

DOCKET NO. D-2008-036-1

DELAWARE RIVER BASIN COMMISSION

**ArcelorMittal Plate LLC
Surface Water Withdrawal
Valley Township and Borough of South Coatesville, Chester County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted by ArcelorMittal Plate LLC (ArcelorMittal or docket holder) to the Delaware River Basin Commission (DRBC or Commission) on November 11, 2008 (Application), for an allocation of surface water and review of an existing surface water withdrawal project.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Chester County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on December 9, 2014.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to approve an existing surface water withdrawal of up to 98.4 million gallons per month (mgm) of water from the West Branch Brandywine Creek and up to 24.8 mgm of water from Sucker Run for industrial cooling and processes at the docket holder's electric arc furnace steel slab, plate mill and finishing operations. The withdrawals are existing, but allocations were not previously specified by the Commission.

2. Location. The docket holder's steel mill is located along the West Branch Brandywine Creek and Sucker Run in the City of Coatesville, the Borough of South Coatesville, and Valley Township, Chester County, Pennsylvania. The West Branch Brandywine Creek Intake is located on the West Branch Brandywine Creek within the Upper West Branch Brandywine Creek Watershed in the Borough of South Coatesville. The Sucker Run Intake located on Sucker Run, in the Sucker Run Watershed, in Valley Township, Chester County, Pennsylvania. Sucker Run is a tributary to the West Branch Brandywine Creek. West Branch Brandywine Creek and Sucker Run at the project site are designated by the PADEP as supporting Warm Water Fishes and Migratory Fishes (WWF-MF).

Specific location information has been withheld for security reasons.

3. **Area Served.** Surface water is used for contact and non-contact cooling and industrial processes at the ArcelorMittal Plate steel plate manufacturing facility located in the City of Coatesville, the Borough of South Coatesville, and Valley Township, Chester County, Pennsylvania. The project withdrawals are used for industrial processes and cooling. 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. **Physical features.**

a. **Design criteria.** The existing ArcelorMittal Plate facility is a steel production facility. The facility uses an electric melt shop to manufacture steel ingots and slabs, rolls ingots and slabs to plates, and provides finishing operations to a portion of the plates. Total average and maximum daily demands of the facility are reported to be 2.054 million gallons per day (mgd) and 8.000 mgd, respectively. The docket holder expects no increase in the daily demands within the next 10 years. The docket holder requested allocations of 7.2 mgd (223.2 mgm) from the West Branch Brandywine Creek and 0.8 mgd (24.8 mgm) from the Sucker Run Intake, which are the reported capacities of the intakes. However, the allocations granted by this docket are based on historic withdrawals reported to the PADEP, as described in the Findings Section of this Docket.

Surface water withdrawn from the 7.2 mgd capacity West Branch Brandywine Creek Intake is used for contact and non-contact processes at the electric arc furnace and hot rolling mills. Water from the West Branch Brandywine Creek is pumped into a 20 million gallon (mg) reservoir prior to use at the mill. Cooling water for the electric arc furnace is withdrawn from the reservoir and the portion not consumptively used is circulated back to the reservoir for reuse. Water is also transferred from the reservoir for contact and non-contact cooling in the hot rolling mills. Water that is not consumptively used in the hot rolling mills is sent to an on-site wastewater treatment plant for treatment prior to returning to the 20 mg reservoir. A side stream of the recirculating process water is diverted to a second wastewater treatment plant for treatment prior to discharging back to the West Branch Brandywine Creek via Outfall No. 001, approximately one (1) mile upstream of the West Branch Brandywine Intake.

Surface water withdrawn from the 0.8 mgd capacity Sucker Run Intake is directed into a five (5) mg capacity reservoir (NAB Reservoir), located adjacent to Sucker Run. The NAB Reservoir provides recirculating process water for finishing operations consisting of steel quenching. The NAB Reservoir also receives flows from the West Side Spring located on the docket holder's property and leachate from an onsite landfill. The amount of spring water and leachate discharging to the reservoir fluctuates based on seasonal conditions and precipitation. The process water from finishing operations is returned to the NAB Reservoir for recirculation. A side stream from the NAB Reservoir discharges back to Sucker Run (Outfall No. 016) just downstream of the Sucker Run Intake. If and when needed, pH adjustment is performed prior to discharge back to Sucker Run.

b. **Facilities.** The existing intakes have the following characteristics:

INTAKE	SOURCE	PUMP CAPACITY	7Q10 FLOW AT INTAKE (CFS)	YEAR CONSTRUCTED
West Branch Brandywine Creek Intake	West Branch Brandywine Creek	7.2 mgd	17.5 cfs	1943
Sucker Run Intake	Sucker Run	0.8 mgd	1.7 cfs	1956

The West Branch Brandywine Creek and Sucker Run intakes are metered.

Flow from the West Side Spring and leachate from an onsite landfill area feeds two small collection ponds which overflow to a drainage ditch. The drainage ditch discharges to a pipe which discharges to the NAB Reservoir adjacent to Sucker Run. The spring flow has a pH of greater than 9.0 standard units and its use offsets the water requirement that would otherwise be withdrawn from Sucker Run. Flow from the West Side Spring and landfill leachate to the NAB reservoir is measured with a weir. Flows range from 0.61 mgm to 14.7 mgm (average 5.3 mgm).

The West Branch Brandywine Creek and Sucker Run water supplies are separate systems and are not presently interconnected with any other distribution system.

Potable water used at the mill is supplied by Pennsylvania American Water Company.

Portions of the docket holder's steel mill facility is located in the 100-year floodplain.

c. **Other.** Wastewater consisting of contact and non-contact cooling water, boiler blowdown and filter backwash is conveyed to the onsite industrial treatment facility most recently approved by DRBC Docket No. D-1990-025-1 on August 8, 1990. Docket No. D-1990-025-1 was originally issued to Lukens Steel Company. The docket was transferred to Bethlehem Steel Corporation (approved by the Commission in 2001), followed by ISG Plate LLC (approved by the Commission in 2004), and finally ArcelorMittal Plate LLC by the Commission's Executive Director by letter dated April 10, 2008. The PADEP issued its most recent NPDES Permit No. PA0011568 on August 4, 2009 for this industrial wastewater treatment facility. The treatment facility has adequate capacity to receive wastewater from the project.

B. FINDINGS

Water Use and Allocations

The docket holder requested an allocation of 223.2 mgm from the West Branch Brandywine Creek Intake and 24.8 mgm from the Sucker Run Intake, a combined total allocation of 248.0 mgm. Although historic withdrawal data reported to the PADEP since 1990 shows that the facility's monthly water use has not approached the requested allocations, the docket holder

has indicated that future business conditions may change and thus warrant the requested allocations. The docket holder's requested allocations are based on the pump capacity of the two (2) project intakes operating continuously at the peak daily demand rates.

The instantaneous allocations provided by this docket are based on the maximum daily source demands of 5,000 gpm (7.2 mgd) and 556 gpm (0.8 mgd) for the West Branch Brandywine Intake and Sucker Run Intake, respectively. The monthly allocations are based on monthly water withdrawal data submitted by ArcelorMittal to the PADEP. The peak historical monthly withdrawals at the West Branch Brandywine Creek Intake and Sucker Run Intake were recorded at 65.6 mgm and 39.5 mgm, respectively. In order to allow for possible changes in future business conditions and associated increases in demand, the monthly allocation for the West Branch Brandywine Creek Intake provided in this docket is based on a value of 150 percent of the above listed peak monthly withdrawal. The Sucker Run Intake allocation is limited to the docket holder's requested allocation and pump capacity of 24.8 mgm (0.8 mgd). The docket holder may submit an application to the DRBC for an increase in these allocations should future conditions warrant such increase.

Surface Water Charges

Entitlement No. 202 was issued to Lukens Steel (the previous owner) for the project withdrawals on July 15, 1976. Entitlement No. 202 allowed for the withdrawal of up to 400.099 mgm of consumptive use water and 1,044.509 mgm of non-consumptive water from the West Branch Brandywine Creek and Sucker Run Intake to be exempt from Commission surface water charges. The entitlement was terminated on February 10, 1999 after a change in ownership. All surface water withdrawal sources and all water withdrawn from these sources is subject to Commission surface water fees in accordance *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*. The facility currently pays surface water fees to the Commission.

Other

Based monthly water usage data and effluent flow data submitted to PADEP, the project withdrawals used for industrial processes and cooling at the facility result in a consumptive use ranging from 23 to 85 percent (average of 53 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 nearest United States Geological Survey (USGS) gaging station to the project withdrawals is USGS Gage No. 01480617 (West Branch Brandywine Creek at Modena, PA). This gage is located approximately one half mile downstream from the West Branch Brandywine Creek Intake. Based on the period of record from 1971 to 1994, the 7-day 10-year low flow (Q7-10) for this gage is 17.5 cubic feet per second.

The project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* 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

I. Effective on the approval date for Docket No. D-2008-036-1 below, the project and appurtenant facilities as described in the Section A “Physical features” are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

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

b. The intakes and operational records shall be available at all times for inspection by the DRBC.

c. The intakes shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

d. Neither source shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

INTAKE NO.	MAXIMUM INSTANTANEOUS RATE	MONTHLY ALLOCATION
West Branch Brandywine Intake	5,000 gpm	98.4 mg
Sucker Run Intake	556 gpm	24.8 mg

e. The docket holder shall pay for surface water use in accordance with Administrative Manual – Part III Basin Regulations – Water Supply Charges.

f. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. 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. The docket holder shall begin to record the metered withdrawals on a biweekly basis by March 1, 2015.

g. The docket holder shall implement to the satisfaction of the PADEP, the 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 PADEP on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

h. 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.

i. 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*.

j. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges 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 (or the later date established by an extension that has been timely requested and approved), 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.

k. 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 insure the proper control, use and management of the water resources of the Basin.

l. If the monitoring required herein, or any other data or information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by any ground or surface users within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished as a result of the docket holder's project withdrawal, shall be repaired, replaced or

otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required.

m. 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.

n. 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.

o. 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: December 10, 2014

EXPIRATION DATE: December 10, 2024