CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ORDER NO. R7-2019-0016

GENERAL WASTE DISCHARGE REQUIREMENTS FOR IN-SITU GROUNDWATER REMEDIATION AT SITES WITHIN THE COLORADO RIVER BASIN REGION

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) finds that:

- 1. Discharges of petroleum hydrocarbon compounds and volatile organic compounds, heavy metals, perchlorate, pesticides, and other types of contaminants have degraded groundwater at various sites throughout the Colorado River Basin Region and have impacted or are threatening to impact beneficial uses of groundwater.
- 2. Cleanup of groundwater at these sites may include the addition (discharge) of chemicals and other reactive materials (amendments) into soil and groundwater (in-situ), via chemical, biological, or physical treatment systems, to promote groundwater remediation. This includes discharge of amendments directly to the groundwater, as well as amendments added to extracted groundwater for a groundwater recirculation system. Persons applying or proposing to discharge amendments to soil or groundwater to promote groundwater remediation within a specified treatment zone are hereinafter referred to as "Dischargers."
- 3. In-situ treatment includes processes such as oxygen enhancement, chemical oxidation, chemical reduction, biostimulation (addition of nutrients to enhance biodegradation), bioaugmentation (introducing appropriate bacteria), and metals precipitation/stabilization, surfactants/co-solvents, buffering and pH adjustment, and/or physical treatments to degrade pollutants, or change them to less toxic or less mobile forms. For the purposes of this Order, groundwater extraction and amendment, with return of amended groundwater to the subsurface (groundwater recirculation) is also considered in-situ remediation. The application of amendments can be active, with hydraulic control of the treatment zone as the amendments are added to the extracted groundwater and recirculated through the subsurface, or passive, with the amendments injected into the treatment zone without hydraulic control.
- 4. The discharge of amendments to remediate groundwater may require a small-scale pilot test to evaluate the amendments' strength, injection volumes, injection rates, injection frequency, injection and monitoring well spacing, and the cost and time to achieve remediation goals prior to design and implementation of full-scale remediation. The discharge of amendments for both pilot studies and full-scale remediation are covered under this Order.
- 5. Water Code section 13260, subdivision (a)(1), requires that any person discharging wastes or proposing to discharge wastes (other than into a community sewer system) that could affect the quality of the waters of the state, must file a report of waste discharge (ROWD). The Regional Water Board then prescribes requirements for the discharge or proposed discharge of wastes pursuant to Water Code section 13263. General waste discharge requirements (General WDRs) may be prescribed for discharges produced by

the same or similar operations, involving the same or similar types of wastes, and requiring the same or similar treatment standards.

- 6. This Order consists of General WDRs regulating the use and application of in-situ biological, chemical, and physical treatments to cleanup waste constituents in groundwater. The Dischargers regulated by this Order are more appropriately regulated by General WDRs than individual WDRs because the Regional Water Board regulates many sites using this type of cleanup process, the cleanup of these types of sites is of high priority and the issuance of individual WDRs is time-consuming without providing additional benefit, and the types of treatment used have similar effects that can reasonably be regulated under General WDRs. This Order further does not preclude the adoption of individual WDRs where appropriate.
- 7. Adoption of these General WDRs for *in-situ* groundwater remediation processes will: (a) simplify the application process for Dischargers, (b) prevent regulatory delays to groundwater remediation activities, (c) reduce the time needed for the Regional Water Board to prepare and adopt WDRs for common remedial activities in the Colorado River Basin Region, and (d) provide a comparable level of water quality protection to individual, site-specific WDRs.
- 8. The application of any amendments to groundwater may result in unintended adverse effects to groundwater quality. To comply with this Order, any potential adverse water quality effects that may occur must be localized, of short-term duration, and may not affect existing or potential beneficial uses of groundwater. Groundwater quality will be monitored before, during, and after addition of any amendments to verify both the effectiveness of the remediation and ensure that no long-term, adverse impacts on beneficial uses of groundwater have occurred.

Scope and Applicability

- 9. A Discharger may seek coverage under this Order to add specific amendments directly to groundwater or indirectly through the soil column for the purpose of facilitating in-situ remediation of waste constituents. The Discharger must demonstrate the effectiveness of the selected amendment(s) as well as control of side reactions and breakdown products under site conditions.
- 10. This Order covers the following actions:
 - a. Pilot studies of limited extent and duration:
 - i. When the amendments have previously been demonstrated (by previous pilot tests or full-scale operations) to achieve the desired results, and side reactions, byproducts, breakdown products, and residuals are understood.
 - ii. When processes to remove byproducts, breakdown products, and residuals are identified and discussed in the Remedial Action Plan (RAP) or Notice of Intent (NOI)/ROWD.
 - b. Full-scale applications:
 - i. When it has been demonstrated in a pilot study, or full-scale application at the site or a similar site, that the desired results can be achieved and side

reactions, breakdown products, and residuals do not result in long-term, adverse water quality effects.

- 11. Coverage under this Order applies to the following groups of amendments, except as specifically excluded in Finding 12 below:
 - a. Amendments that create reducing conditions (i.e., amendments that provide carbon, energy, electrons, and/or macronutrients). Examples include:
 - i. Zero valent metals such as iron or zinc,
 - ii. Easily degradable carbon sources such as glucose, acetate, citric acid, acetic acid, ethanol, methanol, and others,
 - iii. Slowly degradable carbon sources such as edible oils, poly-lactate, and other hydrogen release compounds,
 - iv. Polysulfides,
 - v. Macro nutrients such as nitrate, phosphate, and potassium, and
 - vi. Microorganisms cultured on site materials.
 - b. Amendments that create oxidizing conditions (i.e., amendments that provide oxygen or otherwise gain electrons). Examples include:
 - i. Air,
 - ii. Oxygen,
 - iii. Ozone,
 - iv. Potassium or sodium permanganate,
 - v. Oxygen release compounds, and
 - vi. Hydrogen peroxide.
 - c. Multiple amendments (includes application of reducing agents or oxidizing agents or both applied concurrently or over time as proposed in an approved RAP and the NOI/ROWD). Examples include:
 - i. Establishing a reducing zone immediately downgradient of an oxidizing zone to reduce hexavalent chromium that may be produced under oxidizing conditions, and
 - ii. Providing a slowly degradable carbon source along with polysulfides to precipitate sulfates as metal sulfides.
 - d. Tracer compounds as discussed in **Attachment B** (NOI Additional Information Requirements).
 - e. Biofouling control agents such as chlorine dioxide, chlorine, and bleach.

- 12. The following amendments are specifically <u>excluded</u> from coverage under this Order:
 - a. Amendments that may cause violent exothermic reactions, particularly in the presence of hydrocarbon free product, producing steam, pressure, and/or an explosive off-gas.

Basin Plan and Related Regulatory Considerations

- 13. The Water Quality Control Plan for the Colorado River Basin Region (Basin Plan), which was adopted on November 17, 1993 and amended on March 17, 2017, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Pursuant to Water Code section 13263, subdivision (a), waste discharge requirements must implement the Basin Plan and 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 Water Code section 13241.
- 14. The designated beneficial uses of groundwater in the Colorado River Basin Region include, but are not limited to:
 - a. Municipal and domestic water supply (MUN),
 - b. Agricultural water supply (AGR), and
 - c. Industrial service supply (IND).
- 15. This Order establishes WDRs pursuant to division 7, chapter 4, article 4 of the Water Code (for discharges that are not subject to regulation under section 402 of the Clean Water Act (33 U.S.C. § 1342)). These WDRs implement narrative and numeric water quality objectives for ground and surface waters established by the Basin Plan.
- 16. The Basin Plan identifies numeric water quality objectives for waters designated as municipal supply. These are the maximum contaminant levels (MCLs) specified in the following provisions of California Code of Regulations, title 22: Table 64431-A (Inorganic Chemicals) of section 64431, Table 64444-A (Organic Chemicals) of section 64444, Table 64678-A of section 64678 (Lead and Copper Action Levels), and Tables 64442 and 64443 of sections 64442 and 64443 (Radioactivity). The Basin Plan's incorporation of these provisions by reference is prospective and includes future changes to the incorporated provisions as the changes take effect. The Basin Plan recognizes that the Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
- 17. The Basin Plan contains a narrative water quality objective for tastes and odors. The taste and odor objective requires that groundwater not contain taste or odor producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
- 18. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet the MCLs designed to protect human health and ensure that water is safe for domestic use.

- 19. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells, as described in California Well Standards Bulletin No. 74-90 (June 1991) and Water Well Standards: State of California Bulletin No. 94-81 (December 1981). These standards, and any more stringent standards implemented by the Regional Water Board or adopted by the local county where a site is located pursuant to Water Code section 13801, apply to all monitoring and injection wells covered by this Order.
- 20. Water Code section 13267 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) model found in Attachment C will be used to establish monitoring and reporting requirements to implement state requirements and demonstrate compliance with this Order. The State Water Resources Control Board's (State Water Board) electronic database, GeoTracker Information Systems, facilitates the submittal and review of correspondence, discharger requests, and monitoring and reporting data. The burden, including costs, of the MRP bears a reasonable relationship to the need for that information and the benefits to be obtained from that information.
- 21. Pursuant to Water Code section 13263, subdivision (g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Antidegradation Analysis

- 22. Pursuant to State Water Board Resolution No. 92-49 (Resolution No. 92-49), the Regional Water Board must require actions for cleanup and abatement of discharges that cause or threaten to cause pollution or nuisance to conform to the provisions of State Water Board Resolution No. 68-16 (Resolution No. 68-16), Statement of Policy with Respect to Maintaining High Quality Water in California, and the Basin Plan. The Regional Water Board must ensure that Dischargers are required to cleanup and abate the effects of discharges in a manner that promotes attainment of background water quality, or if background levels of water quality cannot be restored, the best water quality that is reasonable and complies with the Basin Plan, including applicable water quality objectives.
- 23. Resolution No. 68-16 generally prohibits the Regional Water Board from authorizing discharges that will result in the degradation of high quality waters, unless it is demonstrated that any change in water quality will: (a) be consistent with maximum benefit to the people of the state, (b) not unreasonably affect beneficial uses, and (c) not result in water quality less than that prescribed in state and regional policies (e.g., the violation of one or more water quality objectives). The Discharger must also employ best practicable treatment or control (BPTC) to minimize the degradation of high-quality waters.
- 24. Temporal degradation of groundwater may occur at sites subject to this Order within the defined treatment zone¹ due to the amended groundwater injection. The temporary degradation allowed by this Order is consistent with Resolution No. 68-16 because: (1) the purpose is to accelerate and enhance remediation of groundwater pollution, and such remediation will be of maximum benefit the people of the state; (2) the discharge facilitates projects to evaluate the effectiveness of cleanup technology in accordance with Resolution

¹ The treatment zone is the area where the oxidation/reduction processes take place.

- No. 92-49; (3) the degradation is limited in scope and duration; (4) best practicable treatment and control, including adequate monitoring and hydraulic control to ensure protection of water quality, are required; and (5) the discharge will not cause water quality objectives to be exceeded beyond the treatment zone, and it is expected that increases in concentrations above water quality objectives caused by the treatment will be reduced over time.
- 25. This Order addresses water quality as it relates to the chemicals being injected, as well as the byproducts and breakdown products produced by the reactions of the injectants, chemicals being treated, and geological materials. Cleanup criteria for groundwater are established in an appropriate enforcement document e.g., Record of Decision (ROD), Cleanup and Abatement Order (CAO), or Remedial Action Plan (RAP) and are not discussed further as a part of this Order. As noted above, chemicals are injected to stimulate reduction in concentrations of the target waste constituent, and the target waste constituent may undergo a series of transformations to other constituents as it degrades. The injected chemical itself may leave residuals of its components, as well as cause changes in groundwater chemistry that liberate metals found in the formation materials. Background/baseline concentrations of metals and total dissolved solids (TDS) will be established pursuant to a Monitoring and Reporting Program. For most sites, the applicable water quality objectives are the Primary and Secondary MCLs and the narrative objective for tastes and odors. Numeric limits in this Order implement those water quality objectives.

California Environmental Quality Act (CEQA)

- 26. The Regional Water Board is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). As lead agency, the Regional Water Board has prepared an Initial Study/Mitigated Negative Declaration pursuant to California Code of Regulations, title 14, section 15063.
- 27. On March 5, 2019, the Regional Water Board notified interested agencies and persons of its intent to adopt an Initial Study/Mitigated Negative Declaration (IS/MND) for these General WDRs and filed a notice of completion (NOC) with the State Clearinghouse. The Regional Water Board provided interested agencies and persons with an opportunity to submit comments on the draft IS/MND during a 30-day public comment period that ended on April 4, 2019. (Cal. Code Regs., tit. 14, §§ 15072, 15073.)
- 28. On April 11, 2019, the Regional Water Board held a public hearing to consider adoption of the draft IS/MND. After considering the documents, the Regional Water Board adopted the IS/MND, finding, on the basis of the whole record before it, that there was no substantial evidence that the proposed project, with mitigation, would have a significant effect on the environment.

Public Participation

29. Water Code section 13304.1, subdivision (b), requires that, prior to setting applicable water quality standards to be achieved at groundwater cleanup sites that are associated with an aquifer that is used as a drinking water source, the Regional Water Board must consult with the affected groundwater management entity, the affected public water systems, and the State Water Board's Division of Drinking Water (DDW). Prior to issuing

- a Notice of Applicability (NOA) under this Order for a specified project, the Regional Water Board will consult with the appropriate interested agencies.
- 30. Water Code section 13307.5 requires specific public participation actions if the site cleanup is being undertaken pursuant to a Cleanup and Abatement Order (CAO). When applying this Order to sites subject to a CAO, the required public participation will be adhered to.
- 31. The Regional Water Board has notified interested agencies and persons of its intent to adopt General WDRs for the discharges covered under this Order and has provided them with an opportunity to submit written comments and provide oral testimony at a public hearing.
- 32. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the tentative General WDRs.

IT IS HEREBY ORDERED that, pursuant to sections 13263 and 13267 of the Water Code, Dischargers enrolled in this Order, in order to meet the provisions contained in division 7 of the Water Code, and regulations and guidelines adopted thereunder, shall comply with the following:

A. Conditions of Eligibility

- 1. Applicability:
 - a. These General WDRs apply only to Dischargers seeking to add specific amendments directly to groundwater or indirectly through the soil column for the purpose of facilitating *in-situ* remediation of waste constituents, as described in Findings 9 through 12 above.
- 2. To be covered under this Order, a Discharger must provide the following:
 - a. A Notice of Intent (NOI) / Report of Waste Discharge (ROWD) Form 200 (Attachment A) including any additional information required in Attachment B to the NOI. Attachment A can be found or typing this address in your web browser: https://www.waterboards.ca.gov/publications forms/forms/docs/form200.pdf;
 - b. Material Safety Data Sheet (MSDS) and other product technical information for any amendments to be used for cleanup;
 - c. At least three effective case studies demonstrating the use of similar amendments to remediate targeted constituents;
 - d. Evidence that the amendments proposed have been available on the market for a minimum of three years;
 - e. A Regional Water Board-approved Remedial Action Plan (RAP), or its Addendums if applicable, which includes application of an amendment that qualifies for coverage under this Order (the approval for the RAP must be dated within 12 months of the date of the NOI); and
 - f. A Contingency Plan to be implemented to correct unacceptable water quality effects from the *in-situ* remediation discharge(s).

B. Discharge Prohibitions

- 1. The discharge of any amendment or other materials not specifically regulated by this Order, as described in Findings 11 and 12, is prohibited. These amendments and materials are further limited to those listed in the approved RAP required in Section A.2.e and the NOA.
- 2. The creation of pollution, contamination, or nuisance, as defined by Water Code section 13050, is prohibited.
- The discharge of wastes to surface water or surface water drainage courses is prohibited.
 Treated groundwater that is discharged to surface waters is prohibited unless subject to a separate National Pollutant Discharge Elimination System (NPDES) permit.
- 4. The discharge of amendments or wastes to land or groundwater in areas other than those proposed for remediation is prohibited.
- 5. The surfacing or overflow of wastes from the treatment system at any time is prohibited.
- 6. The discharge of any radiological, chemical, or biological warfare agent or high-level radiological waste is prohibited.
- 7. The discharge of waste classified as "hazardous" or "designated," as defined in California Code of Regulations, title 27, section 20164 and Water Code section 13173, is prohibited.
- 8. The discharge of water main, water storage tank, water hydrant pipeline flushing, or hydrostatic testing water from tanks or pipelines that have been used to store or convey any medium other than potable water is prohibited, unless the Discharger has demonstrated to the Regional Water Board that all residual pollutant concentrations have been reduced to levels below the Basin Plan's groundwater quality objectives.
- 9. The discharge of wastes in geological formations in a manner that increases the mobility and/or extent of the contaminant plume through fracturing of the geologic formation is prohibited. Additionally, fracturing of aquitards that separate two distinct, water-bearing zones is prohibited under any condition.
- 10. The migration of any byproducts produced as part of the treatment process beyond the boundaries of the property owned or controlled by the Discharger is prohibited.
- 11. The discharge of wastes or amendments to property that is not under the control of the Discharger is prohibited. The "area under the control" of the Discharger is defined to be at the borders of the treatment zone at areas owned by the Discharger and/or where the Discharger holds an access agreement for purposes of investigation and remediation.

C. Groundwater Limitations and Specifications

- 1. The discharge shall not cause the pH of the groundwater at the compliance points, downgradient and outside the treatment zone, to shift outside the range of 6.0 to 9.0.
- 2. The discharge of wastes shall not cause the mineral constituents of the receiving groundwater at the compliance point, downgradient and outside the application area, to exceed applicable limits given in the Basin Plan. In the NOA, the Executive Officer shall

indicate the groundwater limitations taken from data provided in **Attachment B** applicable to the discharge and identify the compliance point(s) for the site.

- 3. The release, injection, discharge or addition of constituents from a remediation system shall not cause the groundwater at the compliance wells listed in Table 1 of the Monitoring and Reporting Program (MRP) attached to the NOA, and any revisions thereto, to contain concentrations of chemical constituents, including the amendments and by-products of the *in-situ* treatment process, in amounts that exceed the water quality objectives specified in the Basin Plan.
- 4. The release, injection, discharge or addition of constituents from a remediation system shall not cause the groundwater at the compliance wells listed in Table 1 of the MRP attached to the NOA, and any revisions thereto, to contain concentrations of metals, total dissolved solids, or electrical conductivity that are more than 10% greater than their respective background concentrations, as established by the MRP attached to the NOA, and any revisions thereto.
- 5. The release, injection, discharge or addition of constituents from a remediation system shall not cause the groundwater to contain taste or odor producing substances that cause nuisance or adversely affect beneficial uses at the compliance monitor points designated in Table 1 of the MRP attached to the NOA, and any revisions thereto.
- 6. The application of materials or the re-injection or reuse of treated groundwater shall only be within the boundaries of property owned or controlled by the Discharger.
- 7. Re-injection or reuse of treated groundwater shall be limited to the same aquifer where the impacted groundwater was withdrawn for treatment. Re-injection of treated groundwater to which materials or amendments have been added shall be limited to the same aquifer and within the treatment zone.

D. Special Provisions

- 1. The Discharger shall notify the Native American Heritage Commission of any plans to disturb the soil in order to comply with California Environmental Quality Act (CEQA) guidelines as set forth in California Code of Regulations, title 14, section 15064.5, subdivisions (b) and (c). Furthermore, prior to excavation, the Discharger is required to provide local information to the California Historical Resources Information System. This will serve as due diligence of record search to provide proximity to Native American historical and archeological resources. The Discharger shall also be required to adhere to Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and CEQA Guidelines section 15064.5, subdivisions (d) and (f), to ensure that mitigation plan provisions are in place to identify, evaluate, and consult about the discovery and disposition of any recovered human remains or artifacts, should the occasion arise, during the remediation process overseen by the Regional Water Board.
- 2. The Discharger shall develop a Contingency Plan and maintain it on site. The Contingency Plan shall detail appropriate actions to be taken in order to protect human health and the environment in case of any spill or failure related to the operation or mis-operation of the treatment system.

E. Standard Provisions

- Individual WDRs. The Executive Officer may require in writing that any Discharger authorized under this Order apply for and obtain individual WDRs by submitting a ROWD. Any Discharger authorized to discharge under this Order may also request to be excluded from coverage under this Order by applying for individual WDRs.
- 2. **Stormwater.** Adequate facilities shall be provided to divert surface and stormwater away from the application area and/or treatment system and areas where any wastes are stored.
- 3. **Noncompliance.** The Discharger shall comply with all of the conditions of this Order. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.) and grounds for: (1) an enforcement action; (2) termination, revocation and reissuance, or modification of these waste discharge requirements; or (3) denial of an Order renewal application.
- 4. **Monitoring and Reporting Program.** The Discharger may be required to submit technical reports pursuant to Water Code section 13267 as directed by the Executive Officer. The technical reports required by this Order are necessary to ensure compliance with this Order. The Discharger shall comply with the MRP attached to the NOA, and any revisions thereto, as ordered by the Executive Officer.
- 5. Enforcement. The Regional Water Board reserves the right to take any enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code section 13308, or referral to the California Attorney General for recovery of judicial civil liability.
- 6. Proper Operation and Maintenance. The Discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the Discharger to achieve compliance with this Order. Proper operation and maintenance include but are not limited to, effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained and made available to the Regional Water Board on request.
- 7. **Reporting of Noncompliance.** In the event of any noncompliance that may endanger human health or the environment, or if the Discharger is unable to comply with any of the conditions of this Order due to:
 - a. Breakdown of any facility or control system or monitoring equipment installed by the Discharger to achieve compliance with this Order;
 - b. Migration or application of amendments, pollutants, or byproducts outside the specified treatment area;
 - c. Accidents caused by human error or negligence; or
 - d. Other causes such as acts of nature;

The Discharger shall notify the Regional Water Board and Office of Emergency Services by telephone within 24 hours of when the Discharger becomes aware of the incident. If

noncompliance occurs outside of business hours, the Discharger shall leave a message on the Regional Water Board's office voicemail. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The reporting of migration or application of amendments, waste constituents, or byproducts outside the specified treatment area shall include an assessment of and schedule for implementation of the Contingency Plan required by this Order and the NOA.

- 8. **Duty to Mitigate.** The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.
- 9. **Material Changes.** The Discharger shall file an NOI/ROWD with the Executive Officer at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge as authorized in the NOA.
- 10. **Familiarity with Order.** The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order and shall maintain a copy of this Order at the project site.
- 11. **Inspection and Entry.** The Discharger shall allow the Regional Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter the premises regulated by this Order, or the place where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, records kept under the conditions of this Order;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.
- 12. **Records Retention.** The Discharger shall retain copies of all reports required by this Order and the associated MRP. Records shall be maintained for the duration of cleanup activities and a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically. This period may be extended during the course of any unresolved litigation or when requested by the Regional Water Board's Executive Officer.
- 13. Change in Ownership. Enrollment in this Order is not transferable to any person without written approval by the Regional Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Regional Water Board's Executive Officer in writing at least 30 days in advance. The notice must include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement must contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is

liable for compliance with this Order from the date of transfer. The Regional Water Board may require modification or revocation and reissuance of the NOA to change the name of the Discharger and incorporate other requirements as may be necessary under the Water Code.

- 14. **Qualified Professionals.** In accordance with 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 California-registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports required under this Order that contain work plans, 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 contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal. Additionally, all field activities are to be conducted under the direct supervision of one or more of these professionals.
- 15. **Laboratory Certification.** Chemical, bacteriological, and bioassay analyses must be conducted at a laboratory certified for such analyses by the State Water Board, Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP), unless otherwise permitted by the Regional Water Board's Executive Officer.
- 16. Certification Under Penalty of Perjury. All technical reports required in conjunction with this Order shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying under penalty of perjury under the laws of the State of California, that the reports were prepared under his or her supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluated the information submitted, and that based on his or her inquiry of the person or persons who managethe system, the information submitted is, to the best of his or her knowledge and belief, true, complete, and accurate.
- 17. **Violation of Law.** This Order does not authorize violation of any federal, state, or local laws or regulations.
- 18. **Other Permits.** This Order does not alleviate the responsibility of the Discharger to obtain other applicable local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.
- 19. **Property Rights.** This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, state, or local laws, nor create a vested right for the Discharger to continue the waste discharge.
- 20. **Modification, Revocation, Termination.** Pursuant to Water Code section 13263, subdivision (g), these requirements do not create a vested right to continue to discharge and are subject to rescission and modification or termination. These requirements are subject to periodic review and revision by the Regional Water Board. (Water Code, § 13263, subd. (e).)

21. **Severability.** Provisions of this Order are severable. If any provision of these requirements is found invalid, the remainder of this Order shall not be affected.

F. Notice of Intent (NOI) / Report of Waste Discharge (ROWD)

1. Authorization:

To be authorized to discharge under this Order, the Discharger must submit an NOI/ROWD in accordance with the requirements of Section F.2 and F.3 of this Order. Upon receipt of the NOI/ROWD, the Executive Officer shall determine the completeness of the NOI/ROWD and the applicability of this Order to such a discharge. If the discharge is eligible, the Executive Officer shall notify the Discharger by issuance of an NOA that the discharge is authorized under the terms and conditions of this Order and prescribe an appropriate MRP.

2. Deadline for Submission:

The Dischargers seeking coverage under this Order shall file a complete NOI/ROWD that includes all information identified in Section A.2 above at least 90 days before planned commencement of any discharge.

3. Forms for NOI/ROWD:

- a. The Discharger shall use <u>Form 200</u> for the NOI/ROWD (**Attachment A**). Attachment A can be found or typing this address in your web browser: https://www.waterboards.ca.gov/publications forms/forms/docs/form200.pdf
- b. The Discharger shall also provide the supplemental information required by **Attachment B**.
- c. The Discharger, upon request, shall submit any additional information that the Executive Officer deems necessary to determine whether the discharge meets the criteria for coverage under this Order, and/or in prescribing an appropriate MRP.
- d. The Discharger shall provide the first annual fee in accordance with the current version of the California Code of Regulations, title 23, division 3, chapter 9, "Waste Discharge Report and Requirements," article 1, "Fees." The check or money order shall be made payable to the "State Water Resources Control Board."

G. Monitoring and Reporting Requirements

- 1. The Executive Officer is hereby authorized to prescribe an MRP (using the model in **Attachment C**) for each authorized Discharger. This program may include participation of the Discharger in a regional monitoring program.
- 2. The Discharger shall file with the Regional Water Board technical reports on self-monitoring work conducted according to the MRP specified by the Executive Officer and submit other reports as requested by the Regional Water Board.

H. Notification of Coverage

1. Project coverage under this Order shall not take effect until the Executive Officer notifies the Discharger in writing by issuance of an NOA, which shall be a part of this Order, that coverage has been issued.

- 2. The Executive Officer will not issue notification of project coverage under this Order prior to providing notice and a 30-day public comment period on the proposed issuance of coverage.
- 3. Notification of project coverage under this Order shall not be issued if the Executive Officer finds that there may be significant effects on water quality or finds that significant public controversy has arisen or will likely arise from the issuance of project coverage by this Order and that individual WDRs should be considered at a regularly-scheduled Regional Water Board meeting.
- I, Paula Rasmussen, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on April 11, 2019.

| Original signed by | |
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| Paula Rasmussen | |
| Executive Officer | |