



June 13, 2024

Ms. Aubrie Schnelle, Superintendent  
Moniteau School District  
1810 West Sunbury Road  
West Sunbury, PA 16061

Re: Noncommunity Water Supply Approval to Construct  
Dassa McKinney Elem Sch  
PWSID No. 5100316  
Clay and Concord Townships, Butler County

Dear Ms. Schnelle:

The Department of Environmental Protection (“Department”) has completed its review of the Noncommunity Water System Application (“NCWSA”) that was received on June 6, 2024 to describe proposed changes to the noncommunity public water system. Based on the information provided in the NCWSA, the water system modifications appear to meet the minimum design requirements. The proposed alterations to the existing water system consist of installation of two new water softeners, a new pressure tank, and appurtenances.

The Department hereby approves the proposed water system modifications as described in the NCWSA. No deviations from approved plans or specifications affecting the treatment process, quality, or quantity of water shall be made without prior written approval from the Department. If Moniteau School District intends to make any changes other than those described in the NCWSA, please contact the Department to obtain written authorization prior to proceeding.

The proposed facilities may not be placed into service until you obtain a separate operation approval from the Department. Please notify this office within 15 days of completion of the construction. At that time, the Department may schedule an inspection of the water system.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (“Board”) pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A. The Board’s address is:

Environmental Hearing Board  
Rachel Carson State Office Building, Second Floor  
400 Market Street  
P.O. Box 8457  
Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800.654.5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time period. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at <http://ehb.courtapps.com> or by contacting the Secretary to the Board at 717.787.3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

**IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717.787.3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.**

**IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.**

If you have any questions concerning this matter, please contact your Sanitarian, Alicia MacBeth, by telephone at 814.547.1794 or via electronic mail at [amacbeth@pa.gov](mailto:amacbeth@pa.gov).

Sincerely,



Matthew D. Postlewaite  
Regional Manager  
Safe Drinking Water Program

Enclosure(s)

cc: Ryan Braatz, Book & Proch Well Drilling (pdf only)  
A. MacBeth thru R. Kirby (pdf only)  
S. Mielo thru B. Schott, P.E. (pdf only)  
File

MDP:BCS:SLM:kme

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SAFE DRINKING WATER PROGRAM

**INTERNAL REVIEW AND RECOMMENDATIONS**

Applicant Moniteau School District Municipality Clay and Concord Townships Permit No. 5100316  
County Butler

**BRIEF DESCRIPTION OF PROJECT AND DISCUSSION** (Use additional sheets if necessary)

Moniteau School District submitted a Noncommunity Water System Application (“NCWSA”) for the installation of two new water softeners, a new pressure tank, and appurtenances at Dassa McKinney Elementary School. The NCWSA was received through OnBase (Ref# 238316) on June 6, 2024.



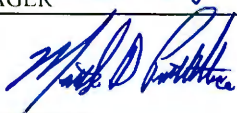
**Background:** Dassa McKinney Elementary School serves a population of about 800 with an average daily production of 4,500 gallons and a maximum daily production of 10,000 gallons. The water system is currently only using Well No. 1 as its source. Water is pumped into the water treatment plant of the school and enters an aeration tank where sodium hypochlorite is injected. The water is re-pressurized with booster pumps. The flow is measured with a 1-inch meter where it then goes through two (2) greensand filters for iron and manganese treatment. A water softener was used to remove iron and manganese and hardness but is no longer in operation. Water then leaves the water treatment plant to a buried steel storage tank for contact time. Three (3) booster pumps re-pressurize the water and a 211-gallon pressure tank is utilized before water enters the distribution system.

**Proposed Project:** The proposed project involves the installation of two (2) new alternating Clack WS2H 15 cubic foot water softeners. The 1-inch meter will be replaced with a new Pulsafeeder 1-inch water meter to record data before the water heads to the buried water storage tank. There will also be a new raw water sample tap, pressure gauge, pressure relief valve, check valve, 2-inch camlock, and a 2-inch Master Meter Octave water meter installed. The existing Well X-Trol WX-452C 211-gallon pressure tank will be replaced with the same make and model.

Water will enter the treatment plant where it will be treated by the softeners to remove iron, manganese, and hardness. The water will then be injected with sodium hypochlorite before discharging to the aeration tank. Water

CURRENT ESTIMATE OF COMPLETION DATE OF PROJECT

**RECOMMENDATION AND ACTION**

Approve	Return	Refuse	Signature	Date
✓			SAMANTHA MIELO REVIEWING ENGINEER 	6/12/24
✓			BRAD C. SCHOTT, P.E. ENVIRONMENTAL ENGINEER MANAGER 	6-12-2024
✓			MATTHEW D. POSTLEWAITE REGIONAL MANAGER 	12 Jun 2024

HYDRO GEOLOGIST REVIEW INCLUDED:  YES  NO  N/A

**PERMIT CONDITIONS:**

1. STANDARD -- N/A
2. SPECIAL (Use additional sheets if necessary) -- None

will be re-pressurized with the booster pumps and metered with the new Pulsafeeder water meter before going to the buried steel storage tank. Three (3) booster pumps will re-pressurize the water and the new pressure tank will be utilized before the water enters the distribution system of the school.

The entry point will not change; it is a spigot located inside WTP 301. The sodium hypochlorite injection point is to be moved to a location after the new softeners and before the aeration tank. It should also be noted that the greensand filters, originally used for iron and manganese treatment, were removed from the system.

The brine tanks will be 39 inches in diameter by 48 inches in height. The salt capacity is 2,200 pounds with a volume of 250 gallons. The new Well X-Trol pressure tank is 30 inches in diameter and 91 inches high.

The NCWSA indicates that the finished water hardness goal is 0 mg/L, when Part IV recommends that it should be at least 80 mg/L. The hardness of the raw water is 177 mg/L. The NCWSA states that having a target hardness of 0 will prevent hardness buildup and achieve 100% iron and manganese removal.

**Ion Exchange Softeners:** The new water softeners are made by Clack and are model WS2H. There will be two (2) units with a volume per unit of 187 gallons each (15 ft<sup>3</sup> of media each). The softeners are located after the raw water sample tap and the water meter and before the chlorine injection. The rate of softening is 6.11 gpm/ft<sup>2</sup> of bed area.

The NCWSA indicates the backwash rate will not be between 6 and 8 gpm as recommended in the Part IV manual. The manufacturer recommends a rate of 4 gpm. The NCWSA indicates that a 6 gpm backwash rate will blow all of the resin out of the softener tanks and into the drains. The backwash water from the softeners will discharge to the existing sanitary sewer system.

**Other:** The proposed materials conform to NSF/ANSI 60/61 Standards.

Laboratory testing on raw well water was performed by Environmental Service Laboratories, Inc between 2/28/2024 and 3/5/2024. Laboratory testing on the finished water was performed by Pace Analytical Services Beaver on 3/11/2024. These results showed that total alkalinity (as CaCO<sub>3</sub>) was at 180 mg/L which exceeds the reporting limit of 20 mg/L.

The raw water iron and manganese results included with the NCWSA were 0.067 mg/L and 0.058 mg/L, respectively. The combined total raw water results for iron and manganese is 0.125 mg/L, which is less than 1.0 mg/L and within the treatment capabilities of ion exchange for iron and manganese treatment.

**Recommendations:** It is recommended that Moniteau School District be granted an Approval to Construct for the installation of two (2) new water softeners, a new pressure tank, and associated appurtenances as described above and within the NCWSA.