

DOCKET NO. D-2009-039-2

DELAWARE RIVER BASIN COMMISSION

Southeastern Pennsylvania Groundwater Protected Area

**Cleveland Cliffs Plate LLC
Groundwater and Surface Water Withdrawal
Plymouth Township, Montgomery County, PA**

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on May 18, 2020 for renewal of an allocation of groundwater and surface water and review of a groundwater and surface water withdrawal project in the Ground Water Protected Area of Southeastern Pennsylvania (Application).

The Application was reviewed for approval under Section 3.8 and for a withdrawal permit under Section 10.3 of the *Delaware River Basin Compact*. The Montgomery County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on May 12, 2021.

A. DESCRIPTION

1. **Purpose.** The purpose of this project is to renew the approval of a surface water and groundwater withdrawal with a total allocation of 59.9 million gallons per month from the previously approved Schuylkill River intake, Q&T Well, and a new well designated as the FMS Well. The purpose of the new FMS Well is to replace a portion of the previously approved surface water supply which has been reduced due to the removal of a dam on the Schuylkill River. This docket retains the previously approved total allocation.

2. **Location.** The project wells are completed in the outcrop area of the Elbrook Formation and are in the Schuylkill – Crow Creek Watershed in Plymouth Township Montgomery County, Pennsylvania. The Schuylkill River near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as supporting Warm Water Fishes and Migratory Fishes (WWF, MF).

Specific location information has been withheld for security reasons.

3. **Area Served.** The groundwater and surface water sources provide water for industrial cooling and processes at the docket holder's steel plate mill. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. Design criteria. The docket holder utilizes water for contact and non-contact cooling, heat treating, and other industrial processes at its existing plate mill complex to produce finished steel plates. Currently the heating and rolling mill processes that utilize the surface water source have been idled, but surface water demands for these purposes will increase when these process resume. The current average and maximum demand over the last two years was 12.3 mgm and 20.6 mgm, respectively. In 2017 when the surface water source was utilized, the average and maximum monthly water demand was 36.6 mgm and 41.7 mgm. The docket holder provided estimates of future water demands that appear to be based on the sum of the maximum requested pumping capacities. Because the purpose of the new well was to replace a portion of the existing surface water withdrawal, Commission staff recommend that the total allocation provided by the docket remain at the total allocation previously approved by the Commission.

5. Facilities. The existing project wells and intake have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
Q & T Well	204'	Unknown / 8"	410	1959
FMS Well	220'	207' / 8"	410	2012

INTAKE NO.	WITHDRAWAL WATER BODY	PUMP CAPACITY (GPM)	7Q10 FLOW AT INTAKE (CFS)	YEAR CONSTRUCTED
River Intake	Schuylkill River	2,500	352	1955

All wells and the intake are metered.

Water is treated by addition of coagulant and flocculent and clarified to remove suspended load prior to initial or recirculated use in the industrial process(es).

The project wells are not located in the flood hazard area.

Potable water is supplied by Pennsylvania American Water Company's Norristown System.

6. Other. Industrial wastewater is conveyed to an on-site industrial wastewater treatment facility which received approval most recently under Section 3.8 of the *Compact* by DRBC Docket No. D-1979-26-3 on September 13, 2017. The PADEP issued its most recent NPDES Permit No. PA0050326, Amendment No. 2 on February 19, 2021, effective on March 1, 2020 for this treatment facility. The treatment facility has adequate capacity to continue to receive wastewater from the project.

B. FINDINGS

1. Ground Water Protected Area

The project is located within the Southeastern Pennsylvania Ground Water Protected Area delineated by the DRBC pursuant to *Compact* Section 10.2. Tests conducted by the docket holder indicate the operation of this project will not create a local water shortage.

Review and analysis of the application pursuant to Section 6.D. of the *GWPAR* result in the following:

1. The withdrawal is consistent with the Commission's Comprehensive Plan and the policies and purposes of these regulations.
2. Opportunities to satisfy water requirements on a timely basis from existing available supplies and facilities have been explored and are being utilized.
3. The withdrawal, in conjunction with other withdrawals in the applicable ground water basin, should not exceed withdrawal limits of the ground water basin, aquifer or aquifer system.
4. The withdrawal should not significantly impair or reduce the flow of perennial streams in the area.
5. Existing ground and surface water withdrawals should not be adversely impacted or will be otherwise assured of adequate supplies in accordance with the requirements of Section 10 of the *GWPAR*. No adverse impact is anticipated due to continued operation of this project.
6. The withdrawal should not cause substantial, permanent adverse impact to the overlying environment.
7. The docket holder adopted and will implement conservation and management programs as required by Section 7 of the *GWPAR*.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact to the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The docket holder's wells are located in the Schuylkill-Crow Creek subbasin (Subbasin No. 29), where total net annual groundwater withdrawal is 2,200.7 million gallons per year (mgy) and the withdrawal limit set in Section 6.I of the *GWPAR* is 1,543 mgy. The withdrawals in this basin exceed the subbasin limit because of PADEP's groundwater designation on the Aqua

Pennsylvania's (Aqua PA) Upper Merion Quarry Reservoir which has a withdrawal of 2,020.8 mgy, without this withdrawal the subbasin would be at 179.9 mgy. The permit holder is requesting an annual allocation of 380.4 mgy, a fraction of which will be returned to groundwater. However, even if no water from this project were returned to groundwater, the total net annual groundwater withdrawal from this subbasin would remain below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from the permit holder's wells, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

2. Drought Management and Contingency Plans (DMCPs) for Water Withdrawal greater than 1 mgd

Section 2.3.5.1 C. of the Commission's *Rules of Practice and Procedure (RPP)*, requires industrial and commercial water withdrawals in excess of one million gallons per day to develop a contingency plan including emergency conservation measures to be instituted in the event of a Commission declared drought or other water shortage. Resolution No. 83-14 amended the Commission's *Water Code* (Section 2.1.4) to include the conservation goal of a 15 percent reduction in depletive use during drought conditions. Hereafter referred to as drought management and contingency plans (DMCPs), DMCPs must contain the following: source of water supply; the average daily and monthly peak water withdrawal; average daily and peak monthly consumptive use (difference between quantity withdrawn and quantity returned to the ground or surface waters of the basin); description of recycling and conservation measures; point of discharge (where water is returned or discharged); types of products produced; normal employment levels (numbers); and estimated employment (numbers) and economic impact for curtailment of water usage for the following levels of curtailment: 10%; 25%; 35%; 50% and 100%. The DMCP shall be submitted to the Commission within 6 months (December 9, 2021) of the docket approval date. The Executive Director shall review the DMCP and either require modifications or provide approval in writing if the DMCP is found to be in accordance with the Commission requirements. The docket holder shall implement the DMCP upon direction by the Executive Director. (see Section C. DECISION Condition C.5.).

3. Surface Water Charges

The docket holder shall pay for surface water use in accordance with the provisions of Resolution No. 74-6, as amended as described in Section C. DECISION Condition C.3.

4. Passby Flow

The docket holder's Schuylkill River surface water withdrawal will continue to be subject to pass-by flow requirements. The surface water intake is located approximately three miles downstream of the USGS No. 01473500 Schuylkill River at Norristown, Pennsylvania Gage. Utilizing USGS Pennsylvania StreamStats, the seven-day low flow with a ten-year recurrence interval (Q_{7-10}) was calculated to be 227.5 million gallons per day (352 cubic feet per second) at the project intake. Whenever the streamflow below the outfall is equal to or less than 352 cfs based on the USGS Norristown, Pennsylvania gaging station (USGS No. 1473500) in accordance

with the approved Schuylkill River Monitoring Plan, dated September 10, 2010, no surface water withdrawal shall be made, and the entire natural streamflow allowed to pass (see Section C. DECISION Condition C.7.).

5. FMS Well Pumping Test

The docket holder installed and began utilizing the FMS Well in 2013 to offset water supply problems with the river intake caused by the removal of a dam on the Schuylkill River. Although historic data is available and demonstrates that the well can supply the requested allocation of 18.30 mgm, additional testing was performed to assess the impact of the well on the local aquifer.

Beginning on December 7, 2020, a 48-hour constant rate pumping test was conducted on Well FMS to assess the withdrawal capabilities and potential impacts to the local aquifer system. The existing well pump was utilized during the test and the discharge rate was equal to the flow rate that occurs during normal plant operations. Because the existing inline flow meter was not able to record and log flow rates during the testing period, an ultrasonic flow meter capable of automatic recording was used during the pumping test. At the start of the pumping test, the facility's permanent inline flow meter indicated a pumping rate of 405 gpm and correlated to a flow of 360 gpm on the temporary ultrasonic meter. Water levels in the pumping well and the nearby Q&T well (365 feet from the FMS Well) were measured with pressure transducers and dataloggers during the pumping test.

At the beginning of the pumping test, the static water level in the FMS well was measured at 46.03 feet below the top of the temporary stilling tube. After 2,908 minutes of continuous pumping, the total drawdown was measured at 5.28 feet (water level of 51.31 feet below the top of stilling tube). Long term projections based on 180 days of continuous pumping, resulted in a total projected drawdown of approximately 10 feet (water level water level approximately 55 feet below top of the stilling tube). The pumping test report indicates that it does not appear that the withdrawals at FMS well affected the water levels in the Q&T Well. However, staff note that some minor drawdown may have occurred, but is masked by a sudden rise in water levels following 216 minutes of pumping as well as drawdowns and recoveries from pumping in the Q&T Well itself.

Based on the test data, no adverse impacts are expected to occur to the surrounding area from the continued use of the FMS Well.

6. Other Findings

The requested allocation of 410 gpm and 18.30 mgm for the FMS well is supported by the historic use and the results of the pumping test. The maximum rate of the Q&T well has been increased from the previously approved 300 gpm to 410 gpm, based on the actual installed pump capacity. However, the monthly allocation for the Q&T well has not increased and remains at 13.4 mgm as previously approved by the Commission. The docket also approves the requested surface water allocation of 29.50 mgm from the River Intake, which is a reduction of the previously approved monthly allocation of 46.5 million gallons. These rates are provided in Condition C.6. in the Decision Section of this docket. As the existing water withdrawals have already been realized by the local hydrologic system, there should be no significant impacts from continued withdrawals from the existing system wells.

Should groundwater demand in excess of the allocations approved by this docket occur in the future, the docket holder must evaluate the feasibility of utilizing the existing surface water intake to supply additional needs before any new or expanded groundwater sources or withdrawals are proposed (see Section C. DECISION Condition C.8.)

The docket holder estimates that the project withdrawals, used for the purpose of industrial cooling, result in a consumptive use of 50 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The project is designed to conform to the requirements of the *Water Code (WC)* and *Water Quality Regulations (WQR)* and *Ground Water Protected Area Regulations (GWPAR)* of the DRBC.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

Effective on the approval date for Docket No. D-2009-039-2 below, Docket No. D-2009-039 is terminated and replaced by Docket No. D-2009-039-2. The project and appurtenant facilities as described in in Section A.4. (Design Criteria) and A.5. (Facilities) are approved subject to the following conditions, pursuant to Section 3.8 of the *Compact*:

Monitoring and Reporting

1. The docket holder shall continue to report to the PADEP all surface and groundwater sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

2. The project withdrawals shall be metered by means of an automatic continuous recording device, flow meter, or other method, and shall be measured to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted for surface water withdrawals by the designated agency (PADEP) if maintenance of the 5 percent performance is not technically feasible or economically practicable. Meters or other methods of measurement shall be subject to approval and inspection by the PADEP as to the type, method, installation, maintenance, calibration, reading and accuracy. A record of biweekly withdrawals shall be maintained, and monthly totals shall be reported to the PADEP annually and shall be available at any time to the Commission if requested by the Executive Director.

3. The docket holder shall pay for surface water use in accordance with *Administrative Manual – Part III Basin Regulations – Water Supply Charges 18 CFR Part 420*.

4. The docket holder shall implement to the satisfaction of the Bureau of Watershed Management, PADEP, a continuous program to encourage water conservation in all types of use within the facilities served by this docket approval. The docket holder will report to the Bureau of Watershed Management, PADEP, on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

5. The docket holder shall prepare and submit a DMCP to the Commission within 6 months (December 9, 2021) of docket approval. The Executive Director shall review the DMCP and either require modifications or provide approval in writing if the DMCP is found to be in accordance with the Commission requirements. The docket holder shall implement the DMCP upon direction by the Executive Director.

Other Conditions

6. During any month, the combined withdrawal from all sources shall not exceed 59.9 million gallons. No well shall be pumped above the maximum rate and monthly allocation as indicated below:

SOURCE ID	MAXIMUM RATE (GPM)*	MONTHLY ALLOCATION (MGM)
River Intake	2,500 gpm	29.50 mgm
Q&T Well	410 gpm	13.4 mgm
FMS Well	410 gpm	18.3 mgm

* Based on a 24-Hour Average

7. The project withdrawal must not cause the streamflow to be less than 352 mgd at the point of taking. Whenever the streamflow below the intake is less than this amount, no surface water withdrawal shall be made, and the entire natural streamflow must be allowed to pass.

8. Should groundwater demand in excess of the allocations approved by this docket occur in the future, the docket holder must evaluate the feasibility of utilizing the existing surface water intake to supply additional needs before any new or expanded groundwater sources or withdrawals are proposed.

9. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 CFR 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline, or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

10. The wells, surface water intake and operational records shall be available at all times for inspection by the DRBC.

11. The wells and surface water intake shall be operated at all times to comply with the requirements of the *WC* and *WQR* of the DRBC.

12. The wells shall be equipped, where possible, with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes as repairs or modifications are made at each existing well so that water levels may be measured under all conditions.

13. No water service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

14. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.

15. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the *Water Quality Regulations* of the Commission.

16. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

17. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

18. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations. (see 18 CFR 401.43).

19. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).

20. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).

21. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to ensure the proper control, use and management of the water resources of the Basin.

22. If the monitoring required herein or any other relevant data or information demonstrates that the operation of this project is interfering with or otherwise impairing existing uses of ground or surface water, or if the docket holder receives a complaint from an existing ground or surface water user within the zone of influence of the withdrawal alleging such interference or impairment, the permit holder shall immediately notify the Executive Director, and unless excused by the Executive Director, shall investigate the demonstrated or alleged impacts. For purposes of this condition, notification shall mean either (a) electronic transmittal of written notice to the Executive Director via email (using addresses posted on the DRBC website); or (b) written notice to the Executive Director and a telephone call to the Project Review Section at 609-883-9500, ext. 216. (Oral notification must always be accompanied by immediate written notification directed to the Executive Director.) In addition, the docket holder shall provide written notice to all potentially affected water users of the docket holder's responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the docket holder's project withdrawal shall be repaired, replaced or mitigated at the docket holder's expense.** The scope of the options to consider for repair, replacement and/or mitigation shall not be limited solely to those that are owned, operated, or controlled by the project sponsor. An investigation report and/or mitigation plan prepared and certified by a licensed professional engineer and/or a licensed professional geologist shall be submitted to the Executive Director as soon as practicable following notice of the demonstrated or alleged impairment consistent with this paragraph. The Executive Director shall make the final determination regarding the scope and sufficiency of the investigation and the extent of any mitigation measures that may be required. Where ground and surface waters are rendered unavailable, unusable, or unsuitable for the pre-existing use, the Executive Director may direct the docket holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.

23. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

24. For the duration of any drought emergency declared by either Pennsylvania or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

25. Renewal of this docket does not resolve violations, if any, by the docket holder that may have occurred prior to this renewal or that may be ongoing (“prior or ongoing violations”) of provisions of the *Delaware River Basin Compact* (“*Compact*”) or of any rule, regulation, order or approval duly issued by the Commission or the Executive Director pursuant to the *Compact*. The Commission reserves its right to take appropriate enforcement action against the docket holder, including but not limited to recovery of financial penalties consistent with Section 14.17 of the *Compact*, for any and all such prior or ongoing violations.

26. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the *Rules of Practice and Procedure*. In accordance with Section 15.1(p) of the *Delaware River Basin Compact*, cases and controversies arising under the *Compact* are reviewable in the United States district courts.

BY THE COMMISSION

APPROVAL DATE: June 9, 2021

EXPIRATION DATE: June 9, 2031