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**WASTE DISCHARGE REQUIREMENTS
ORDER R5-2026-XXXX**



ORDER INFORMATION

Order Type(s): Waste Discharge Requirements (WDRs)
Status: Adopted
Program: Non-15 Discharge to Land
Region 5 Office: Sacramento (Rancho Cordova)
Discharger: Basalite Building Products, LLC
Facility: Basalite Concrete Products
Address: 605 Industrial Way, Dixon, California 95620
County: Solano County
Parcel Nos.: 0111090730, 0111090700
CIWQS Place ID: 874389
Prior Order(s): None

WASTE DISCHARGE REQUIREMENTS ORDER R5-2026-xxxx
BASALITE BUILDING PRODUCTS, LLC
BASALITE CONCRETE PEODUCTS
SOLANO COUNTY

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CERTIFICATION

I, PATRICK PULUPA, Executive Officer, hereby certify that the following is a full, true, and correct copy of the order adopted by the California Regional Water Quality Control Board, Central Valley Region, on xx Month 2026.

PATRICK PULUPA, Executive Officer

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FINDINGS

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) hereby finds as follows:

Introduction

1. On 5 March 2020, Basalite Building Products, LLC (Discharger), submitted a Report of Waste Discharge (RWD) to apply for Waste Discharge Requirements (WDRs) for discharge of wastewater generated from sawing and grinding concrete blocks at the Basalite Concrete Products (Facility) in Dixon, Solano County. The RWD indicates that the Facility was constructed in 1987 and has not been previously regulated under WDRs. Additional RWD supplemental information was submitted in January 2021, August and November 2024, and May and June 2025. The Discharger owns and operates the Facility and is responsible for compliance with these WDRs.
2. The Facility is located at 605 Industrial Way, Dixon in Solano County (Section 13, Township 7 North, Range 1 East, Mount Diablo Principal Meridian). The location is depicted on Attachment A, which is attached hereto and made part of this Order by reference. The Facility occupies Assessors' Parcel Numbers 0111090730 and 0111090700.
3. The following attachments are incorporated as part of this Order.
 - a. Attachment A – Location Map
 - b. Attachment B – Site Plan
 - c. Attachment C – Process Schematic
 - d. Information Sheet
 - e. Standard Provisions & Reporting Requirements dated 1 March 1991 (SPRRs)
4. Also attached is **Monitoring and Reporting Program Order R5-2026-xxxx (MRP)**, which requires monitoring and reporting for the discharge regulated under these WDRs. The Discharger shall comply with the MRP, and any subsequent revisions thereto.

Existing Facility and Discharge

5. The Facility manufactures concrete blocks and other masonry products. The Facility encompasses 56 acres and is graded to keep stormwater runoff onsite. Approximately 71 percent of the site is impermeable and covered by concrete or asphalt paving,

building roof areas, and hard-packed surfaces such as compacted aggregate base. The remaining 29 percent of the site is permeable such as materials storage areas.

- The source of water supply in the City of Dixon is provided from local groundwater supply wells. Based on the 2024 City of Dixon Water Quality Report, analytical results are summarized below:

Table 1. Drinking Water Quality

| Constituent | Units | Water Supply | Potential Water Quality Objectives (WQOs) |
|------------------------------|----------|--------------|---|
| Arsenic | µg/L | 1 | 10 (Note 1) |
| Barium | µg/L | 150 | 1,000 (Note 2) |
| Chromium (total) | µg/L | 24 | 50 (Note 3) |
| Hexavalent Chromium | µg/L | 19 | 10 (Note 4) |
| Chloride | mg/L | 13 | 250 (Note 5) |
| Electrical Conductivity (EC) | µmhos/cm | 547 | 900 (Note 6) |
| Nitrate as Nitrogen | mg/L | 3.5 | 10 (Note 7) |
| pH | Std. | 8.0 | 6.0-8.0 (Note 8) |
| Sodium | mg/L | 56 | 69 (Note 9) |
| Total Dissolved Solids (TDS) | mg/L | 327 | 500/1,000 (Note 10) |

Notes:

- Primary Maximum Contaminant Level (MCL) for Arsenic: 10 µg/L.
- Primary MCL for Barium: 1,000 µg/L.
- Federal drinking water primary MCL for total chromium (which includes all forms of chromium) is 100 µg/L; California primary MCL for total chromium is 50 µg/L.
- Prior to October 1, 2024 (the effective date of 2023-24 Hexavalent Chromium MCL Regulation), hexavalent chromium had been regulated under the California primary MCL of 50 µg/L for total chromium. However, The State Water Board adopted the Primary MCL of 10 µg/L for hexavalent chromium (VI) on 17 April 2024. It is effective as of October 1, 2024 (use either EPA Method 218.6 or 218.7).
- Secondary MCL for Chloride: 250 mg/L.
- Secondary MCL for EC: 900 µmhos/cm.
- Primary MCL 10 mg/L for Nitrate as Nitrogen.
- Agricultural Water Quality Goal for pH: 6.0<pH< 8.0.
- Agricultural Water Quality Goal for sodium: 69 mg/L.
- Secondary MCLs for TDS: Recommended level = 500; Upper level = 1000 mg/L.

Based on the 2024 City Dixon Water Quality Report, the water supply has a hexavalent chromium concentration of 19 µg/L, exceeding the Primary MCL of 10 µg/L for hexavalent chromium. Chromium is found naturally in rocks and soil, and exists in various forms, including the metal itself and its oxidized states, trivalent chromium (III), and hexavalent chromium (VI). Trivalent chromium exists in a nontoxic form. However, hexavalent chromium is among the chemicals known to the state to cause cancer [Title 27, California Code of Regulations, Section 27001], pursuant to California's Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65"). The City

anticipates being in compliance with the Primary MCL for the hexavalent chromium by 1 October 2027, which is the State of California's compliance deadline for the City.

7. The Facility manufactures concrete blocks onsite. Small amount (five percent) of water is added to portland cement, sand and aggregates in mixers before being forced into molds. Unlike a ready-mix batch plant, the mixers are cleaned by air hammering out hardened concrete. Therefore, no wastewater is generated from the concrete making process. However, the Facility generates wastewater from cutting and polishing cured concrete blocks for special orders. This waste stream is regulated under this order.
8. The Facility operates four saws and a face grinder for cutting and polishing cured concrete block for special orders. The diamond encrusted blades and grinding wheels rely on a small but continuous water supply from the City of Dixon's public water system for lubrication, cooling, and removal of cutting waste. Normally, two saws and the grinder operate continuously during a normal shift with two smaller saws being used on a more limited basis. The Discharger states that approximately 4,300 gallons of process wastewater is generated during a typical work day. The wastewater is a fine slurry mixture of fine cement particles, sand, and aggregate dust suspended in water.
9. The onsite wastewater treatment and disposal system consists of three concrete Settling Basins, a carbon dioxide (CO₂) gas inject system for wastewater pH neutralization, an unlined effluent Storage Pond, and 16 acres of Land Application Areas (LAAs), as shown in Attachment B Site Plan, which is attached hereto and made part of this Order by reference. The capacity of each concrete Settling Basin is 8,750 gallons. The capacity of Storage Pond is approximately 0.56 million gallons based on two feet of freeboard. The LAAs are the open areas without pavement of asphalt or concrete in the Facility. The treated wastewater in the Storage Pond is applied to the LAAs via water trucks for dust suppression in the LAAs.
10. Wastewater from concrete processes is typically highly alkaline due to dissolved calcium hydroxide (Ca(OH)₂) generated from cement hydration reactions. The high alkaline water is caustic and corrosive and may cause some inorganic pollutants, such as arsenic and chromium, released into the wastewater. In addition, some chemicals, which originate from the chemical admixtures used in concrete, may be present in the wastewater.
11. For cured concrete, hydration is largely completed at batch plants. When cured concrete blocks are cut and ground, the wastewater is more stable and less chemically reactive than wastewater generated from washing out concrete mixers at a ready-mix batch plant.
12. Based on four sets of pH data collected from January 2020 through May 2025, the untreated wastewater from the cured concrete cutting process has a pH range of 10.6

- to 12.1. Treatment for such wastewater requires neutralizing the alkaline pH. Neutralization of high pH is commonly conducted with acids like sulfuric or hydrochloric, or using less hazardous methods like carbon dioxide gas. In December 2020, the Discharger installed a carbon dioxide gas injection system for pH neutralization. The carbon dioxide gas forms carbonic acid in water and reacts with alkaline water resulting in pH neutralization.
13. The solids in wastewater settle in the Settling Basins, which are operated in series. Carbon dioxide gas is injected into the third Settling Basin prior to wastewater being conveyed to the Storage Pond. The treated wastewater in the Storage Pond is applied to the LAAs via water trucks for dust suppression in the LAAs. The Process Schematic is depicted on Attachment C, which is attached hereto and made part of this Order by reference.
14. The RWD states that the water truck used for dust control makes three runs on a dry day at approximately 2,500 gallons per run down to zero on a wet day. Dust control is occasionally supplemented with potable water when the pond water levels are too low. However, the RWD states that the water truck has been using City of Dixon potable water for several years and use of treated wastewater from the Storage Pond for dust control may or may not resume. The Discharger prefers to maintain maximum operational flexibility for use of treated wastewater for dust suppression in the LAAs.
15. The RWD states about 8.5 cubic feet of solids are generated per day from concrete block cutting and grinding, about 3,200 pounds of material per week based on the average number of blocks cut and the saw kerfs. Most of the solids are settled out in the first Settling Basin and are removed approximately every six weeks. Solids are stored in a depression in the reclaim pile where the water is allowed to evaporate. Then solids are recycled back into the concrete block manufacturing process.
16. On 12 February 2025, the Discharger submitted a water balance (based on total annual precipitation using a return period of 100 years) signed by a Professional Engineer. The water balance demonstrates that the Facility has an adequate disposal capacity for the influent flow of 10,000 gallons per day (gpd) as a monthly average, which is the flow limit of this order.
17. The RWD states that starting from early 2022, the carbon dioxide injection system has proved to be stable and operable. Based on 14 pH measurements collected from the effluent of the third Settling Basin prior to discharge to the Storage Pond (between February 2022 through May 2025) effluent to the Storage Pond averaged 7.9 for pH, with a range between 7.2 to 8.3.
18. Per the request of Central Valley Water Board staff, the Discharger collected additional monitoring data on 15 and 29 May 2025. The samples were collected at four locations:

the local water supply, untreated wastewater in the first Settling Basin, effluent from the third Settling Basin, and the treated wastewater in the Storage Pond near the water truck pump station for dust control, as shown in Attachment C. These samples were not filtered. Based on the two sets of data collected at all four locations, concentrations of antimony, beryllium, cadmium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, and zinc were not detected above laboratory reporting levels. Based on two sets of data, average concentrations for selected constituents are listed in Table 2 below:

Table 2. Source Water and Wastewater Quality

| Analyte | Unit | Water Supply | Untreated Wastewater | Effluent to Storage Pond | Storage Pond | Potential WQOs |
|-------------------------|----------|--------------|----------------------|--------------------------|--------------|--------------------|
| Arsenic | µg/L | 2.1 | 1.0 | 1.6 | 3.0 | 10 (Note 1) |
| Barium | µg/L | 185 | 50 | 50 | 50 | 1000 (Note 2) |
| Boron | µg/L | 430 | 325 | 355 | 190 | 1,000 (Note 3) |
| Total Chromium | µg/L | 42 | 46 | 52 | 23 | 50 (Note 4) |
| Electrical Conductivity | µmhos/cm | 565 | 420 | 470 | 615 | 900 (Note 5) |
| Hardness | mg/L | 225 | 63 | 78 | 51 | NA |
| Hexavalent Chrome | µg/L | 12 | 47 | 41 | 4.3 | 10 (Note 6) |
| Magnesium | mg/L | 34 | 0.9 | 3.9 | 4.7 | NA |
| Nitrate as N | mg/L | 4.6 | 4.9 | 4.4 | 0.5 | 10 (Note 7) |
| pH | pH Units | 7.8 | 10.7 | 7.7 | 9.1 | 6.0-8.0 (Note 8) |
| TDS | mg/L | 360 | 320 | 330 | 405 | 500/1,000 (Note 9) |
| Vanadium | µg/L | 17 | 23 | 25 | 21 | 50 (Note 10) |

Note: NA-not available.

- 1) Arsenic Primary MCL: 10 µg/L.
- 2) Barium Primary MCL: 1000 µg/L
- 3) No primary or Secondary MCLs for boron; California Notification Level for boron:1000 µg/L.
- 4) Total Chromium California Primary MCL 50 µg/L. Total Chromium is analyzed by EPA method 200.8.
- 5) Electrical Conductivity: 900 µmhos/cm for Secondary MCL.
- 6) Hexavalent Chromium: California' Primary MCL has been changed from 50 to10 µg/L, effective as of 1 October 2024. Hexavalent Chrome results are analyzed by EPA 7196A.
- 7) Nitrate as nitrogen Primary MCL: 10 mg/L.
- 8) Agricultural water quality goal for pH: 6.0<pH< 8.0.
- 9) Secondary MCLs for TDS: Recommended level = 500; Upper level = 1,000 mg/L.
- 10) Vanadium: No Primary or Secondary MCL; California Notification and Response Level 50 mg/L.

19. Electrical conductivity (EC) is a measure of the capacity of water to conduct electrical current and is an indicator of salinity. Based on Table 2, the effluent to the Storage Pond has an average EC of 470 µmhos/cm, which is less than EC of 565 µmhos/cm for water supply. Treated wastewater in the Storage Pond has an average of 615 µmhos/cm, which is slighter higher than EC of the effluent to the Storage Pond,

likely caused by evaporation. The levels of EC for the water supply and the treated wastewater are less than 700 $\mu\text{mhos/cm}$ for agricultural water quality goal and 900 $\mu\text{mhos/cm}$ for the secondary MCL.

20. Based on agricultural water quality goal for pH, the pH shall not be depressed below 6.0 nor raised above 8.0. Based on Table 2, the wastewater average pH has been reduced from 10.7 for untreated wastewater to 7.7 for the effluent to the Storage Pond, indicating effectiveness of carbon dioxide injection treatment. The treated wastewater in the Storage Pond has an average pH of 9.1, which is out of range between 6.0 and 8.0 for agricultural water quality goal for pH. This is mainly caused by algae in the Storage Pond. When algae grow and reproduce, they consume carbon dioxide, which causes the pH increase. This increase in pH may exceed 8.5, especially during the spring when nutrients are readily available. However, this pH level (pH 9.1) does not cause increase of hexavalent chromium concentration in the Storage Pond, because this pH level is favorable for trivalent chromium precipitation¹ as discussed in Finding No.23.
21. Based on Table 2, the treated wastewater in the Storage Pond has an average hexavalent chromium concentration of 4.3 $\mu\text{g/L}$, which is less than the average hexavalent chromium concentrations of 41 $\mu\text{g/L}$ for the effluent to the Storage Pond, 12 $\mu\text{g/L}$ for water supply, and 10 $\mu\text{g/L}$ for the hexavalent chromium Primary MCL.
22. There are two major reasons likely to cause hexavalent chromium reduction in the Storage Pond: dilution from storm water and/or solid precipitation due to chemical reactions and microbial activities in the Storage Pond. Both sets of samples were collected during the dry season of May 2025 when wastewater quality in the Storage Pond was unlikely to be impacted by stormwater. During the dry season, evaporation causes increase in salinity for the wastewater in the Storage Pond based on comparison of EC and TDS data in Table 2. However, the average hexavalent chromium concentration in the Storage Pond shows a decrease (instead of an increase as salinity due to evaporation) compared with data for effluent to Storage Pond. Therefore, the significant hexavalent chromium reduction in the Storage Pond is likely due to chromium precipitation.
23. Hexavalent chromium reduction is greatly dependent on the operation parameters, including pH, reagent concentration, temperature, coexisting ions and gas atmosphere². The microbial decomposition of organic matter in pond sediments

¹ [Chromium trihydroxide | CrH6O3 | CID 14787 - PubChem - NIH](#), 3.2 Experimental Properties * 3.2.1 Physical Description. Dry Powder. EPA Chemical Data Reporting (CDR) Blue to green solid; [ICSC] Practically insoluble in water.

² [The reduction of Cr\(VI\) to Cr\(III\) mediated by environmentally relevant carboxylic acids: State-of-the-art and perspectives, volume 365](#), 5 March 2019, Pages 205-226. [Journal of Hazardous Materials](#).

consumes dissolved oxygen, leading to an anoxic or low-oxygen environment (low redox potential). In this anoxic environment, the carbon in organic matter acts as an electron donor to reduce toxic hexavalent chromium to the less toxic, more stable trivalent chromium³. In addition, when the water's pH is around 9 to 10, dissolved trivalent chromium ions react with hydroxide ions to form the insoluble solid chromium hydroxide¹. The treated wastewater in the Storage Pond has an average pH of 9.1, which is favorable for chromium precipitation in the Storage Pond. Although the Storage Pond average pH is slightly greater than water supply pH, it does not cause the hexavalent chromium concentration to increase due to chromium precipitation.

24. Water hardness is a measure of the total calcium and magnesium salts present in the water and is expressed as calcium carbonate, in mg/L of CaCO₃. Based on Table 2, the average of wastewater magnesium concentrations are much less than water supply average magnesium concentration; In addition, the wastewater average hardness values are much less than the water supply average hardness. This indicates that some dissolved magnesium ions in the wastewater are likely converted to magnesium carbonate (MgCO₃) in solid formation resulting in reduction of magnesium concentrations and hardness in the wastewater.
25. Based on Table 2, the treated wastewater in the Storage Pond has an average nitrate as nitrogen concentration of 0.5 mg/L, which is less than the water supply average nitrate as nitrogen concentration of 4.6 mg/L. This difference is likely caused by denitrification and adsorption by algae in the Storage Pond. All nitrate as nitrogen data for the water supply and wastewater are less than the Primary MCL of 10 mg/L for nitrate as nitrogen.
26. Based on Table 2, wastewater concentrations of arsenic, barium, boron and vanadium are considered low levels. These constituents are not significantly elevated by the treatment and concentrations remain below their corresponding water quality objectives

Site-Specific Conditions

27. Based on the RWD, the elevation of the ground surface of the Storage Pond is 62 feet above mean sea level.
28. The nearest surface water drainage courses are Putah Creek located approximately five miles north. The area around Dixon is within the Lower Putah Creek watershed.

³ BIOCHAR AS BOTH ELECTRON DONOR AND ELECTRON SHUTTLE FOR THE REDUCTION TRANSFORMATION OF CR(VI) DURING ITS SORPTION. [Environmental Pollution Volume 244](https://www.sciencedirect.com/science/article/abs/pii/S0269749118336649), January 2019, Pages 423-430), <https://www.sciencedirect.com/science/article/abs/pii/S0269749118336649>

While the land slopes toward Putah Creek, current runoff is managed through agricultural ditches and channels that drain toward the Sacramento River.

29. The average annual precipitation in Dixon is 20.2 inches per year, and the 100-year annual precipitation is 36.5 inches per year. The mean reference evapotranspiration rate is approximately 57 inches per year.
30. Based on the RWD, the onsite soils are located on alluvial fans and are moderately well-drained.
31. Surrounding land use is primarily commercial, industry and agricultural.
32. There are no groundwater monitoring wells at the Facility. Campbell Soup Supply Company, located approximately two miles northeast of the Facility, is regulated under WDRs R5-2019-0055. There are five groundwater monitoring wells at the Campbell Soup Supply Company facility, including two upgradient monitoring wells and three downgradient monitoring wells. Based on data collected on 13 June 2024, the average EC was 825 $\mu\text{mhos/cm}$ in the two upgradient monitoring wells and 780 $\mu\text{mhos/cm}$ in a downgradient monitoring well. The depth to groundwater ranged from 29 to 55 feet below top of casing. The groundwater flows to southeast at a gradient of 0.0019.
33. Based on Federal Emergency Management Agency (FEMA), the land application area of the facility is located outside the 100-year floodplain.
34. Domestic wastewater generated at the Facility is discharged separately to the Dixon's public sewer system.

Legal Authorities

35. This Order is adopted pursuant to Water Code section 13263, subdivision (a), which provides in pertinent part as follows:

The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge..., with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonable required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.

Compliance with section 13263, subdivision (a), including implementation of applicable water quality control plans, is discussed in the findings below.

36. The ability to discharge waste is a privilege, not a right, and adoption of this Order shall not be construed as creating a vested right to continue discharging waste. (Wat. Code, § 13263, subd. (g).)
37. This Order and its associated MRP are also adopted pursuant to Water Code section 13267, subdivision (b)(1), which provides as follows:

[T]he regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste ... shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

38. The reports required under this Order, as well as under the separately issued MRP, are necessary to verify and ensure compliance with these WDRs. The burden associated with such reports is reasonable relative to the need for their submission.

Basin Plan Implementation

39. Pursuant to Water Code section 13263, subdivision (a), WDRs must “implement any relevant water quality control plans and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.”
40. This Order implements the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan), which designates beneficial uses for surface water and groundwater within its scope and establishes WQOs necessary to preserve such beneficial uses. (See Wat. Code, § 13241 et seq.)
41. Putah Creek is a tributary of the Sacramento San Joaquin Delta. The beneficial uses of the Sacramento San Joaquin Delta, as stated in the Basin Plan, are municipal (MUN) and domestic supply; agricultural supply; industrial service supply; industrial process supply; navigation; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; wildlife habitat; migration of aquatic organisms; and spawning, reproduction, and/or early development.
42. The beneficial uses of underlying groundwater as set forth in the Basin Plan are municipal and domestic supply, agricultural supply, industrial service supply and industrial process supply.

43. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.
44. The Basin Plan's numeric WQO for bacteria requires that the most probable number of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN groundwater.
45. The Basin Plan's narrative WQOs for chemical constituents, at a minimum, require MUN-designated waters to at least meet the MCLs specified in California Code of Regulations, title 22 (Title 22). The Basin Plan provides that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
46. The narrative toxicity WQO requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, animal, plant, or aquatic life associated with designated beneficial uses.
47. Quantifying a narrative water quality objective requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative objective is required to protect specific beneficial uses, the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations to implement the narrative objective.

Salt and Nitrate Control Programs

48. The Central Valley Water Board adopted Basin Plan amendments incorporating new programs for addressing ongoing salt and nitrate accumulation in the Central Valley at its 31 May 2018 Board Meeting (Resolution R5-2018-0034). The Basin Plan amendments became effective on 17 January 2020 and were revised by the Central Valley Water Board in 2020 with [Resolution R5-2020-0057](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf) (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf). The revisions to the Basin Plan amendments became effective on 10 November 2021.
 - a. For the Salt Control Program, the Discharger (CVSALT ID 3679) submitted a Notice of Intent and elected to participate in the Conservative Salinity Permitting Approach. Unless the Board's Basin Plans designated a site-specific numeric water quality objective, a permittee seeking to be regulated under Conservative Salinity Permitting Approach must meet the conservative limits based on the applicable water quality objective that protects the most sensitive beneficial use: either a monthly average of 700 $\mu\text{mhos/cm}$ EC for agriculture beneficial use or an annual average of 900 $\mu\text{mhos/cm}$ EC for MUN Beneficial Use. The groundwater beneath

the Discharger's LAAs is designated for both agricultural and MUN. Accordingly, these WDRs establish an average monthly effluent limitation of 700 $\mu\text{mhos/cm}$ for EC to ensure compliance with the Conservative Salinity Permitting Approach.

- b. The Facility is not subject to the Nitrate Control Program because it has not been identified as a discharger of nitrate or other forms of nitrogen speciation to groundwater. The MRP requires recurring groundwater monitoring for total nitrogen and, if future data demonstrates increasing or elevated nitrogen concentrations, the Central Valley Water Board may incorporate the Discharger into the Nitrate Control Program via issuance of a Notice to Comply letter.
49. As these strategies are implemented, the Central Valley Water Board may find it necessary to modify the requirements of these WDRs to ensure the goals of the Salt and Nitrate Control Programs are met. This order may be amended or modified to incorporate newly applicable requirements. More information regarding this regulatory planning process can be found on the Central Valley Water Board's [CV-SALTS website](https://www.waterboards.ca.gov/centralvalley/water_issues/salinity) (https://www.waterboards.ca.gov/centralvalley/water_issues/salinity).

Compliance with Antidegradation Policy

50. State Water Board Resolution 68-16, Statement of Policy with Respect to Maintaining High Quality Waters in California (Antidegradation Policy), which is incorporated as part of the Basin Plan, prohibits the Central Valley Water Board from authorizing degradation of "high-quality waters" unless it is shown that such degradation will be consistent with the maximum benefit to the people of California; will not unreasonably affect present and anticipated future beneficial uses; and will not result in water quality less than as prescribed in applicable policies. Resolution 68-16 further requires that any discharge to existing high quality waters be required to meet WDRs that will result in the best practicable treatment or control (BPTC) of the discharge necessary to assure that pollution and/or nuisance will not occur and that the highest quality consistent with the maximum benefit to the people of the state will be maintained.
51. The Antidegradation Policy applies when the Central Valley Water Board authorizes an activity that will result in discharges of waste to high-quality waters that will degrade the quality of those waters. "High-quality waters" are those waters where water quality is more than sufficient to support beneficial uses designated in the Basin Plan. Whether a water is a high-quality water is established on a constituent-by-constituent basis, which means that an aquifer can be considered a high-quality water with respect to one constituent, but not for others (State Water Board Order No. WQ 91-10). If the activity will not result in the degradation of high-quality waters, the Antidegradation Policy does not apply, and the discharger need only demonstrate that it will use "best efforts" to control the discharge of waste.

52. Constituents in the Facility’s effluent with potential to degrade groundwater include salinity and hexavalent chromium. Based on the two sets of data collected on 15 May and 29 May 2025, the average concentrations of these constituents are summarized in Table 3.

Table 3. Summary of Source Water and Wastewater Quality

| Analyte | Unit | Saw Water Supply | Untreated Wastewater | Effluent to Storage Pond | Storage Pond | Potential Water Quality Objective |
|-------------------------|----------|------------------|----------------------|--------------------------|--------------|-----------------------------------|
| Electrical Conductivity | µmhos/cm | 565 | 420 | 470 | 615 | 700/900 (note 1) |
| Hexavalent Chromium | µg/L | 12 | 47 | 41 | 4.3 | 10 (note 2) |

1) Agricultural water quality goal for EC 700 µmhos/cm, EC Secondary MCL 900 µmhos/cm.

2) Hexavalent Chromium Primary MCL 10 µg/L.

- a. **Salinity EC:** The treated wastewater in the Storage Pond has an average EC of 615 µmhos/cm, which is less than the potential agricultural water quality goal of 700 µmhos/cm for EC. This Order sets an EC limit of 700 µmhos/cm as a monthly average for the treated wastewater applied to the LAAs. In the summertime, wastewater in the Storage Pond may have higher EC values due to evaporation. The Discharger may dilute the wastewater with potable water in the water truck when the effluent is applied to the LAAs for dust control.
- b. **Hexavalent Chromium:** The treated wastewater in the Storage Pond has an average hexavalent chromium concentration of 4.3 µg/L, which is significantly less than the average hexavalent chromium concentration in the untreated wastewater (47 µg/L) and the water supply (12 µg/L). Additionally, the treated wastewater hexavalent chromium concentration is below the Primary MCL of 10 µg/L. Therefore, the discharge is unlikely to degrade groundwater beyond the water quality objective for hexavalent chromium. For the treated wastewater applied to LAAs, this Order contains a hexavalent chromium limit of 10 µg/L as an annual average, or the water supply hexavalent chromium concentration, whichever is greater.

53. The Discharger implements, or will implement, as required by this Order, the following BPTC measures, which the Central Valley Water Board has determined constitute BPTC. These measures will minimize the extent of water quality degradation resulting from the Facility’s discharges:

- a. Installation of a wastewater treatment system, improving wastewater quality. The Discharger has already installed a carbon dioxide system to reduce chromium levels in wastewater and improve overall water quality.

- b. Reuse of solids from concrete cutting process for concrete block manufacturing. The Discharger has already implemented this concrete handling process.
 - c. Compliance with the Salt and Nitrate Control Programs, including an effluent limit of 700 μ mhos/cm for EC.
54. The economic prosperity of Central Valley communities and associated industry is of maximum benefit to the people of the State and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order. The Facility employs full-time employees to manufacture concrete and other masonry products to meet market demand. Therefore, the limited degradation of groundwater in the Facility's discharge is consistent with the maximum benefit to the people of the state.

Based on the foregoing, the adoption of this Order is consistent with the State Water Board's Antidegradation Policy.

California Environmental Quality Act

55. The issuance of WDRs is a discretionary agency action subject to the California Environmental Quality Act (CEQA). This Order regulates an existing wastewater discharge to land at the Facility. Authorization of the Discharger's existing operation is exempt from CEQA review pursuant to California Code of Regulations, title 14 (Title 14), section 15301 because such authorization involves no expansion of existing use. To the extent that this Order authorizes use of treated water for dust control on site, the Central Valley Water Board has determined that such authorization is exempt from CEQA review pursuant to Title 14 section 15304.

Other Regulatory Considerations

56. These WDRs regulate a facility that may impact a disadvantaged community and/or tribal community and includes an alternative compliance path that allows the Discharger time to come into compliance with a water quality objective (i.e., salinity). The Central Valley Water Board has satisfied the outreach requirements set forth in Water Code section 189.7 by conducting outreach in affected disadvantaged and tribal communities through its notice and comment procedures. Pursuant to Water Code section 13149.2, the Central Valley Water Board reviewed readily available information and information raised to the Board by interested persons concerning anticipated water quality impacts in disadvantaged or tribal communities resulting from adoption of these WDRs. The Board also considered environmental justice concerns within the Board's authority and raised by interested persons with regard to those impacts.

57. Pursuant to Water Code section 106.3, subdivision (a), it is “the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.” Although this Order is not subject to Water Code section 106.3, as it does not revise, adopt, or establish a policy, regulation, or grant criterion (see § 106.3, subd. (b)), it nevertheless promotes the policy by requiring discharges to meet MCLs for drinking water (excluding salinity), which are designed to protect human health and ensure that water is safe for domestic use. For salinity, this Order requires compliance with the Salt Control Program. Although the Basin Plans’ Exceptions Policy for Salinity allows participants in these Programs to obtain limited-term exceptions from MCLs for salinity, this Program is consistent with the Human Right to Water Policy because its over-arching management goals and priorities include long-term development of sustainable management practices and, where feasible, restoration of impacted groundwater basins and sub-basins.
58. This Order, which prescribes WDRs for discharges of wastewater to land in accordance with the Basin Plan, is exempt from the prescriptive requirements of California Code of Regulations, title 27 (Title 27), section 20005 et seq. (See Title 27, section 20090, subd. (b).).
59. Based on the threat and complexity of the discharge, the Facility is determined to be classified as 3C as defined below:
- Category “3” – Those discharges of waste that could degrade water quality without violating water quality objectives, or could cause a minor impairment of designated beneficial uses as compared with Category 1 and Category 2.
- Category “C” – Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13263 of the Water Code not included in Category A or Category B. Included are dischargers having no waste treatment systems or that must comply with best management practices, dischargers having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal.
60. Statistical data analysis methods outlined in the US EPA’s Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (Unified Guidance) are appropriate for determining compliance with the Groundwater Limitations of this Order. Depending on the circumstances, other methods may also be appropriate.

Scope of Order

61. This Order is strictly limited in scope to those waste discharges, activities, and processes described and expressly authorized herein.

62. Pursuant to Water Code section 13264, subdivision (a), the Discharger is prohibited from initiating the discharge of new wastes (i.e., other than those described herein) or making material changes to the character, volume, or timing of waste discharges authorized herein without filing a new RWD per Water Code section 13260.
63. Failure to file a new RWD before initiating material changes to the character, volume, and/or timing of discharges authorized herein, shall constitute an independent violation of these WDRs.
64. This Order is also strictly limited in applicability to those individuals and/or entities specifically designated herein as “Discharger” subject only to the discretion to designate or substitute new parties in accordance with this Order.

Procedural Matters

65. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.
66. The Discharger, interested agencies, and interested persons were notified of the Central Valley Water Board’s intent to prescribe the WDRs in this Order and provided an opportunity to submit their written views and recommendations at a public hearing. (Wat. Code, § 13167.5.)
67. At a public meeting, the Central Valley Water Board heard and considered all comments pertaining to the discharges regulated under this Order.
68. The Central Valley Water Board will review and revise the WDRs in this Order as necessary.

REQUIREMENTS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13263 and 13267, that the Basalite Building Products, LLC, Basalite Concrete Products, their agents, employees, and successors shall comply with the following.

A. Standard Provisions

Except as specifically provided below, the Discharger shall comply with all applicable provisions of the attached *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, 1 March 1991 (SPRRs), which are incorporated herein.

B. Discharge Prohibitions

1. Discharge of waste to surface waters or surface water drainage courses, including irrigation ditches outside of control of the Discharger, is prohibited.
2. Discharge of waste classified as “hazardous”, as defined in Title 22, section 66261.1 et seq., is prohibited.
3. Discharge of waste classified as “designated”, as defined in Water Code section 13173, in a manner that causes violation of Groundwater Limitations, is prohibited.
4. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.
5. Discharge of toxic substances into any wastewater treatment/storage systems, or LAAs such that biological treatment mechanisms are disrupted is prohibited.
6. Application of residual solids to the LAAs is prohibited.
7. Discharge of domestic wastewater to the process wastewater treatment system or any surface water is prohibited.
8. Discharge of wastewater to the domestic wastewater treatment system is prohibited.

C. Discharge Limitations

1. Influent entering the treatment system at INF-001 (as defined in the MRP) shall not exceed **10,000 gpd** as a monthly average.
2. The pH monthly average for effluent to the Storage Pond at EFF-001 (as defined in the MRP) shall not be less than 6.0 or greater than 8.0.
3. For the treated wastewater (or mixture of wastewater with potable water) applied to the LAAs at EFF-002 (as defined in the MRP), the following constituents shall not exceed the following limits:

| Constituent | Units | Limits |
|--|----------|--|
| EC (monthly average) | µmhos/cm | 700 |
| Hexavalent Chromium (annual average) | mg/L | 10 or water supply, whichever is greater |
| Nitrate as Nitrogen (annual average) | mg/L | 10 |

Compliance with the above requirements shall be determined as specified in the Monitoring and Reporting Program.

D. Groundwater Limitations

Discharge of waste at or from any portion of the Facility shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or in excess of natural upgradient quality, whichever is greater:

1. Concentrations that exceed either the Primary or Secondary MCLs, as applicable, established in Title 22.
2. Concentrations of taste or odor-producing constituents, toxic substances, or any other constituent that cause nuisance or adversely affect beneficial uses.

E. Discharge Specifications

1. Wastewater treatment, storage, conveyance, and disposal shall not cause pollution or a nuisance, as those terms are defined in Water Code section 13050.
2. All conveyance, treatment, storage, and discharge systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
3. As a means of monitoring odors, the dissolved oxygen (DO) content in the upper one foot of the effluent Storage Pond shall not be less than 1.0 mg/L for three consecutive sampling events. If DO concentrations are less than 1.0 mg/L for three consecutive sampling events and offensive odors are perceivable beyond the property limits for the surrounding community/neighborhood or any considerable number of persons, the Discharger shall report the findings to the Central Valley Water Board in writing within 10 days and shall include a specific plan to resolve the odors within 30 days.
4. The Discharger shall design, construct, operate, and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or

structural failure. The operating freeboard in any pond shall never be less than two feet, measured vertically from the lowest possible point of overflow. As a means of management and to discern compliance with this requirement, the Discharger shall install and maintain in the Storage Pond a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.

5. Wastewater treatment and storage structures shall have sufficient capacity to accommodate allowable discharge flow and design seasonal precipitation while ensuring compliance with all requirements of this Order. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
6. On 1 October each year, available capacity shall at least equal the volume necessary to comply with Specification E.4 and E.5.
7. The Dischargers shall monitor sludge accumulation in the wastewater treatment/Storage Ponds and shall periodically remove sludge as necessary to maintain adequate storage capacity.
8. Storage of residual solids on areas not equipped with means to prevent storm water infiltration or a paved leachate collection system is prohibited.
9. All ponds shall be managed to prevent breeding of mosquitoes. Specifically:
 - a. An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
 - d. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.
10. Newly constructed or rehabilitated berms or levees shall be designed and constructed under the supervision of a California Registered Civil Engineer.
11. Objectionable odors shall not be perceivable beyond the limits of the property where the waste is generated, treated, and/or discharged at an intensity that creates or threatens to create nuisance conditions for the surrounding community/neighborhood or any considerable number of persons.

12. The Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge. Such change may require submittal of a report of waste discharge before the change is implemented.

F. Land Application Area Specifications

1. Any wastewater runoff shall be confined to the LAAs and shall not enter any surface water drainage course or storm water drainage system.
2. Land application of wastewater shall be managed to minimize erosion.
3. Wastewater shall not be applied to LAAs if standing water is observed.
4. The Discharger shall not discharge wastewater to the LAAs when soils are saturated (e.g., during or after significant precipitation events).
5. Wastewater shall not be applied to LAAs when wind gusts exceed 30 miles per hour.
6. LAAs shall be inspected periodically to determine compliance with the requirements of this Order. If an inspection reveals noncompliance or threat of noncompliance with this Order, the Discharger shall immediately stop wastewater application to the noncompliant LAA(s) and implement corrective actions to ensure compliance with this Order.

G. Solids Disposal Specifications

1. Solid waste shall be removed from screens, sumps, the Settling Basins and Storage Pond as needed to ensure optimal operation and adequate storage capacity.
2. Any handling and storage of solid waste and residual solids shall be controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the groundwater limitations of this Order.
3. Land application of sludge from the Storage Pond is prohibited onsite.
4. If removed from the site, solid waste and residual solids shall be disposed of in a manner consistent with Title 27, division 2. Removal for land disposal at other facilities (i.e., landfills, composting facilities, and/or soil amendment sites operated in accordance with valid waste discharge requirements issued by a regional water board) will satisfy this specification.

5. Any proposed change in residual solids use or disposal practice shall be reported in writing to the Executive Officer at least 90 days in advance of the change.

H. Provisions

1. If the Discharger proposes to make any significant change to its wastewater treatment system which may impact discharge water quality, the Discharger shall notify the Executive Officer and submit a Report of Waste Discharge describing the proposed change(s), justification(s), and potential impact(s) to water quality. The Executive Officer will evaluate the proposed change with respect to the requirements of this Order.
2. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall bear the professional's signature and stamp.
3. The Discharger shall submit the technical reports and work plans required by this Order for consideration by the Executive Officer and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Discharger shall proceed with all work required by the foregoing provisions by the due dates specified.
4. As of the date of adoption of this Order, the Discharger shall comply with MRP Order R5-2026-xxxx, which is incorporated as part of this Order, as well as any subsequent revisions thereto as ordered by the Executive Officer. Submittal dates of Discharger self-monitoring reports shall be no later than the submittal date specified in the operative MRP.
5. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports. On or before each report due date, the Discharger shall submit the specified document to the Central Valley Water Board or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharger shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board in writing when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders

requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

6. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger when the operation is necessary to achieve compliance with the conditions of this Order.
7. The Discharger shall use the best practicable cost-effective control technique(s), including proper operation and maintenance, to comply with this Order.
8. In the event that the Discharger reports toxic chemical release data to the State Emergency Response Commission (SERC) pursuant to section 313 of the Emergency Planning and Community Right to Know Act (42 U.S.C. § 11023), the Discharger shall also report that information to the Central Valley Water Board within 15 days of the report to the SERC.
9. In the event of any change in control or ownership of the facility, the Discharger must notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board.
10. To assume operation as Discharger under this Order, any succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Central Valley Water Board, and a statement in accordance with the signatory paragraph of SPRRs Standard Provision B.3 stating that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit a transfer request may result in penalties for discharging without WDRs, a violation of the Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board at one of its regularly scheduled meetings.
11. In order to rescind WDRs that are no longer necessary because the discharge to land permitted under this Order has ceased, the Discharger must contact the Central Valley Water Board's Compliance and Enforcement Unit to determine appropriate wastewater treatment system closure requirements.

12. A copy of this Order, including the MRP, Information Sheet, Attachments, and SPRRs, shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.

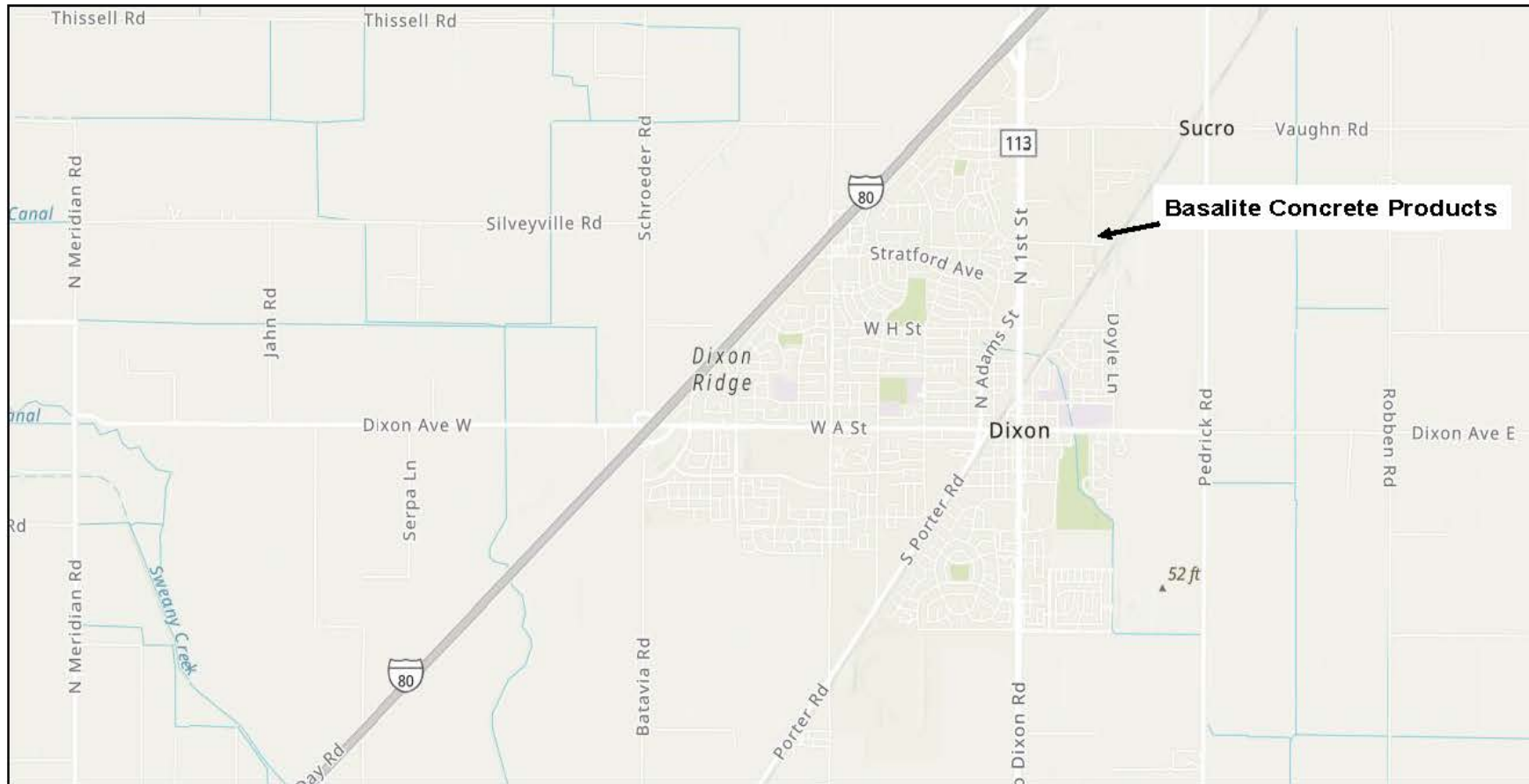
ENFORCEMENT

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350, and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

ADMINISTRATIVE REVIEW

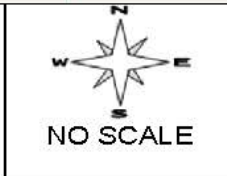
Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board for administrative review in accordance with Water Code section 13320, and California Code of Regulations, title 23, section 2050 et seq. To be timely, the State Water Board must receive the petition by 5:00 pm on the 30th day after the date of this Order, except that if the 30th day falls on a Saturday, Sunday or State Holiday, the petition must be received by the State Water Board by 5:00 pm on the next business day. The law and regulations applicable to filing petitions are available on the internet at the State Water Boards' Public Notices [Petitions for Water Quality webpage](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) (http://www.waterboards.ca.gov/public_notices/petitions/water_quality). Copies will be provided upon request.

ATTACHMENT A- LOCATION MAP

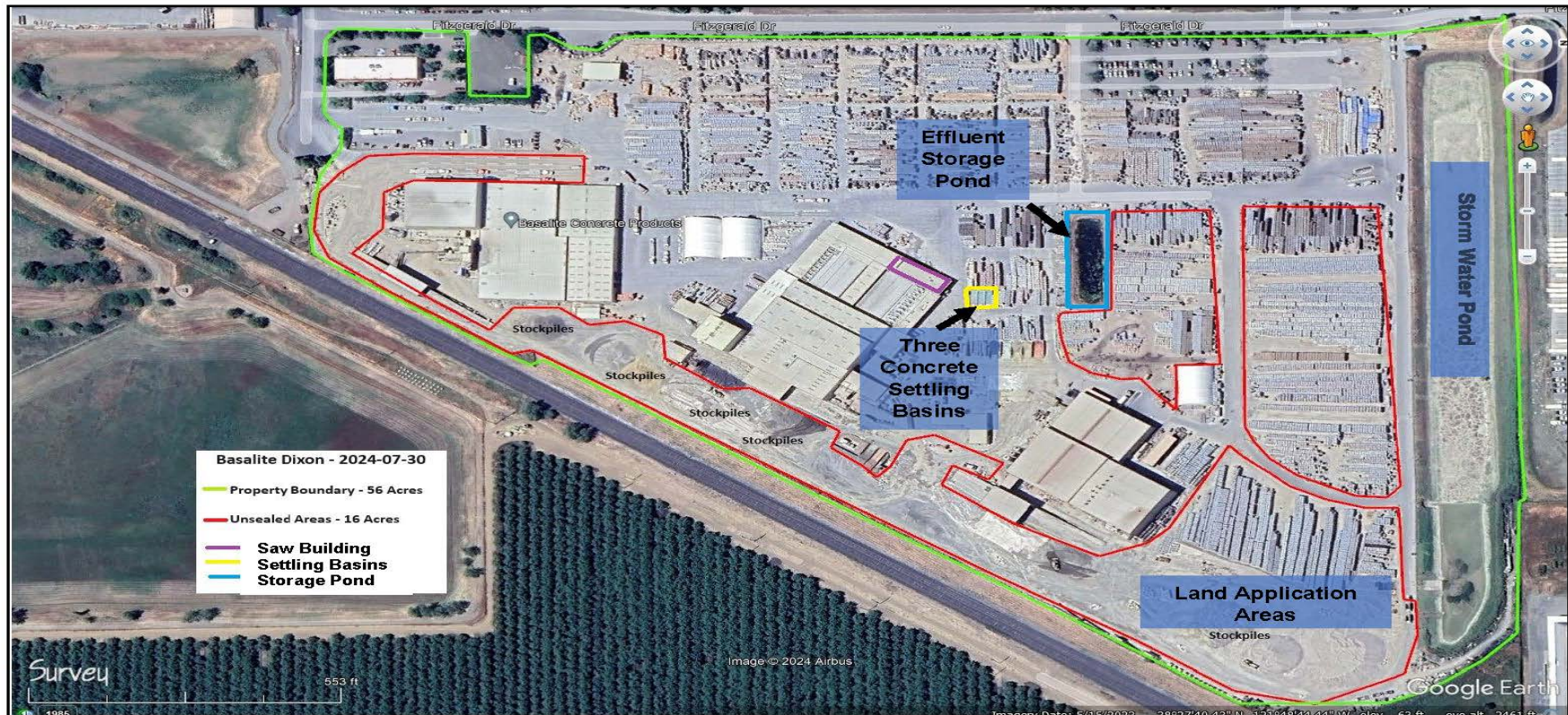


Drawing Reference:
www.arcgis.com

LOCATION MAP
BASALITE BUILDING PRODUCTS, LLC
BASALITE CONCRETE PRODUCTS
SOLANO COUNTY



ATTACHMENT B-SITE PLAN

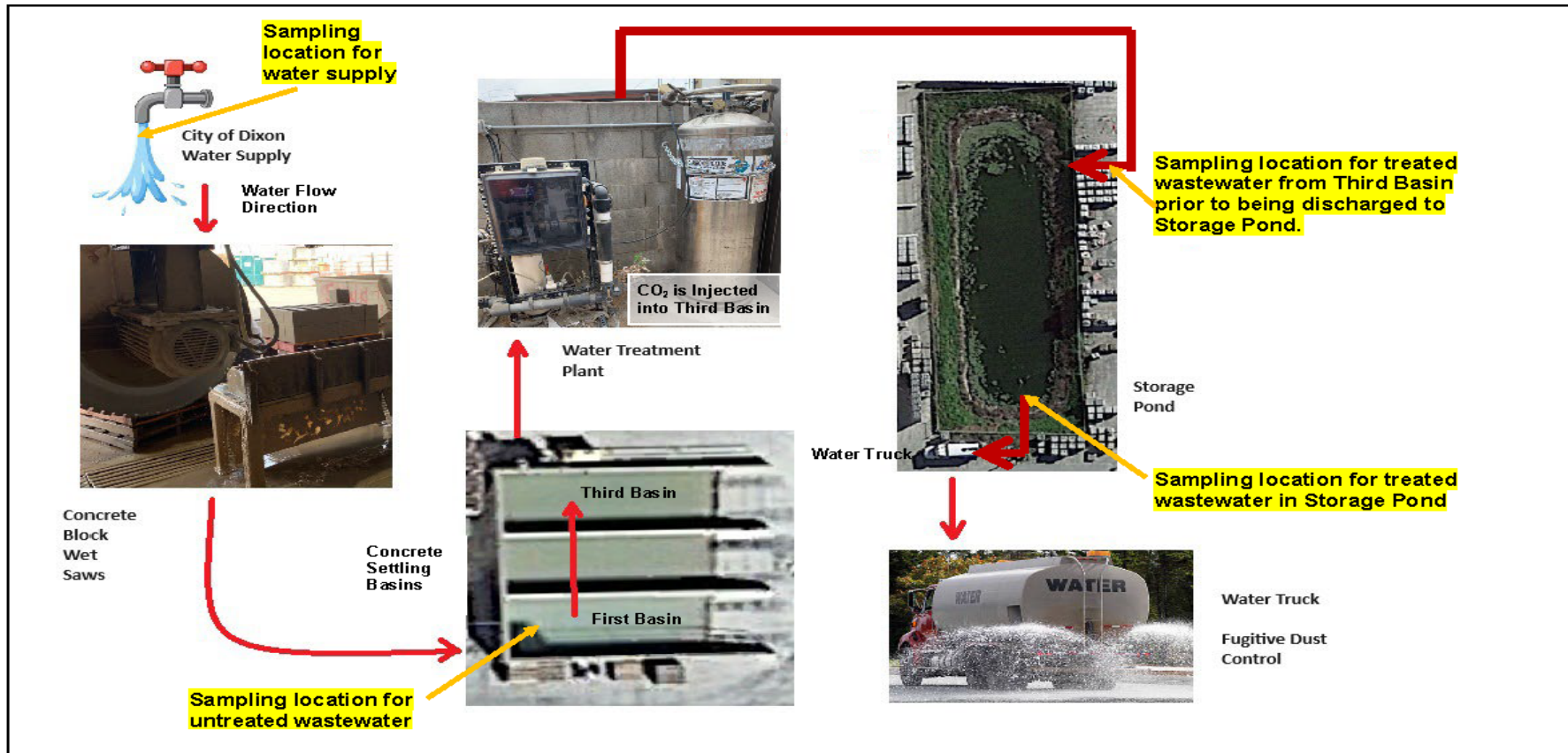


Drawing Reference:
Basalite Building Products, LLC
RWD, July 2024



SITE MAP
BASALITE BUILDING PRODUCTS, LLC
BASALITE CONCRETE PRODUCTS
SOLANO COUNTY

ATTACHMENT C-PROCESS SCHEMATIC



Drawing Reference:
 Basalite Building Products, LLC
 RWD, July 2024

PROCESS SCHEMATIC
 BASALITE BUILDING PRODUCTS, LLC
 BASALITE CONCRETE PRODUCTS
 SOLANO COUNTY

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 CENTRAL VALLEY REGION
 WASTE DISCHARGE REQUIREMENTS ORDER R5-2026-xxxx
 FOR
 BASALITE BUILDING PRODUCTS, LLC
 BASALITE CONCRETE PRODUCTS
 SOLANO COUNTY

INFORMATION SHEET

Basalite Concrete Products (Facility) was constructed in 1987 and has not been previously regulated under WDRs.

The Facility manufactures concrete blocks and other masonry products. The Facility operates four saws and a face grinder for cutting and polishing cured concrete block for special orders. The diamond encrusted blades and grinding wheels rely on a small but continuous water supply for lubrication, cooling, and to remove cutting waste. The Discharger states that approximately 4,300 gallons of process water is generated during a work day.

The process wastewater treatment system consists of three concrete Settling Basins, a carbon dioxide gas inject system for wastewater pH neutralization, an unlined Effluent Storage Pond, and 16 acres of Land Application Areas (LAAs). The treated wastewater is applied to LAAs for dust control. Solids collected from Settling Basins are recycled back into the concrete block manufacturing process.

Based on two sets of data collected on 15 May and 29 May 2024, wastewater average pH has been reduced from 10.7 for untreated wastewater to 7.7 for the effluent to the Storage Pond, indicating effectiveness of carbon dioxide injection treatment. Based on two sets of data, average concentrations for selected constituents are summarized below:

| Analyte | Unit | Water Supply | Untreated Wastewater | Effluent to Storage Pond | Storage Pond | Potential Water Quality Objective |
|-------------------------|----------|--------------|----------------------|--------------------------|--------------|-----------------------------------|
| Electrical Conductivity | µmhos/cm | 565 | 420 | 470 | 615 | 900, note 1 |
| Hexavalent Chrome | µg/L | 12 | 47 | 41 | 4.3 | 10, note 2 |
| Nitrate as N | mg/L | 4.6 | 4.9 | 4.4 | 0.5 | 10, note 3 |

WASTE DISCHARGE REQUIREMENTS ORDER R5-2026-xxxx
 BASALITE BUILDING PRODUCTS, LLC
 BASALITE CONCRETE PRODUCTS
 SOLANO COUNTY

- 1) Secondary MCL 900 μ mhos/cm for EC.
- 2) Hexavalent Chromium Primary MCL 10 μ g/L.
- 3) Primary MCL 10 mg/L for nitrate as nitrogen.

The treated wastewater in the Storage Pond has an average EC of 615 μ mhos/cm, which is less than the agricultural water quality goal of 700 μ mhos/cm for EC. The Storage Pond has an average hexavalent chromium concentration of 4.3 μ g/L, which is less than 10 μ g/L for the Primary MCL for hexavalent chromium. All wastewater nitrate as nitrogen concentrations are less than the Primary MCL of 10 mg/L for nitrate as nitrogen.

The WDRs Order contains the following flow and effluent limits:

- Influent entering the treatment system shall not exceed 10,000 gpd as a monthly average.
- The pH monthly average for effluent to the Storage Pond (effluent from the third Settling Basin prior to being discharged into the Storage Pond) shall not be less than 6.0 or greater than 8.0.
- For the treated wastewater (or mixture of wastewater with potable water) applied to the LAAs, the following constituents shall not exceed the following limits:

| Constituent | Units | Limits |
|---|---------------|--|
| EC (monthly average) | μ mhos/cm | 700 |
| Hexavalent Chromium (annual average) | mg/L | 10 or water supply, whichever is greater |
| Nitrate as Nitrogen (annual average) | mg/L | 10 |