



SUSQUEHANNA RIVER BASIN COMMISSION

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Surface Water Withdrawal Application Tioga River Project Summary

SRBC Pending No.: 2024-105

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: JKLM Energy LLC

Address: 2200 Georgetown Drive

Suite 500

State: PA

City: Sewickley

Zip Code: 15143

Contact Person: Joseph Harrick

Title: General Manager EHS

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Requested Surface Water Withdrawal Quantity

Projected Design Year: 2029

Existing Withdrawal Quantity: 0(mgd)

Requested Withdrawal Quantity: 3(mgd)

Maximum Instantaneous Withdrawal Rate: 4167(gpm)

Estimated Daily Operation: 12(hours/day)

Requested Consumptive Use Quantity - No

Existing Consumptive Use: 0(mgd)

Requested Consumptive Use: 0(mgd)

Pre-Compact/Grandfathered CU: 0

Facility Location

Street Address: PA-287

State: PA

County: Tioga

Municipality: Tioga Township

Zip Code: 16946

Surface Water Withdrawal Source Information

Source Name: Tioga River

Source Type: stream

Subbasin: Chemung

2.1 Project Facility Description

JKLM Energy, LLC (JKLM) is proposing to construct a new surface water withdrawal facility in Tioga Township, Tioga County, Pennsylvania, which will be designed to withdraw up to 3.0 million gallons per day (mgd) at a maximum instantaneous rate of 4,167 gallons per minute (gpm) from the Tioga River. The project will be known as the Wood Withdrawal, and construction is targeted for spring 2025, following receipt of necessary permits and agency approvals. The facility will involve the installation of a floating surface water intake structure and pumping and metering equipment. In order to minimize cost and impacts to the environment, JKLM intends to transfer water from the facility by pipelines rather than by over-the-road trucks. Access to the facility will be provided from State Route 287.

The proposed surface water withdrawal facility will be used to provide fresh water for the development and completion of natural gas wells targeting deep shale formations in Pennsylvania. JKLM's natural gas development projects involve transferring water from multiple sources to tanker trucks (or via pipeline) and transporting the water to well sites for use in well drilling, development, and completion. Water is stored on each well pad in aboveground storage tanks or frac tanks. Water used for fracture stimulation (or hydrofracing) of natural gas production wells must be available on-site prior to hydrofracing, and may be stored for a month or more during the setup period. It is possible water from a particular source may be delivered to several well sites during any one day.

During hydrofracing, highly pressurized fresh water (that may be blended with flowback water) and sand are injected into isolated sections (stages) of the boreholes to fracture the shale and maintain open, interconnected fractures to promote gas movement. The fracing fluid that flows back to the surface is pumped to on-site tanks for temporary storage until reused in the hydrofracing process, or pumped into tanker trucks for transport to a wastewater treatment or processing facility.

The proposed natural gas development projects in Tioga County will primarily consist of horizontal wells, with accompanying fracture stimulation and completion activities at each well. Estimates provided by JKLM indicate that, during the drilling of a horizontal well, approximately 75,000 to 100,000 gallons of water is used. Once the borehole is completed, the well is stimulated by hydrofracing, which typically requires an additional 10 million gallons per well.