



SUSQUEHANNA RIVER BASIN COMMISSION

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Surface Water Withdrawal Application Susquehanna River Project Summary

SRBC Pending No.: 2022-108

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:	NORTHEAST MARCELLUS AQUA MIDSTREAM I, LLC		
Address:	R 347 Main Street		
		State:	PA
City:	Dickson City	Zip Code:	18519
Contact Person:	James Valvano	Title:	Managing Director
Telephone:	570-840-9142	Fax:	
Mobile:		Email:	javalvanotse@aol.com

Requested Surface Water Withdrawal Quantity

Projected Design Year:	2027
Existing Withdrawal Quantity:	5(mgd)
Requested Withdrawal Quantity:	5(mgd)
Maximum Instantaneous Withdrawal Rate:	3473(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: 105 SR 92 S

State: PA

County: Wyoming

Municipality: Tunkhannock Township

Zip Code: 18657

Surface Water Withdrawal Source Information

Source Name: Susquehanna River

Source Type: stream

Subbasin: Middle Susquehanna

Project Facility Description

Susquehanna River Water Withdrawal Northeast Marcellus Aqua Midstream 1, LLC

Introduction and Project Purpose

This renewal application is being submitted to the Susquehanna River Basin Commission (SRBC) in order to request renewal of the existing surface water withdrawal located on the Susquehanna River in Tunkhannock Township, Wyoming County, Pennsylvania. This existing withdrawal began operation 2019, and is referred to herein as the Susquehanna River Water Withdrawal, and is owned and operated by Northeast Marcellus Aqua Midstream 1, LLC (NEMAM). This withdrawal will supply water under an existing agreement to Coterra (formerly Cabot Oil and Gas). This withdrawal will be an integral component of Coterra's gas development program in the northeast, particularly in Wyoming and Susquehanna Counties, Pennsylvania.

The water withdrawn from the existing intake will be used during natural gas well drilling, cementing, and completion (hydraulic fracturing) activities at natural gas wells that are to be installed at several well pads located on Coterra's leased northeast Pennsylvania acreage in Wyoming and Susquehanna Counties. The Susquehanna River intake represents a crucial source of freshwater for Coterra's natural gas development operations in northeastern Pennsylvania since there are currently no other active, large-volume water sources located in the vicinity of the leased acreage.

Site Location

The existing Susquehanna River Water Withdrawal intake and pumping facility is located south of State Route 6 (SR-6) and east of the confluence of Tunkhannock Creek and the Susquehanna River. The existing withdrawal location is south of the Reading Blue Mountain Railroad (Railroad) property. Figure 1, Site Location Map, show the existing intake and top of bank coordinates for the Susquehanna River Water Withdrawal.

Figure 2 depicts the existing site layout plan. The existing withdrawal point is situated on a property owned by the Reading Blue Mountain Railroad. This property is shown on Figure 2 (Wyoming Recorded Deed Book 0348, Page 0877 and Deed Book 0348, Page 0975). The lift station and appurtenances that will support the operation of the intake (i.e., withdrawal pump, piping, metering, water storage, etc.) and will be located on adjacent property that is owned by Mark Tunkhannock Associates, LP (Wyoming County tax parcel number 058.0-255-03-00-00).

Existing Withdrawal Rate

The daily and instantaneous withdrawal rates for the Susquehanna River Water Withdrawal is constant on a monthly basis and will remain unchanged as part of this renewal. During hydraulic fracturing activities, Coterra's daily freshwater need is approximately 5.00 million gallons. To ensure that well completion activities can occur without interruption (and regardless of available



freshwater storage), the ideal daily maximum withdrawal volume would be 5.00 million gallons per day (mgd) year-round.

At the existing point of withdrawal, the Susquehanna River has a warm water fishes, migratory fishes (WWF-MF) designated use classification per Pennsylvania Department of Environmental Protection's 25 PA Code Chapter 93. No existing use classification exists for the river at this location.

NEMAM has decided to continue the use of the constant monthly withdrawal rate as the existing passby is anticipated to be P95. It is also anticipated that during low-flow periods, withdrawals on the River should be to maintain operations, as the existing rate is less than 10% of the monthly P95 statistic year-round. The passby statistic of P95 statistic is an appropriate passby threshold since the Susquehanna River is classified as an Aquatic Resource Class (ARC) 6 waterway at the existing intake location. The existing withdrawal rate was selected based on the demand projected by the operator. This principle, in combination with the enforcement of a passby threshold, helps to ensure that potential impacts to aquatic species due to instantaneous (i.e., initiation of pumping) and sustained or long-duration pumping / withdrawal events are prevented.

Table 1 below summarizes the previously approved monthly instantaneous pumping rate and total daily withdrawal volume threshold for the Susquehanna River Water Withdrawal. These existing rates are reasonable, will remain unchanged as part of this renewal, and are based on Coterra's projected water needs and the ability of NEMAM to convey this volume of water to in the nearby natural gas development area and based on the long-term monthly flow statistics for the Susquehanna River at the existing point of taking. Renewal of the Susquehanna River Water Withdrawal is necessary to ensure that NEMAM will have a reliable water source to support its Client's natural gas development activities in Wyoming and Susquehanna Counties for at least the next 4 years. Subsequent sections of this surface water withdrawal application provide a detailed justification of the project and the existing withdrawal rates.



Table 1. Existing Monthly Withdrawal Rates (instantaneous and total daily volumes) for the Susquehanna River – Susquehanna River Water Withdrawal

Month	P95 for Reference USGS Gage 01533400 (cfs)	10% P95 for Reference USGS Gage 01533400 (cfs)	Existing Withdrawal Rate (10% of P95 or less)		
			(mgd)	(gpm)	(cfs)
Jan	2950	295	5.00	3,472	7.74
Feb	3200	320	5.00	3,472	7.74
Mar	4980	498	5.00	3,472	7.74
Apr	7550	755	5.00	3,472	7.74
May	3680	368	5.00	3,472	7.74
Jun	1910	191	5.00	3,472	7.74
Jul	1120	112	5.00	3,472	7.74
Aug	823	82.3	5.00	3,472	7.74
Sept	787	78.7	5.00	3,472	7.74
Oct	1030	103	5.00	3,472	7.74
Nov	1530	153	5.00	3,472	7.74
Dec	3120	312	5.00	3,472	7.74

*gpm: gallons per minute
mgd: million gallons per day
cfs: cubic feet per second*

