DOCKET NO. D-1974-189-3

DELAWARE RIVER BASIN COMMISSION

Located in Drainage Area to Special Protection Waters

Holcim (US) Inc. - Whitehall Cement Plant
Groundwater and Surface Water Withdrawal
Whitehall Township, Lehigh County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on May 11, 2021 for renewal of an allocation of groundwater and surface water and review of a groundwater and surface water withdrawal project (Application). The project mining operation was approved by the Pennsylvania Department of Environmental Protection (PADEP) on June 13, 1977 and reissued on February 2, 1996 and February 23, 1999 (Permit No. 7875SM2C).

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Lehigh Valley 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 withdrawal and surface water withdrawal project to supply up to 70.68 million gallons per month (mgm) of water to the docket holder's cement manufacturing plant from existing Wells Nos. 1 and 2, and existing surface water intake No. 1 on the Lehigh River.

2. Location. The project is located in the Coplay Creek and Lehigh River Watersheds in Whitehall Township, Lehigh County, Pennsylvania within the drainage area of the section of the non-tidal Delaware River known as the Lower Delaware, which the Commission has designated as Special Protection Waters. The surface water intake on the Lehigh River is located at River Mile (R.M.) 183.6 - 23.7 (Delaware River – Lehigh River). The project wells and quarry are completed in the Jacksonburg Formation. The designated use established by the Pennsylvania Department of Environmental Protection (PADEP) for the Lehigh River in the vicinity of the project site is Warm Water Fishes (WWF).

Specific location information is undisclosed for security reasons.

3. Area Served. The project withdrawals serve only the Whitehall cement plant. 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 cement at this facility. Withdrawn water is used primarily for non-contact cooling. Some of this water is used for processing cement. Non-contact cooling water is mainly withdrawn from Intake 1 on the Lehigh River and is augmented with groundwater from one of two deep groundwater wells (Wells Nos. 1 and 2) located near the Cementon Quarry. Well No. 2 is not in use but is retained as a backup source. The docket holder also pumps groundwater from its operating quarry for dewatering operations and to assist in meeting effluent temperature requirements at the discharge outfall. Cement plant processing equipment includes two rotary kilns, 2 finishing mills and 2 raw mills.

The project withdrawals are used primarily for non-contact cooling as part of the cement manufacturing process. The industrial process consumes an annual average of 1.1 to 3.5 percent of the water withdrawn from Intake No. 1 and Well No. 1. Consumptive use occurs at water spray systems located in two kilns and two finish mills. The water spray systems are used to control exhaust gas temperatures when necessary to comply with air emission limits and to condition clinker, gypsum, and other additives during the cement milling process. The total water consumed in these processes is metered. Non-contact cooling water is discharged back to the Lehigh River through 2 outfalls (designated 001 & 002) located on the Lehigh River. Water pumped from the quarry serves to dewater the quarry and to assist in meeting temperature requirements at the two outfalls.

The Cementon Quarry, which occupies 72.5 acres of the plant site, is an active quarry from which the docket holder mines approximately 500 tons of rock per year. The quarry is largely filled with water. A small dewatering pump located at the north side of the quarry pit runs continuously from approximately April to October every year, depending on dewatering and temperature regulation need, and pumps from 0 to 18.3 mgm from the quarry to a small pit located near a wetland area. From there, a portion of the pumped water is directed into the wetland. The diversion to the wetland is meant to augment the natural flow to the wetland that has been reduced by quarry dewatering in the area around the site. The docket holder is responsible for submitting a semi-annual wetland report to the PADEP regarding these actions. The remaining quarry water is discharged to a settling pond and then pumped to the two discharge outfalls. The quarry withdrawal is continuously metered, and weekly flow meter readings are collected to determine the weekly volume of water pumped from the quarry to the settling ponds. The quarry dewatering withdrawal is regulated by the PADEP in accordance with Non-Coal Surface Mining Permit No. 7875SM2C issued for the facility. This withdrawal is not subject to review or approval by the DRBC in accordance with the August 19, 1976 Administrative Agreement between the DRBC and the PADEP.

The primary source of cooling water for the cement plant is a withdrawal from the Lehigh River via Intake No. 1. The intake is located upstream from the Northampton dam in the Lehigh River about 0.12 miles downstream of the Route 329 bridge adjacent to the plant. River water from Intake No. 1 is diverted to a pump house, which pumps the water to a reservoir (the inlet reservoir) located in the powerhouse on the plant site. The temperature of the water is recorded at the reservoir and is representative of the Lehigh River water temperature for reporting purposes. From the inlet reservoir, water is distributed to various locations within the cement plant for use as non-contact cooling water. In 2019 an average of 1.0 million gallons per day was pumped from Intake No. 1 with monthly withdrawals ranging from 16.43 mgm to 49.15 mgm. The withdrawals are metered.

Groundwater from Well No. 1 supplements water pumped from the Lehigh River. In 2019, an average of 0.31 mgd was withdrawn from Well No. 1 with monthly totals ranging from 0.0 mgm to 16.10 mgm. Well No. 2 is not currently in use but is retained a backup supply. Withdrawals from both wells are monitored by flow meters.

The plant records an existing average and maximum water demand of 1.31 million gallons per day (mgd) and 2.18 mgd, respectively. This is based on data from 2019 at full industrial output with both kilns operating. The docket holder projects the maximum water demand to increase to increase to 2.29 mgd and projects a peak monthly demand of 68.52 mgm. The combined system allocation of 70.68 mgm should be sufficient to meet the future demands of the docket holder's Whitehall plant.

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

WELL/ INTAKE NO.	WELL DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR DRILLED
Well No.1	500'	140' / 10"	648 gpm	1974
Well No. 2	600'	314' / 8"	160 gpm	2004
Lehigh River Intake No.1	n/a	n/a	1,200 gpm	n/a
Cementon Quarry Intake No. 2	n/a	n/a	500 gpm	n/a

All wells and intakes are metered.

The water withdrawn from Intake No. 1 on the Lehigh River is pressure filtered through a gravel bed at the plant site to remove debris prior to entering the processing plant. Filter back-flush water is directed to a sedimentation basin at the plant site. Supernatant fluids from the pond are pumped to discharge Outfalls Nos. 001 and 002.

The Lehigh River Intake pump house is located in the 100-year floodplain; however, the floor of the pump house is elevated 10 feet above the 100-year flood elevation. The project wells are not located in the 100-year floodplain.

Well No. 2 is not currently in use but is retained as a backup supply.

6. Other. Non-contact cooling water and quarry dewatering water are discharged to the Lehigh River via Outfalls Nos. 001 and 002, most recently approved by DRBC Docket No. D-1975-115-3 on March 14, 2018. The docket holder is also authorized by PADEP under NPDES Permit PA0012505 to discharge commingled non-contact cooling water and stormwater through Outfalls 001 and 002 to the adjacent Lehigh River.

B. FINDINGS

1. Special Protection Waters

In 1992, the DRBC amended its *Water Quality Regulations* (*WQR*) by the addition of regulations for the protection of Special Protection Waters (SPW), designed to maintain the quality of interstate waters where existing quality is better than the established stream quality objectives. As the result of its initial classifications and subsequent amendments, the Commission has designated the entire non-tidal main stem Delaware River from Hancock, New York to Trenton, New Jersey as SPW. DRBC's SPW regulations apply within the designated reaches and their drainage area.

The wells and surface water intakes providing water supply to the docket holder are located within the drainage area to SPW. Sections 3.10.3A.2.e.1) and 2) of the *WQR* state that projects subject to review under Section 3.8 of the Compact that are located within the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. Since this project involves the renewal of an approval for existing activities and does not entail additional construction or expansion of facilities or create new or increased non-point source loads, the NPSPCP requirement is not applicable at this time. Condition C.22. of this docket provides that at such time, if ever, as additions to the area served by the docket holder's withdrawals are proposed, the docket holder will be required to demonstrate compliance with an approved NPSPCP in accordance with DRBC's SPW regulations.

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*)provides that the sponsors of industrial and commercial water withdrawals in excess of one million gallons per day must develop a contingency plan, including emergency conservation measures to be instituted in the event of a Commission-declared drought or other water supply emergency. The Commission's *Water Code* (Section 2.1.4) establishes the conservation goal of a 15 percent reduction in depletive use during drought conditions. The docket holder submitted a drought management and contingency plan (DMCP) with the Application.

The DMCP indicates that the kilns require steady and uninterrupted operation and cannot be efficiently cycled on and off. Idling of a kiln and cold restart are maintenance- and capital-intensive and highly disruptive to plant operations. The docket holder proposes to utilize additional water stored in the Cementon Quarry to initially offset its consumptive use during drought periods. The existing dewatering system in the quarry is operated on a float system with the intake set at approximately 10 feet below the normal pool elevation. During a drought period the docket holder would utilize the additional drawdown available in the quarry to offset its consumptive use. Should the Cementon Quarry resource prove insufficient to reach the needed curtailment goals, the docket holder would then evaluate the idling of one finish mill, which would result in a reduction of approximately 15 percent of the overall consumptive use of the facility. The docket holder shall implement the DMCP upon direction by the Executive Director (see Condition C.6.).

3. Surface Water Charges

The docket holder shall continue to pay for surface water use in accordance with DRBC's Water Supply Charges Regulations, codified at 18 CFR Part 420. This requirement is set forth at in Condition C.3.

4. Passby Flow

Yearly consumptive use at the Holcim facility averages from 1.1 to 3.5 percent of the total water withdrawn. The total withdrawal allocation of 70.68 mgm (2.28 mgd) would result in an average consumptive use of 0.0798 mgd, or 0.123 cfs. This is approximately 0.06 percent of the $Q_{7\text{-}10}$ flow in the Lehigh River at the point of withdrawal. The surface water withdrawal is augmented with withdrawals of groundwater from Wells 1 and 2 (if used) and the Cementon Quarry. Withdrawn surface water and groundwater (less the consumptive use) is discharged to outfalls located 150 feet (Outfall 001) and 500 feet (Outfall 002) downstream of Intake No. 1. Metering data suggests that the return flow of withdrawn groundwater and surface water back to the Lehigh River is in all but a few instances greater than the amount of water withdrawn from the Lehigh River. These data show that on average, the amount of water discharged back to the Lehigh River is equivalent to 166 percent of the quantity withdrawn from surface water. Additionally, the plant's reliance on groundwater withdrawals increases as flows in the Lehigh River decrease.

Considering this withdrawal/discharge relationship, a restriction on surface water withdrawal during low flows in the Lehigh River was not included in the previous approval and is not required in this docket renewal. However, the previous approval required that during periods when flow in the Lehigh River as measured at the USGS Gage No. 01451000 (Lehigh River at Walnutport, PA) is less than or equal to 202 cfs, the docket holder shall assure that the combined discharge to the Lehigh River from Outfalls 001 and 002 is equal to or exceeds the quantity of water withdrawn from the Lehigh River via Intake No. 1. Additionally, during periods of any declared "drought warning" or "drought emergency" condition applicable to the Lehigh River or the Delaware Basin, or when flow in the Lehigh River as measured at the Walnutport, PA USGS gage is less than 404 cfs, this docket renewal requires the docket holder to report the following data to the DRBC on a monthly basis:

1) The quantity of water withdrawn each day from the Lehigh River, Wells Nos. 1 and 2 and the quarry.

2) The total daily quantity of water consumptively used at the kilns and finishing mills.

3) The total daily calculated amount of return flow discharged to the Lehigh River (withdrawal total of all sources minus total consumptive use)

Staff examined the average daily flow for the Lehigh River using the USGS Lehigh River at Walnutport gage data. The data show that flows in the Lehigh did not fall below 202 cfs during the last ten-year approval period. River flows did decline below 404 cfs on several occasions during most years, and the withdrawal and consumptive use data should have been submitted to the DRBC in accordance with Condition C.g. of Docket D-1974-189-2 issued on May 10, 2012. The docket holder has recently subscribed to the USGS Water Alert Service for the Walnutport gage and must submit the required information moving forward as specified in Condition C.4. of this renewal. In accordance with Section 14.17 of the *Delaware River Basin Compact*, Subpart G of the Commission's *Rules of Practice and Procedure*, and DRBC Resolution No. 2009-13 (Penalty Matrix), violations or attempts to violate the Delaware River Basin Compact or any rule, regulation or order of the Commission (including conditions of a docket approval) may be subject to sanctions, including financial penalties.

5. Northampton Dam Removal Study

Condition C.x. of the Commission's last docket approval for the captioned project (Docket D-1974-189-2) required the docket holder to prepare a detailed plan of study for evaluating the potential technical and financial feasibility of removal of the Northampton Dam and to provide its study plan to the Commission, PADEP, Pennsylvania Fish and Boat Commission (PFBC) and Northampton Borough Municipal Authority (NBMA) within 60 months of the docket approval date (i.e., by May 10, 2017). The docket holder was to commence the study within 6 months of the Executive Director's approval and was to complete the study in accordance with the approved plan.

By letter dated May 2, 2017, in response to a request by Holcim dated March 24 of that year, the Executive Director granted Holcim an extension of time to complete a study that instead supported Holcim's view that a detailed study pertaining to restoration of fish passage by removing the Northampton Dam should not be required until the three dams in the lower part of the Lehigh River are studied and plans for associated fish migratory pathway improvements at these facilities are underway or implemented.

In October 2018, on behalf of Holcim, AECOM submitted the report entitled, "Preliminary Engineering Assessment," supporting Holcim's view as set forth above. The AECOM assessment was based in part on the conclusions of a separate study that modification of the fish ways at the Easton and Chain Dams to improve American Shad populations is not cost-effective and that removal of these dams is infeasible (KCI, 2013). Because no plans currently exist to remove or modify the Hamilton Street Dam, the three dams remain barriers to anadromous fish migration upstream, regardless of the presence of the Northampton Dam.

The AECOM report indicated that Holcim has obtained preliminary cost estimates of approximately $300,000 for removal of the dam, excluding survey, design, regulatory permits, and costs for developing a new water supply source/system. The Northampton Dam is required to maintain adequate water withdrawal from the Lehigh River for the Whitehall Plant. Holcim has investigated the feasibility of developing an alternate water supply for the Whitehall Plant. The alternatives investigated to date would preclude Holcim from meeting discharge

requirements during the summer months. Holcim's estimates show that the cost of studying additional alternative water supplies for the Whitehall Plant is approximately $82,700, and that another $250,000 would be required to secure permits for their use. These estimates do not include construction and operational costs associated with changes to the water system for the plant.

AECOM's report also found that removal of the Northampton Dam would adversely impact other stakeholders. The Tri-Boro Sportsman Club operates a boat launching facility approximately 2,300 feet upstream from the Northampton Dam. According to Holcim, removal of the dam would lower the water level, increase water velocities, and impact the ability to launch watercraft. An assessment of boat launch conditions would entail a bathymetric survey and hydraulic analysis. In the absence of the dam, the boat ramp would need to be extended further into the river to maintain boat launch conditions, requiring regulatory authorizations and construction funding. The Tri-Boro Sportsmen Club supports keeping the dam in place in order to protect their facilities and current use of the River. Removal of the dam could also impact facilities owned by the Northampton Borough Municipal Authority (NBMA). The NBMA maintains a 16" water line crossing of the Lehigh River approximately 400 feet upstream of the dam. This water line is currently exposed along the western shoreline. The removal of the Northampton Dam would further expose the water line, and would result in the need for additional measures to protect the line as well as regulatory permits to complete this work.

Staff reviewed the AECOM report and determined that the information generally met the requirements specified in Condition C.x. of Docket No. D-1974-189-2. Based on AECOM's dam assessment inspection, the water-retaining structures at Northampton Dam were observed to be in satisfactory condition. Accordingly, neither replacement of the dam nor significant maintenance is required in the foreseeable future. Although the staff agree that the AECOM report met the conditions of the prior docket, the staff also notes that:

1. The removal of the Northampton dam is technically feasible. Similar projects have been successfully executed throughout the Delaware River Basin and outside the Delaware River Basin.

2. The Northampton Dam hinders passage for both resident and anadromous fish. While passage for migratory fish is also hindered at downstream dams, the Pennsylvania Fish and Boat Commission has indicated that there is value to improving fish passage at this location on the Lehigh River.

3. Stakeholders have raised several concerns that must be addressed as part of any fish passage improvements being considered. Objections to removal of the dam have been expressed by: the Northampton Borough Municipal Authority, Borough of Northampton, and Tri-Boro Sportsmen's Club.

Condition C.23 directs the docket holder to consult with the Pennsylvania Fish and Boat Commission (PFBC) and the Pennsylvania Department of Environmental Protection (PADEP) regarding further actions or requirements concerning modification or removal of the Northampton Dam. Should these agencies require fish passage improvement, Holcim is encouraged to work with partners at the local, regional, state, and federal level to secure such financial assistance as is available for these types of projects.

6. Other Findings

The docket holder estimates that the project withdrawals, used for the purpose of non-contact cooling water and cement processing result in a consumptive use of 1.1 to 3.5 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,* 18 CFR Part 420.

The project has been in operation for several decades with no reported adverse effects to nearby wells or on the water resources of the basin.

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

Effective on the approval date for Docket No. D-1974-189-3 below, Docket No. D-1974-189-2 is terminated and replaced by Docket No. D-1974-189-3. 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 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 daily 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. During periods when flow in the Lehigh River as measured at the USGS gage No. 01451000 (Lehigh River at Walnutport, PA) is less than or equal to 202 cfs, the docket holder shall assure that the combined discharge to the Lehigh River from Outfalls 001 and 002 is equal to or exceeds the quantity of water withdrawn from the Lehigh River via Intake No. 1. During periods of any declared "drought warning" or "drought emergency" condition applicable to the Lehigh River or the Delaware Basin, or when flow in the Lehigh River as measured at the Walnutport, PA USGS gage is less than 404 cfs, the docket holder shall report to the DRBC monthly, the following data:

1) The quantity of water withdrawn each day from the Lehigh River, Wells Nos. 1 and 2 and the quarry.

2) The total daily quantity of water consumptively used at the kilns and finishing mills.

3) The total daily calculated amount of return flow discharged to the Lehigh River.

5. 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.

6. The docket holder shall implement the DMCP upon direction by the Executive Director.

Other Conditions

7. During any month, the combined withdrawal from all well and surface water sources shall not exceed 70.68 million gallons. No well or intake shall be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM RATE (GPM)*	MONTHLY ALLOCATION (MGM)
Well No.1	648 gpm	30 mgm
Well No. 2	300 gpm	13 mgm
Intake No. 1 (Lehigh River)	1,200 gpm	50 mgm

* Based on a 24-Hour Average

8. 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.

9. The wells and surface water intakes and operational records shall be available at all times for inspection by the DRBC.

10. The wells and surface water intakes shall be always operated to comply with the requirements of the *WC* and *WQR* of the DRBC.

11. 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.

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

13. 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.

14. 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*.

15. 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).

16. 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).

17. 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).

18. 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.

19. 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.

20. 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.

21. 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.

22. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

23. The docket holder is directed to consult with the Pennsylvania Fish and Boat Commission (PFBC) and the Pennsylvania Department of Environmental Protection (PADEP) regarding further actions or requirements concerning the removal or modification of the Northampton Dam. By 31 December 2023, Holcim shall convene a meeting with PFBC, PADEP, and other stakeholders deemed by either Holcim or the Pennsylvania agencies to have vital interests in the matter to collectively develop a plan to address fish passage at Northampton Dam. The plan shall include and identify sources of available funding for any proposed fish passage improvements included in the plan. If the plan is acceptable to PFBC, PADEP, and DRBC, DRBC staff will support, co-sponsor, or collaborate on grant applications for funding or partial funding of the fish passage improvements working in partnership with the Pennsylvania agencies, and interested stakeholders.

24. 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.

25. Section 2.3.10 of the Commission's Rules of Practice and Procedure (18 C.F.R. 401.41), limiting the Commission's approval to three years in the absence of an expenditure of substantial funds by the project sponsor in reliance on the approval, is hereby waived for good cause shown in accordance with Section 2.9.3 (18 C.F.R. 401.123) of the same regulations. This approval shall expire on the expiration date set forth below unless prior thereto the docket holder has applied to the Commission to renew or extend this approval.

BY THE COMMISSION

APPROVAL DATE: **September 8, 2022**

EXPIRATION DATE: **September 8, 2032**