DOCKET NO. D-2011-023-2

DELAWARE RIVER BASIN COMMISSION

Reading Alloys, Inc.
Groundwater and Surface Water Withdrawal
Heidelberg and South Heidelberg Township, Berks County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on October 26, 2021 (Application) for renewal of an allocation of groundwater and surface water and review of a groundwater and surface water withdrawal project.

The Application was reviewed for approval under Section 3.8 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 11, 2022.

A. DESCRIPTION

1. **Purpose.** The purpose of this docket is to renew the approval of an existing groundwater and surface water withdrawal to supply the docket holder's manufacturing plant with up to 0.57 million gallons per month (mgm) of groundwater from existing Wells 3 and 4 and 14.5 mgm of surface water from existing Intake No. 1. Groundwater withdrawals are used for potable and domestic water and surface water withdrawals are used for industrial cooling purposes. Intake No. 1 withdraws water from an existing on-site pond.

2. **Location.** The project wells are completed in the Richland Formation limestone and dolomite and are located in the Spring Creek Watershed in Heidelberg and South Heidelberg Townships, Berks County, Pennsylvania. Spring Creek near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as Cold-Water Fishes (CWF) and Migratory Fishes (MF).

   Specific location information has been withheld for security reasons.

3. **Area Served.** The docket holder’s existing wells and surface water intake serve only the docket holder’s manufacturing plant site as shown on a map entitled “Kymera Reading Alloys, Inc. - Site Location Map”, submitted as part of the application. 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 manufactures high-purity metals and alloys at its Robesonia facility. Non-Contact Cooling Water (NCCW) for the manufacturing facility is diverted from an unnamed tributary to Spring Creek by a diversion dam that directs water from the stream to an on-site, man-made, 2.29-million-gallon (mg) capacity pond known as the Upper Pond. Upper Pond overflow re-enters the unnamed tributary to Spring Creek approximately 240 feet below the diversion dam. NCCW for the facility’s processes is pumped from and discharged to this pond. Discharged NCCW comes back with stream water and available stormwater in the pond and as the pond reaches its capacity, water overflows back into the Unnamed Tributary to Spring Creek.

Shortly after the flow from the Upper Pond is reintroduced into the unnamed tributary to Spring Creek, the stream enters a concrete pipe culvert that passes under a portion of the docket holder’s facility for approximately 420 feet before day lighting. The stream then flows northeastward off on the property toward Spring Creek.

The docket holder reports an existing average and maximum surface water demand of 0.255 mgd and 0.342 mgd, respectively. The docket holder projects an average and maximum water demand of 0.450 mgd and 0.600 mgd, respectively, by the year 2032. The surface water allocation of 14.5 mgm should be sufficient to meet the future demands of the docket holder’s system.

The docket holder reports an existing average and maximum groundwater demand of 0.010 mgd and 0.029 mgd, respectively. The docket holder projects an average and maximum water demand of 0.017 mgd and 0.029 mgd, respectively, by the year 2032. The facility may have larger events once or twice a year where the water use could be up to 0.294 mgd and in the next 10 years could be as high as 0.385 mgd. During those events, the facility will still comply with their monthly groundwater allocation. The groundwater allocation of 0.57 mgm should be sufficient to meet the future demands of the docket holder’s potable and domestic use.

5. **Facilities.** The docket holder’s existing wells and surface water intake have the following characteristics:

<table>
<thead>
<tr>
<th>WELL NO.</th>
<th>DEPTH (FEET)</th>
<th>CASED DEPTH/CASING DIAMETER</th>
<th>PUMP CAPACITY (GPM)</th>
<th>YEAR DRILLED</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>600</td>
<td>20’ / 6”</td>
<td>25</td>
<td>1984</td>
</tr>
<tr>
<td>4</td>
<td>640</td>
<td>20’ / 6”</td>
<td>25</td>
<td>1984</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTAKE NO.</th>
<th>WITHDRAWAL WATER BODY</th>
<th>PUMP CAPACITY (MGD)</th>
<th>STORAGE CAPACITY (MG)</th>
<th>YEAR CONSTRUCTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Upper Pond</td>
<td>0.24</td>
<td>2.29</td>
<td>1984</td>
</tr>
</tbody>
</table>
The wells and surface water intake connections are metered.

Prior to entering the distribution system, the water is treated with chlorination and phosphate.

The project wells are located outside of the 100-year flood elevation.

The water system is not presently interconnected with any other water system.

6. Other. Domestic wastewater is transported to Environmental Recovery Corporation (ERC) for disposal. Non-contact cooling water is discharged to the Upper Pond located on-site. This discharge was most recently approved by DRBC Docket No. D-1979-044-4 on December 9, 2020. The wastewater treatment facility is approved by PADEP NPDES No. PA0070050. The docket holder’s industrial wastewater treatment facility has adequate capacity to receive wastewater from this project.

B. FINDINGS

1. Surface Water Charges

DRBC issued Certificate of Entitlement No. 242 to the docket holder. The Certificate entitled the docket holder to use, withdraw or divert up to 0.062 mgm non-consumptive use and up to 0.003 mgm consumptive use without charge from the unnamed tributary to Spring Creek in South Heidelberg Township, Berks County, Pennsylvania. The docket holder shall pay for surface water use in excess of the consumptive use and non-consumptive use listed in Entitlement No. 242 in accordance with the provisions of 18 CFR Part 420 as described in Condition C.3 in the DECISION section.

2. Pass-by Flow

The docket holder’s unnamed tributary to Spring Creek surface water withdrawal is subject to pass-by flow requirements. The estimated contributing drainage area to Spring Creek above the surface water intake is approximately 0.355 square miles. The estimated seven-day low flow with a recurrence interval of 10 years ($Q_{7,10}$) at the point of withdrawal is 0.0394 cubic feet per second (cfs) or 0.025 mgd. The project withdrawal must not cause the stream flow in Spring Creek to be less than 0.0394 cfs at the point of taking and daily withdrawal rates shall be reduced as appropriate to ensure that a minimum of 0.0394 cfs passes by the intake. Withdrawals shall cease entirely if the 24-hour average flow as measured below the intake, less the withdrawal, is 0.0394 cfs or less. Whenever the stream flow below the intakes is less than 0.0394 cfs, no withdrawal from the creek shall be made and the entire natural stream flow must be allowed to pass. When streamflow is less than $Q_{7,10}$ at the diversion, no diversions shall be made to the Upper Pond and the entire natural streamflow must be allowed to pass. The docket holder shall continue to monitor the pass-by requirement in accordance with Condition C.6 in this docket.
The docket holder’s Surface Water Intake Operation Plan was submitted to the Commission on March 11, 2013 and approved on June 5, 2013. The existing surface water intake consists of a 6-inch pipe which is partially submerged in the pool of water created by the diversion dam and weir structure. Water flows into the pipe and then into the water channel into the docket holder’s Upper Pond. The surface water intake must allow the passage of the Q_{7.10} passby flow due to the configuration of the concrete dam and board weir structure.

3. **Other Findings**

The docket holder estimates that the project surface water withdrawal, used for the purpose of NCCW results in a consumptive use of 25 percent of the total water use. The DRBC estimates that the project groundwater withdrawal, used for the purpose of domestic water supply results in a consumptive use of 10 percent of the total groundwater 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)* 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-2011-023-2 below, Docket No. D-2011-023-1 is terminated and replaced by D-2011-023-2. 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. 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 excess of 0.003 mgm consumptive use and 0.062 mgm non-consumptive 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 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 PADEP, on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

**Other Conditions**

5. During any month, the combined withdrawal from all well sources shall not exceed 0.57 million gallons. Also, during any month the surface water withdrawal from Intake No. 1 shall not exceed 14.5 million gallons. No source shall be pumped above the maximum rate and monthly allocation as indicated below:

<table>
<thead>
<tr>
<th>SOURCE ID</th>
<th>MAXIMUM RATE (GPM)*</th>
<th>MONTHLY ALLOCATION (MGM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well 3</td>
<td>25</td>
<td>0.30</td>
</tr>
<tr>
<td>Well 4</td>
<td>25</td>
<td>0.27</td>
</tr>
<tr>
<td>Intake No. 1</td>
<td>160</td>
<td>14.5</td>
</tr>
</tbody>
</table>

*Based on a 24-Hour Average

6. The diversion from the unnamed tributary to Spring Creek to the Upper Pond must not cause streamflow in the Creek to be less than 0.025mgd (0.0394 cfs) below the intake. The diversion shall be constructed to allow at least $Q_{7-10}$ or inflow at the point of diversion to pass the diversion at all times. When streamflow is less than $Q_{7-10}$ at the diversion, no diversions shall be made to the Upper Pond and the entire natural streamflow must be allowed to pass.

7. 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.

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

9. 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.
10. New and existing wells shall be equipped as necessary to accommodate water level measurements under all reasonable conditions.

11. Each new water service connection shall include a water meter in accordance with the DRBC’s Resolution No. 87-7 (Revised).

12. 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).

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

14. 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 WQR of the Commission.

15. 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.

16. 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.

17. 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).

18. 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 401.35).

19. 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 401.35).

20. 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 to ensure the proper control, use and management of the water resources of the Basin.
21. 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.

22. 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.

23. 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 8, 2022

**EXPIRATION DATE:** June 8, 2032