The duplex pump system will be constructed so that water levels will not drop below the level of intake during pumping. Two, 10 horsepower Meyers 4 VHA submersible pumps will be used to pump water from the wet well. A check valve will be installed on each riser pipe prior to being connected to a single feed line to the water storage tank. Both pumps will be mounted on slide rails to allow for quick removal during maintenance of the pump and during periodic debris removal. Float switches will also be installed on the pumps in the event a significant drop in water level occurs. Pump calculations, pump specifications and curve chart can be referenced in Attachment C.

An ACS355 variable frequency drive (VFD) will be installed into the circuit panel which will regulate the RPM's of the pump, insuring that water is not pumped at a rate greater than 635 gpm. Both pumps are capable of filling the storage tank at a constant rate independently. The duplex pump system will allow Black Bear to cycle pump operations to reduce prolonged stress on any one pump and still operate if a single pump should fail. The VFD specifications can be referenced in Attachment D.

3.0 Metering

The withdrawal system will utilize a Signet 2551 (insertion-style) Magmeter Flow Sensor to record daily water withdrawal from the creek. This meter will be located in a meter pit on the supply line prior to entering the storage tank. This type of meter is accurate to +/- 1% within specified normal flow ranges (7 - 1,300 gpm). The flow meter will be a blind meter and daily flow data will be sent to the site's computer operating system. Daily flows can be accessed from the site computer or by logging on to the system via internet. Photographs of the meter will be submitted to the Commission prior to initiating water withdrawal. In addition, two of these same totalizing meters will be installed on each pipe at the filling stall, which is discussed below. Calibration certifications and serial numbers for these three meters are not available at this time. These meters have been ordered from the supplier and this information will be submitted to the Commission as soon as possible. Photographs of the meter installation will also be submitted. The meter specification sheet can be referenced in Attachment E.

4.0 Water Storage

Black Bear Waters, LLC will use a Fisher Brand, welded-steel 500,000 gallon water storage tank. The tank is 40 feet tall and has a diameter of 46.5 feet. The tank will be constructed on a concrete ring-wall foundation, per the manufacturer design recommendations. Incoming water will enter the tank through the bottom-center of the tank. The tank will utilize a Keller America "Level Rat" lift station level transmitter to monitor the water level in the tank. This level transmitter will signal the pump to turn off if water levels in the tank come within 1 foot of the overflow pipe. Therefore, the effective storage of the tank will be 470,000 gallons. The water level meter information can be referenced in Attachment F.

5.0 Dispensing

A fabricated dual-stall dispensing island will be constructed on a concrete pad surrounded by steel pipe bollards. A Panel View Plus Compact touch screen monitor from Rockwell Automations will be mounted at each filling stall. This device will require truck number, driver number, pad site destination, time and date. Hauling truck operators will be required to enter this information prior to withdrawing water from the storage system. In addition, a Signet 2551 (insertion-style) Magmeter Flow Sensor will be installed at each filling stall to record the amount of water withdrawal from storage. This monitoring data will be electronically recorded by the computing system and submitted to the Commission quarterly. The Panel View monitor information can be referenced in Attachment G.