

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
NORTH COAST REGION**

**CLEANUP AND ABATEMENT AND
INVESTIGATIVE ORDER NO. R1-2026-0038**

for

Mykal Coelho

**4545 Briceland Road, Redway
Humboldt County
APN 220-261-009**

This Cleanup and Abatement Order (Order) is issued to Mykal Coelho (Discharger) based on provisions of California Water Code (Water Code) section 13304, which authorizes the North Coast Regional Water Quality Control Board (North Coast Water Board) to issue a Cleanup and Abatement Order, and Water Code section 13267, which authorize the North Coast Water Board to require the preparation and submittal of technical and monitoring reports.

FINDINGS

The Executive Officer finds, with respect to the Discharger's acts, or failure to act, the following:

1. **Purpose of the Order:** This Order requires the Discharger to clean up and abate the effects of threatened unauthorized discharges of drilling fluid used in horizontal directional drilling (HDD) and associated HDD waste¹, from the Property (defined below) to waters of the state, including the unnamed tributary stream immediately to the northeast of the Property (Tributary 1), Redwood Creek, and the South Fork Eel River. Unauthorized discharges of HDD drilling waste create an imminent threat to waters of the state, the environment, and beneficial uses of water. This Order requires immediate investigation and cleanup actions to prevent further harm and unauthorized discharges consistent with the *Porter-Cologne Water Quality Control Act* (Wat. Code § 13000 *et seq.*), the *Water Quality Control Plan for the North Coast Region* (Basin Plan), State Water Resources Control Board (State Water Board)

¹ **HDD waste** — a mixture of water and bentonite clay (specifically Tru-Bore® and Super Gel-X, both bentonite-based products) used to lubricate the drill bit, stabilize the borehole, and carry cuttings to the surface during horizontal directional drilling operations. The return mixture — which picks up soil, sand, rock fragments, and the bentonite itself — is properly called **HDD return slurry** or **HDD waste**. **Drilling waste, including all drilling fluids, additives, and materials or byproducts used in or produced by HDD activities.**

Resolution 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under Water Code Section 13304* (Resolution 92-49), and other applicable State and Regional Water Board plans, policies, and regulations.

2. **Responsible Party:** The Discharger is the owner of the property located at 4545 Briceland Road in Redway, Humboldt County Assessor's Parcel Number (APN) 220-261-009 (the Property), where the Discharger caused or permitted, or threatened to cause or permit, waste to be discharged or deposited where it is, or probably will be, discharged into waters of the state, which creates, or threatens to create, a condition of pollution or nuisance. The Discharger has the legal ability to control the activities at the Property that resulted in the discharge and threatened discharge of waste to waters of the state.
3. **Background: The Discharger accepted disposal of HDD waste on the Property from:** (a) Direct Drilling, Inc., a HDD contractor operating in the Garberville area, as a subcontractor on a fiber optic project; (b) North Sky Communications, the general contractor that hired Direct Drilling, Inc. for HDD operations; and (c) Arcadian Infracom 4, LLC, the project owner, developer and holder of contracts for the segment of a fiber optic network.
4. Disposal Site and Discharge Events:

Direct Drilling commenced HDD operations in the Garberville area the week of May 25, 2026, drilling Monday through Thursday. The drilling operation used Tru-Bore® bentonite-based drilling fluid (four fifty-pound sacks per 1,000 gallons of water) or Super Gel-X, sometimes with additives, generating an estimated 8,000 gallons of HDD waste per day (ten loads of approximately 800 gallons each). During the first week, Direct Drilling, Inc. most likely used Tru-Bore® without additives.

During the week of May 25, 2026, Direct Drilling, Inc. delivered all HDD waste generated by their Garberville area operations to the Property, pursuant to an informal arrangement with the Discharger. The Discharger had no regulatory coverage for waste discharges from the disposal of HDD waste on the Property, or any other Property. HDD waste discharged from the Property to a roadside ditch on Briceland Road, with delivery into Tributary 1, a Class II watercourse that drains to Redwood Creek approximately 500 feet downstream.

Based on reports by local residents that Redwood Creek was white and opaque between Seely Creek and the South Fork Eel River, on June 2, a California Office of Emergency Service Hazardous Materials Spill Report went out to agencies, and on June 3 a CalEPA complaint was submitted.

On June 2, 2026, at approximately 16:30, North Coast Water Board staff (Staff) received a complaint from a resident who observed Redwood Creek was white and opaque at the Seely Creek Road crossing, located approximately 1.7 miles upstream of the South Fork Eel River. Staff conducted field inspections on June 2 and June 4, 2026, documenting widespread turbidity in Redwood Creek. By June 4, 2026, the plume had reached the South Fork Eel River.

On June 2 and 4, 2026, Staff **conducted inspections and documented evidence of discharges of HDD waste emanating from the Property, into a ditch along**

Briceland Road, and into an unnamed tributary, shown as a blue line stream on USGS maps, (Tributary 1) and Redwood Creek. Staff documented Clay deposition of approximately two inches depth in the roadside ditch along Briceland Road leading from the Briceland Road Property to Tributary 1 and significant bentonite bottom deposits in Tributary 1, including in the first pool downstream of the Briceland Road culvert, and on rock surfaces in the channel that were visibly coated with clay, downstream to Redwood Creek. The discharges resulted in substantial HDD waste in suspension in Tributary 1, turbid conditions in Redwood Creek for three miles downstream to the confluence of Redwood Creek with the South Fork Eel River, and a plume in South Fork Eel River.

On June 10, 2026, a representative of California Department of Fish and Wildlife (CDFW) inspected Tributary 1 and Redwood Creek and estimated the depth of the bentonite in the first pool to be approximately two feet and noted observable deposits of bentonite covering nearly the entire width and length of the Tributary 1 channel. In Redwood Creek, CDFW observed a thin layer of bentonite coating the channel bottom.

The Property drains to the Benbow Hydrologic Subarea of the South Fork Eel River Hydrologic Area. Redwood Creek is a documented coho salmon rearing tributary and supports threatened steelhead. The South Fork Eel River has been identified by NOAA Fisheries as a priority watershed for coho salmon, steelhead, and Chinook salmon recovery. June is an active period for juvenile salmonids in both systems.

The Discharger's activities at the Property, 1) caused and continue to threaten discharges of HDD waste — consisting of water, bentonite clay, and entrained soil and rock cuttings — into Tributary 1, Redwood Creek, and the South Fork Eel River, waters of the state and United States², and 2) cause or permit, and threaten to cause or permit, waste to be discharged or deposited where it is, or probably will be, discharged to waters of the state, and create and/or threaten to create a condition of pollution or nuisance.

² The North Coast Water Board administers and enforces the Clean Water Act (CWA). The CWA regulates what it refers to as “navigable waters” and defines those waters as “waters of the United States.” Waters of the United States includes traditionally navigable waters and tributaries as defined in 40 C.F.R. section 122.2. The Porter Cologne Water Quality Control Act provides the Regional Water Board additional authority to regulate discharges of waste into “waters of the state.” (Wat. Code § 13260.) The term “waters of the state” is defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.” (Wat. Code § 13050 subd. (e).) All waters of the United States that are within the borders of California are also waters of the state for purposes of the Porter-Cologne.

5. Beneficial Uses, Basin Plan Prohibitions, and Water Quality Objectives

The Water Quality Control Plan for the California Regional Water Quality Control Board, North Coast Region (Basin Plan)³ **designates beneficial uses of water within Hydrologic Subareas, establishes water quality objectives, contains implementation programs for achieving objectives, and incorporates by reference the plans and policies adopted by the State and Regional Water Boards.**

- a. **Beneficial Uses:** Existing and Potential beneficial uses for the Benbow Hydrologic Subarea within the South Fork Eel River include the following: municipal and domestic supply (MUN), agricultural water supply (AGR), industrial service supply (IND), industrial process supply (PRO), groundwater recharge (GWR), freshwater replenishment (FRSH), navigation (NAV), hydropower generation (POW), water contact recreation (REC-1), non-contact water recreation (REC-2), commercial and sport fishing (COMM), warm freshwater habitat (WARM) cold freshwater habitat (COLD), wildlife habitat (WILD), rare, threatened, or endangered species (RARE), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development (SPWN), shellfish harvesting (SHELL), and aquaculture (AQUA). Beneficial uses of any specifically identified water body generally apply to all its tributaries.
- b. **Basin Plan Prohibitions:** The Basin Plan contains specific standards and provisions for maintaining high-quality waters of the state that provide protection to the beneficial uses identified. The Basin Plan's *Action Plan for Logging, Construction, and Associated Activities* includes the following waste discharge prohibitions:
 - i. Prohibition 1 – “The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse⁴ in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.”
 - ii. Prohibition 2 – “The placing or disposal of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.”

³ Available online here:
https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/

⁴ As provided in section 4.2.2, paragraph B.2, of the Basin Plan, “[t]he definition for ‘stream or watercourse’ as those terms are used in the waste discharge prohibitions relative to logging and construction activities shall be interpreted by the Regional Water Board to mean the following: Natural watercourse as designated by a solid line or dash and three dots symbol shown in blue on the largest scale United State Geological Survey Topographic Map most recently published.”

- c. **Water Quality Objectives:** The Basin Plan designates beneficial uses (Chapter 2) as noted above and establishes water quality objectives (Chapter 3) for the protection of those uses. Beneficial uses of any specifically identified water body generally apply to all of its tributaries. Water quality objectives for groundwater as contained in the Basin Plan, chapter 3, include, but are not limited to, the following:
- i. **Biostimulatory Substances:** Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
 - ii. **Chemical Constituents:** Waters shall not contain concentrations of chemical constituents in amounts that cause nuisance or adversely affect beneficial uses.
 - iii. **Color:** Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.
 - iv. **Dissolved Oxygen:** Dissolved oxygen concentrations shall conform to applicable aquatic life requirements. For waters designated Cold Freshwater Habitat (COLD), the daily minimum objective is 6.0 mg/L with a 7-day moving average objective of 8.0 mg/L. For waters designated Spawning, Reproduction, and/or Early Development (SPWN), the daily minimum objective is 9.0 mg/L with a 7-day moving average objective of 11.0 mg/L.
 - v. **Floating Material:** Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
 - vi. **Sediment:** The suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
 - vii. **Settleable Material:** Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
 - viii. **Suspended Material:** Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
 - ix. **Tastes and Odors:** Waters shall not contain taste- or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or that cause nuisance or adversely affect beneficial uses.
 - x. **Toxicity:** Waters shall not contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in, human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the synergistic effect of multiple substances. The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors shall not be less than that for the same waterbody in areas unaffected by the waste discharge.

- xi. **Turbidity:** Turbidity shall not be increased more than 20 percent above naturally occurring background levels.

6. North Coast Water Board TMDL Implementation

The entire South Fork Eel River watershed is Clean Water Act section 303(d) listed as impaired due to elevated sedimentation/siltation and temperature. On December 16, 1999, the U.S. Environmental Protection Agency approved Total Maximum Daily Loads (TMDL) for temperature and sediment for the South Fork Eel River. To control sediment waste discharges and restore sediment impaired water bodies, the North Coast Water Board adopted the *Total Maximum Daily Load Implementation Policy Statement for Sediment Impaired Receiving Waters in the North Coast Region*, directing the Executive Officer to use “all available authorities, including existing regulatory standards and permitting and enforcement tools, to more effectively and efficaciously pursue compliance with sediment-related standards by all discharges of sediment waste”. The goals of the policy are to control sediment waste discharges to impaired water bodies so that the TMDLs are met, sediment water quality objectives are attained, and beneficial uses are no longer adversely affected by sediment. The Basin Plan *Action Plan to Address Elevated Water Temperatures in the Eel River Watershed* identifies implementation actions to achieve the temperature TMDL load allocations.

7. Property Features or Conditions Impacting or Threatening to Impact Water Quality and Beneficial Uses:

The discharge of HDD waste from the Property has caused, and threatens to continue to cause, exceedances of aforementioned objectives by introducing fine bentonite clay particles and associated soil and rock cuttings into Tributary 1 and Redwood Creek in concentrations that far exceed natural background levels and that adversely affect beneficial uses of those waters. The North Coast Water Board's Basin Plan states that controllable water quality factors shall conform to the water quality objectives contained therein, and that when other factors result in the degradation of water quality beyond established levels, controllable factors shall not cause further degradation. The South Fork Eel River, including its tributaries, is already impaired by excess sediment; any additional fine sediment loading from the HDD waste discharges from the Property constitutes a controllable factor that must be eliminated consistent with the Antidegradation Policy and State Water Board Resolution No. 68-16.

Given the potential for substantial HDD waste on the Property, and the continued presence of HDD waste in Tributary 1 and Redwood Creek, the HDD waste has the potential to further degrade surface water quality and adversely affect the MUN, COLD, SPWN, MIGR, WILD, REC-1, and REC-2 beneficial uses of Redwood Creek and the South Fork Eel River, as well as properties and water users downstream. Water users may be impacted by increased turbidity and concern that constituents of the HDD waste can enter and settle in water storage tanks. Any precipitation event or physical disturbance has the potential to remobilize settled HDD waste and transport additional fine sediment to waters of the state. HDD waste deposited in the interstitial spaces of the streambed has the potential to smother benthic invertebrate

communities and degrades spawning gravel quality; such impacts may persist until winter high flows sufficient to flush the gravel occur, threatening the fall and winter spawning season for coho salmon and steelhead and the continued rearing of juvenile salmonids through the summer and fall months. Suspended clay particles that cloud the water column are capable of impairing fish feeding and reducing dissolved oxygen exchange through gills.

The discharge of HDD waste from the Property threatens to further alter the quality of waters of the state and potentially alter the quality of waters of the state to a degree that unreasonably affects waters for beneficial uses. Therefore, the threatened discharges of waste create a condition of threatened pollution subject to this Order in accordance with Water Code section 13304.

8. **Legal Basis of the Order:** Water Code section 13304, subdivision (a) states, in relevant part: “A person who has discharged or discharges waste into waters of this state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and causes, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts....Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.”

This Order is issued pursuant to California Water Code (Water Code) section 13267 and conforms to and implements policies and requirements of the Porter Cologne Water Quality Control Act (Division 7, commencing with Water Code section 13000) including section 13267, and the Basin Plan adopted by the North Coast Water Board including beneficial uses, water quality objectives, and implementation plans.

Water Code section 13267, subdivision (a), provides that the North Coast Water Board may investigate the quality of any waters of the state within its region in connection with any action relating to the Basin Plan. Water Code section 13267, subdivision (b) provides that the North Coast Water Board, in conducting an investigation, may require a discharger to furnish, under penalty of perjury, technical or monitoring program reports. The reports required by this Order will assist the North Coast Water Board in determining whether the Discharger has taken, or will take, necessary actions to protect water quality and the beneficial uses of surface waters in the Shasta River watershed. The burden of compiling these reports, including the costs associated with collecting the information, bear a reasonable relationship to the benefits that will be obtained from having the necessary information for the North Coast Water Board to properly regulate and monitor the Property and to protect water quality.

9. **“Waste,”** is defined by Water Code section 13050, subdivision (d), includes, “sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature, prior to, and for purposes of, disposal.” Earthen material, including sediment when discharged to waters of the state, is a “waste” as defined in Water Code section 13050, subdivision (d). The sediment described above threatens to discharge into the waters of the state in a manner that has created or threatens to create a condition of pollution by altering the quality of the waters of the state. The extent of these threatened and actual discharges of waste could be deleterious to fish, wildlife, or other beneficial uses.
10. **“Nuisance”** is defined in the Water Code section 13050 as anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. (3) Occurs during, or as a result of, the treatment or disposal of waste
11. **“Pollution”** is defined by Water Code section 13050, subdivision (l)(1) as, an alteration of the quality of the waters of the state by waste to a degree that unreasonably affects either waters of the state for beneficial use or facilities that serve these beneficial uses.
 - a. Discharges of sediment and other inert material can alter the hydrologic and sediment transport regimes of surface waters by affecting the flow of water and establishment of vegetation. Such changes may lead to adverse conditions such as flooding, increases in suspended sediment and turbidity, accelerated erosion of the watercourse bed or banks, and localized accumulation of deleterious materials. Additionally, such discharges directly threaten wildlife habitat and aquatic species (beneficial uses impacted: RARE, MIGR, SPWN, COLD, COMM, and WILD). The unnamed tributaries provide habitat for amphibians and are tributary to streams that provide habitat for salmonids. Increased sedimentation and turbidity can also result in increased treatment and/or maintenance costs for downstream agricultural and municipal users that withdraw and treat the water (beneficial uses impacted: AGR and MUN). Sediment-laden storm water can also discharge to surface water and result in increased turbidity that may affect the recreational and aesthetic enjoyment of the surface waters (beneficial uses impacted: REC-1 and REC-2).
 - b. The discharge of sediment is especially problematic in this watershed since the South Fork Eel River is Clean Water Act section 303(d)-listed as impaired due to elevated sedimentation/siltation, and its tributaries are listed as impaired due to elevated temperature. Sediment delivery to streams impacts the migration, spawning, reproduction, and early development of cold-water fish such as Chinook salmon, coho salmon, and steelhead trout.

- c. Sediment delivery to headwater streams is especially problematic for amphibian species. Sediment deposition (i.e. bottom deposits) in headwater streams can result in the direct impact to native amphibians that rely on clean substrate to burrow in and access cold, clean water, including Southern Torrent Salamanders, Coastal Giant Salamanders, and Tailed Frogs. Southern Torrent Salamanders are primarily aquatic, extremely moisture dependent, burrow into streambed substrates during both low and high stream flows, and feed largely on aquatic macroinvertebrates. Southern Torrents lay single eggs that take approximately eight months to hatch, and their larvae take up to two and a half years to metamorphose.
- d. Suspended sediment in surface waters can cause harm to aquatic organisms by abrasion of surface membranes, interference with respiration, and sensory perception in aquatic fauna. Suspended sediment can reduce photosynthesis in and survival of aquatic life by limiting the transmittance of light. The Basin Plan contains a water quality objective for sediment, which requires that the suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
- e. Suspended sediment can also physically damage gills causing fish mortality; increased physiological stress; reduce reproduction; impair normal feeding and predator avoidance behaviors, resulting in impacts to commercial and recreational fishing resources; increase water temperature; and fill in lagoons and wetlands converting them from aquatic to terrestrial habitat.
- f. Impacts to beneficial uses occur both during sediment transport and sediment deposition. In addition to the problems associated with suspended sediment, sediment is also an excellent transport mechanism for toxics (e.g., metals and synthetic organics) and nutrients, which bind to sediment particles. (beneficial uses impacted: REC1, REC-2, COLD, SPWN, RARE, MIGR, COMM, MUN, AGR, and WILD).

12. Cleanup and Abatement Action Necessary: Cleanup and abatement is necessary to ensure that threatened discharges of waste to waters of the state threatening to create a condition of pollution, are appropriately cleaned up, that background water quality conditions are restored, and that any impacts to beneficial uses are mitigated.

The unauthorized discharge of HDD waste could alter the quality of waters of the state to a degree which would unreasonably affect waters of the state for beneficial uses. The current condition of pollution is a violation of applicable water quality regulations and the issuance of this Order pursuant to Water Code section 13304 is appropriate and consistent with the policies of the North Coast Water Board

13. Technical Reports Required: Water Code section 13267 subdivision (b) provides that the North Coast Water Board may require a discharger to furnish, under penalty of perjury, technical or monitoring reports. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained. The technical reports required by this Order are necessary

to investigate the quality of waters of the state, characterize the full extent of waste discharge, and protect beneficial uses. The reports required herein address cleanup and abatement planning, waste characterization and disposal site inventory each necessary to fully understand and remediate a discharge that has impacted a highly sensitive salmonid watershed during the critical juvenile rearing season^{5,6}

14. This Order requires seven categories of required actions: immediate cessation of unauthorized discharges, a Discharge Characterization Report, a Corrective Action Plan, weekly progress reports, completion of the approved CAP, and a CAP Completion Report. Staff estimates that the total cost of preparing and submitting all required reports is between approximately **\$13,600 and \$36,450** (reporting costs only). The burden of compiling these reports, including the costs of the technical or monitoring reports required by this Order, bears a reasonable relationship to the need for these reports and the benefits to be gained, as discussed below:
- a. **Immediate Cessation Notification (Required Action 1):** The written notification to the North Coast Water Board confirming immediate cessation of unauthorized discharges from the Property is a technical report necessary to document the most urgent compliance action required by this Order. The scope is limited to a written certification of cessation. Estimated reporting costs range between \$300 and \$700. The burden bears a reasonable relationship to the need for prompt, documented confirmation that active discharges to Tributary 1 have ceased.
 - b. **Discharge Characterization Report (Required Action 2):** The Discharge Characterization Report is a technical report necessary to establish the complete sworn factual record of HDD waste disposal on the Property, including: the events and arrangements leading to disposal; the identity, composition, and breakdown products of the waste with Safety Data Sheets; a map of all disposal locations with timing, volumes, and personnel; site conditions contributing to discharge; and estimates of the volume brought to, remaining on, and discharged from the Property. The scope of report preparation is comparable to that of a Site Assessment Report as described in the 2023 Cost Guidelines, scoped to a single-parcel, single-pathway discharge. Estimated reporting costs range between **\$3,600 and \$9,200**. The burden bears a reasonable relationship to the need for the report as the foundational evidentiary document for all subsequent required actions under this Order.
 - c. **Corrective Action Plan (Required Action 3):** The Corrective Action Plan (CAP) is a technical report necessary to ensure that short-term abatement measures at

⁵ Estimates based on the Underground Storage Tank Cleanup Fund 2023 Cost Guidelines Update, dated July 1, 2023, updated with an approximate 8% CPI adjustment to reflect inflation from mid-2023 to mid-2026, consistent with the California Department of Industrial Relations CPI calculator methodology (<https://www.dir.ca.gov/OPRL/capriceindex.htm>).

⁶ This cost analysis section was prepared by Jeremiah Puget, Senior Environmental Scientist with the assistance of Generative AI.

the Property are designed and documented by an appropriately licensed professional, including: proposed abatement measures and Tributary 1 remediation activities; actions to minimize additional discharges during cleanup; identification of all controllable discharge points and areas of immediate concern; proposed activities to abate discharges to waters of the state; and a proposed abatement schedule. The scope of CAP report preparation is comparable to that of a basic Corrective Action Plan as described in the 2023 Cost Guidelines. Estimated reporting costs range between **\$4,400 and \$11,600**. The burden bears a reasonable relationship to the need for a professionally-certified, documented cleanup plan for a discharge that reached waters of the state through the Property's pond, spillway, ditch, and culvert system.

- d. **Weekly Progress Reports (Required Action 4):** Weekly progress reports are technical reports necessary to ensure that the North Coast Water Board can evaluate the effectiveness of cleanup measures, confirm tasks are implemented as planned, and identify needed improvements during the active remediation period. The scope of each report (effectiveness evaluation, activity summary, needed improvements, task completion update) is comparable to that of a Cleanup Progress Report as described in the 2023 Cost Guidelines, though limited in scope to operational reporting. For an estimated four-week active remediation period, total estimated reporting costs range between **\$1,600 and \$4,000**. The burden bears a reasonable relationship to the need for real-time, documented oversight of active cleanup work.
 - e. **CAP Implementation Documentation (Required Action 6):** The field logs, photo documentation, and disposal facility receipts compiled during CAP implementation are technical reports necessary to create a contemporaneous evidentiary record of all cleanup activities performed and to support the CAP Completion Report. This documentation obligation is limited in scope. Estimated reporting costs range between **\$700 and \$1,850**. The burden bears a reasonable relationship to the benefit of a complete, verifiable record of all cleanup work carried out at the Property.
 - f. **CAP Completion Report (Required Action 6):** The CAP Completion Report is a technical report necessary to demonstrate that the Discharger has successfully completed all cleanup and abatement measures required by the approved CAP, with a summary and photographs of all corrective action areas clearly keyed to site maps. The scope of report preparation is comparable to that of a Cleanup Progress Report as described in the 2023 Cost Guidelines, adjusted for the multi-area photo documentation and site map keying requirements of this Order. Estimated reporting costs range between **\$2,400 and \$6,600**. The burden bears a reasonable relationship to the need for documented evidence that all corrective actions have been completed and that the Property no longer poses a threat of discharge to waters of the state.
14. **Notification:** Staff notified the Discharger's attorney of its intent to issue this Order during a phone call on June 12, 2026, discussing the Discharger's plan to address the emergency conditions at the Property and threats associated with the discharge

events. Due to the urgent need to address the imminent threat to waters of the state, the environment, and public health, this Order has been issued as expeditiously as possible. The Discharger can seek changes or comment on this Order once it is issued. Moreover, under Water Code section 13320, it can petition the State Water Resources Control Board for review, as explained in General Requirements and Notices, paragraph 19, below.

15. **California Environmental Quality Act:** Issuance of this Order is being taken for the protection of the environment and to enforce the laws and regulations administered by the North Coast Water Board and, as such, is exempt from provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15061, subdivision (b)(3), 15306, 15307, 15308, and 15321. This Order generally requires the Discharger to submit plans for approval prior to implementation of cleanup, abatement, and restoration activities at the Facility. Mere submittal of plans is exempt from CEQA as submittal will not cause a direct or indirect physical change in the environment and/or is an activity that cannot possibly have a significant effect on the environment. CEQA review at this time would be premature and speculative, as there is simply not enough information concerning the Discharger's proposed cleanup, abatement or restoration activities and possible associated environmental impacts. To the extent that the Order requires earth-disturbing and re-vegetation activities not to exceed five acres in size and to assure restoration of stream habitat and prevent erosion, this Order is exempt from provisions of CEQA pursuant to California Code of Regulations, title 14, section 15333. If the North Coast Water Board determines that implementation of any plan required by this Order will have a significant effect on the environment that is not otherwise exempt from CEQA, the North Coast Water Board will conduct the necessary and appropriate environmental review prior to implementation of the applicable plan. The Discharger will bear the costs, including the North Coast Water Board's costs, of determining whether implementation of any plan required by this Order will have a significant effect on the environment and, if so, in preparing any documents necessary for the North Coast Water Board to satisfy its environmental review obligations under CEQA. If necessary, the Discharger and a consultant acceptable to the North Coast Water Board shall enter into a memorandum of understanding with the North Coast Water Board regarding such costs prior to undertaking any environmental review.

REQUIRED ACTIONS

IT IS HEREBY ORDERED, pursuant to Water Code sections 13304 and 13267, that the Discharger shall clean up any wastes and abate the actual and threatened impacts to water quality in accordance with the scope and schedule set forth below and provide the technical reports as required below.

1. Immediate Cessation of Unauthorized Discharges

The Discharger shall immediately cease all unauthorized disposal of HDD waste at any unpermitted location on the Property. No HDD waste shall be deposited, stored, or discharged at any location on the Property without prior written authorization from the North Coast Water Board. Any continued disposal of HDD waste is permissible

only at a properly permitted disposal facility or at a location that holds an applicable waste discharge requirement or general permit coverage approved in advance by the North Coast Water Board and all applicable local agencies.

2. Discharge Characterization Report

By July 10, 2026, the Discharger shall submit a Discharge Characterization Report, prepared by and/or under the direction of a qualified professional, that provides a complete accounting of all HDD waste accepted at the Property in connection with the HDD operations in the Garberville Area (including during the week of May 25, 2026). The report shall include, at minimum:

- a. Copies of all contracts, subcontracts, agreements, work orders, scopes, purchase orders, task orders, payments, amendments and other contractual agreements issued and entered into for the the generation, transportation, storage, treatment, dewatering, placement or disposal of HDD waste.
- b. A description of the events and arrangements that led up to and after the disposal of HDD waste on the Property. This description shall summarize the sequence of activities, communications, agreements, site uses, and operational choices that resulted in the placement, storage, management, or disposal of HDD waste on the Property, and shall describe how the waste was handled after it was deposited.
- c. Copies of all communications between the Discharger and any contractor, subcontractor, employee, agent, landowners, or representative involved in the HDD operations concerning the use of the Property for storage, treatment, dewatering, placement, or disposal of drilling waste. Identification of all persons who participated in, directed, approved, supervised, managed, negotiated, authorized, arranged, transported, stored, treated, dewatered, placed, or disposed of HDD waste on the Property, or who participated in discussions or decisions regarding the use of the Property for such activities. For each person identified, provide their name, title, employer or affiliation, contact information, role and responsibilities, dates of involvement, and a description of their participation in the decision-making process and disposal activities.
- d. A characterization of the constituents of the waste and their concentrations, breakdown products, and safety data sheets.
- e. A map showing all disposal and recycling sites on the Property, including GPS coordinates, timing of and volumes of disposal, and personnel involved.
- f. An evaluation of the factors that caused or contributed to each discharge, including but not limited to site selection, waste placement methods, containment measures, storage capacity, dewatering practices, precipitation, and hydrologic connections to surface waters from each disposal site, operational decisions, and any failures of planning, design, operation, or maintenance.
- g. All available truck manifests, haul logs, or load tickets for the HDD waste disposal to the Property.

- h. Estimates of the volume of HDD waste accepted at the Property, the volume still on site, the volume discharged from each disposal location to waters of the state and the basis for the estimates.

3. **Corrective Action Plan**

By July 10, 2026, the Discharger shall submit a proposed **Corrective Action Plan (CAP)** prepared by an appropriately licensed professional and subject to review and concurrence by the North Coast Water Board or its delegated officer, for the completion of short-term abatement measures necessary to abate any wastes and to prevent unauthorized discharges of HDD waste to waters of the state, both groundwater and surface waters, including Tributary 1, Redwood Creek, and the South Fork Eel River. The CAP shall include, at a minimum, the following elements:

a. Site Stabilization and Source Control:

- i. Identification of all discharge locations and pathways at all known HDD waste disposal sites and all areas of immediate concern with potential to discharge to waters of the state.
- ii. Proposed Best Management Practices (BMPs) and physical containment measures to prevent additional HDD waste from reaching any watercourse or drainage feature hydrologically connected to waters of the state.
- iii. Proposed actions to prevent the resuspension and downstream transport of settled bentonite material discharged from the Briceland Road Property to Tributary 1 during abatement activities.
- iv. Proposed measures to stabilize and contain HDD waste remaining at all HDD waste disposal locations, pending transport to a properly permitted disposal facility.
- v. All proposed site stabilization and source controls shall be reflected in the site specific plans, contracts, scopes of work, design drawings and specifications as applicable.

b. In-Stream and Riparian Cleanup:

- i. Proposed activities, methods, BMPs, to remove settled HDD waste materials from the ditch along Briceland Road, the culvert under Briceland Road, Tributary 1, and, to the extent feasible and consistent with minimizing additional disturbance, from affected reaches of Redwood Creek and the South Fork Eel River. A proposed methodology for extraction of settled HDD waste materials from Tributary 1 pools downstream of the Briceland Road culvert, including a dewatering plan for Tributary 1 and a description of any additional equipment and personnel required.
- ii. Any in-stream cleanup work shall require preauthorization from CDFW and the North Coast Water Board prior to implementation. If emergency conditions necessitate work before authorization can be obtained, the Discharger shall coordinate with CDFW for emergency permit options and notify the North Coast Water Board in writing at least 24 hours in advance.

- iii. Proposed disposal location(s) for all material recovered during cleanup, including confirmation of permit status for each receiving facility.

c. Implementation Schedule:

- i. A detailed schedule for completion of all CAP tasks, with specific milestone dates, identification of responsible parties, and criteria for determining task completion.
- ii. The Dischargers shall notify North Coast Water Board staff in writing (email is acceptable) at least 24 hours before commencing any activity described in the approved CAP.

4. Weekly Progress Reports

Beginning July 13, 2026, and continuing through CAP completion, the Dischargers shall submit weekly progress reports to the North Coast Water Board. Each report include: a summary of all major cleanup and abatement activities conducted during the reporting period; documentation of any new disposal and recycling sites identified including volumes generated recycled and disposed of; all available truck manifests, haul logs, or load tickets for the HDD waste disposal; evaluation of the effectiveness of ongoing cleanup measures; photographic documentation of work areas; identification of any problems or delays and proposed solutions; and a schedule outlook for the following reporting period.

5. North Coast Water Board Approval Required

No in-stream or riparian cleanup activities shall commence until the North Coast Water Board and CDFW has approved the relevant component of the CAP or has notified the Dischargers in writing that work may proceed on an emergency basis.

6. CAP Completion

Upon written approval of the CAP and implementation schedule by the North Coast Water Board Executive Officer, or their designee, and after obtaining any required regulatory authorizations, the Discharger shall commence implementation of the approved CAP no later than five (5) calendar days following the latter of (1) Executive Officer approval or (2) receipt of required regulatory authorizations, unless otherwise specified in writing by the Executive Officer, the Dischargers shall have completed the work specified in the approved CAP. The Dischargers must notify North Coast Water Board staff in writing (e-mail is appropriate) at least 24 hours in advance of commencing activities outlined in the approved CAP.

7. CAP Completion Report

No later than 14 days following completion of all activities described in the approved CAP, the Dischargers shall submit a CAP Completion Report to the North Coast Water Board. This report shall include a summary and photographic documentation of all completed cleanup and abatement measures, clearly keyed to site maps; confirmation of proper off-site disposal of all HDD waste with disposal facility receipts; a statement of professional certification by the responsible licensed

professional; and a determination of whether any additional cleanup is warranted based on conditions observed at completion.

8. **No later than August 7, 2026**, the Discharger shall provide a report of completion of the CAP to the North Coast Water Board. This report shall include a summary and photographs of the completed cleanup and abatement measures. Include photographs of all areas where corrective action has taken place, clearly keyed to site map(s).

GENERAL REQUIREMENTS AND NOTICES

9. **Duty to Use Qualified Professionals:** The Discharger shall provide technical and monitoring reports prepared under the direction of appropriately qualified professionals. In preparing the technical reports, any engineering or geologic evaluations and judgments shall be performed by or under the direction of registered professionals pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1. Reports submitted by or on behalf of the Discharger shall include a statement of qualifications and registration numbers of the responsible lead professional. The lead professional shall sign and affix their registration stamp to the report.
10. **Signatory Requirements:** All technical reports submitted by the Discharger shall include a cover letter signed by the Discharger, or a duly authorized representative, certifying under penalty of law that the signer has examined and is familiar with the report and that to his/her knowledge, the report is true, complete, and accurate. The Discharger shall also state in the cover letter whether he/she will implement the recommendations/proposals provided in the report and the schedule for implementation. Any person signing a document submitted under this Order shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”
11. **Notice of Change in Ownership or Occupancy:** The Discharger shall file a written report on any changes in the Facility’s ownership or occupancy. This report shall be filed with the North Coast Water Board no later than 30 days prior to a planned change and shall reference the number of this Order.
12. **Reasonable Access:** The Discharger shall allow the North Coast Water Board, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to enter at reasonable times to inspect the Facility and any records that must be kept under the conditions of this Order for the

purposes of assuring compliance with this Order or as otherwise authorized by the Water Code.

13. **Submissions:** All submissions, monitoring reports, technical reports, or notices required under this Order shall be submitted to Staff at the addresses provided below. Staff will coordinate to obtain approval of the required submittals.

By email (preferred) to:

The North Coast Water Board at NorthCoast@Waterboards.ca.gov, Adona White at Adona.White@waterboards.ca.gov and Jeremiah Puget at Jeremiah.Puget@waterboards.ca.gov

Or by mail to:

North Coast Regional Water Quality Control Board, Attn: Jeremiah Puget
5550 Skylane Blvd, Suite A, Santa Rosa, CA 95403

14. **Other Regulatory Requirements:** The Discharger shall obtain all applicable local, state, and federal permits necessary to fulfill the requirements of this Order prior to beginning the work.
15. **Cost Recovery:** Pursuant to Water Code section 13304, the State or Regional Water Board is entitled to all reasonable costs it actually incurs to investigate and abate the effects of unauthorized discharges of waste and to oversee/supervise the cleanup of such waste, or other restoration action, required by this Order.
16. **Delayed Compliance:** If for any reason, the Discharger is unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Order and approved by the North Coast Water Board Executive Officer or their designee, the Discharger may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. Any extension request shall be submitted as soon as a delay is recognized but no later than 5 business days prior to the compliance date. An extension may only be granted by modification of this Order or by a letter from the Executive Officer or their designee.
17. **Modifications:** Any modification to this Order shall be in writing and approved by the North Coast Water Board or its delegated officer including any potential extension requests.
18. **Enforcement Authority and Potential Liability:** If the Discharger fails to comply with the requirements of this Order, this matter may be referred to the Attorney General for judicial enforcement or a complaint for administrative civil liability may be issued by the North Coast Water Board. Failure to comply with this Order may result in the assessment of an administrative civil liability of up to \$1,000 dollars per day for violation of technical reporting requirements and liability of \$5,000 per day of violation and/or up to \$10 per gallon when the violation results in the discharge of waste, pursuant to Water Code sections 13268, 13350, and/or 13385. The North Coast Water Board reserves the right to take any enforcement actions authorized by law, including, but not limited to, violation of the terms and conditions of this Order.

19. **No Limitation of Water Board Authority:** This Order in no way limits the authority of the North Coast Water Board to institute additional enforcement actions or to require additional investigation and cleanup consistent with the Water Code. This Order may be revised as additional information becomes available.
20. **Modifications:** Any modification to this Order shall be in writing and approved by the North Coast Water Board or its delegated officer.
21. **Requesting Review by the State Water Board:** Any person aggrieved by this, or any final action of the North Coast Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 et al. The State Water Board must receive the petition no later than 5:00 p.m., 30 days following the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:
[Filing Petition](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) (http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

This Order is effective upon the date of signature.

Original signed by Valerie Quinto on June 17, 2026

Valerie Quinto
Executive Officer