

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

Response to Written Comments

on the Tentative Orders for

Sand Mining in San Francisco Bay, 2027 through 2036 – Reissuance of Waste Discharge Requirements and Clean Water Act Section 401 Water Quality Certification

SAN FRANCISCO BAYKEEPER AND SURFRIDER FOUNDATION (BAYKEEPER)

Comment 1.

Without stronger protections for public trust resources in San Francisco Bay and nearby Pacific beaches, Baykeeper opposes the Tentative Orders (TOs) reissuing Waste Discharge Requirements (WDRs) and Clean Water Act Section 401 Water Quality Certifications for Martin Marietta, Lind Marine, and Suisun Associates.

The Regional Board must deny certification or, at a minimum, significantly revise the TOs to incorporate strict volume reductions, seasonal dredging closures, and robust sediment/biological monitoring under a public review process. The Project encompasses approximately 3,906 acres of the San Francisco Bay floor, including 2,601 acres in the Central Bay, 938 acres in the Suisun Bay/Western Delta, and 367 acres in the privately held Middle Ground Shoal lease.

Response 1.

We disagree that the certification must be denied. The Tentative Orders (TOs) as revised include all necessary conditions to protect water quality and beneficial uses. See detailed responses to Baykeeper's comments below.

Comment 2.

While claiming to reduce mining from the prior authorized maximum of approximately 2,039,866 cubic yards per year, the proposed extraction volume of 1,750,000 cubic yards per year from the lease renewals issued by the California State Lands Commission ("Commission") [SLC] substantially exceeds historical extraction rates.

Response 2.

The TOs do not authorize extraction of 1,750,000 cubic yards of sand per year. In combination, the TOs would certify that a total peak extraction volume of 1,750,000 cubic yards within a single year and a combined average volume of 1,426,000 cubic yards per year will not violate water quality standards or other appropriate requirements of state law. The combined average volume and total ten-year maximum volume are less than the volumes authorized by the State Lands Commission (SLC) leases and analyzed under CEQA in the SLC's Final Supplemental Environmental Impact Report (2026 SEIR). In addition, these volumes are also a reduction in the 1,950,000 peak

volume and 1,613,000 annual average volume previously certified by the San Francisco Bay Regional Water Quality Control Board (Water Board) in 2015.

Further, annual sand mining volumes are driven by construction-related demand. As a result, historical extraction rates fluctuate with economic conditions. The proposed volumes are based on historical volumes from 2002 to 2007. Since that time economic factors have reduced construction demand for sand. As a result, the mining volumes from 2015 to present were lower than from 2002 to 2007.

The TOs have been revised in Section I.B.5. Sand Mining Volumes to clarify the annual maximum volume and 10-year maximum volume.

Comment 3.

Under 40 C.F.R. § 121.3, the Regional Board is independently authorized and required to evaluate whether the project activities comply with applicable water quality requirements. The Board's authority is not bound by the Commission's [SLC's] Final SEIR certified on February 9, 2026.

Response 3.

We agree that the Water Board is required to evaluate whether the activity will comply with applicable water quality requirements. At present, there is no evidence that sand mining as proposed in the TOs will violate water quality standards with inclusion of the prohibitions, limitations, and provisions in the TOs.

Comment 4.

Sand is a finite, relic resource. From 2001–2020, sand removed by mining (1.17 Mt/y) was 2.6-fold more than all sand inflows to the Bay combined (0.45 Mt/y). This deficit has impacts on the Bay, on fish and wildlife habitat, on the nearshore Pacific coast, on resiliency and flooding, and on preparedness for sea level rise. Impacts to fish and wildlife include boat strikes and entrainment, and there is growing evidence of increased mammal presence around these lease sites and in shipping lanes. The fish that are impacted are in far worse condition than they were fifteen years ago at the time of the last analysis. Management challenges are far more difficult now as policy makers struggle with prioritizing habitat conservation and mitigation. All of these factors should lead the Regional Board to adopt additional limitations on the volume of sand allowed to be mined from the Bay.

Response 4.

We agree that the volume of sand removed by mining is greater than inflow to the Bay as determined by the sand mining studies.^{1, 2} However, the sand mining studies,

¹ McKee, L.J., Zi, T., Pearce, S.A., Grosso, C., Wong, A., Weaver, M., Dusterhoff, S., Lowe, J., Elias, E., Roelvink, F., 2023. Sand budget and sand transport in San Francisco Bay. A report prepared by SFEI-ASC for the State Coastal Conservancy (SCC), and the San Francisco Bay Conservation and Development Commission (BCDC). SFEI Contribution #1125. Richmond, CA.

² McKee, L.J., Zi, T., Pearce, S.A., Grosso, C., Wong, A., Weaver, M., Dusterhoff, S., Lowe, J., Elias, E., Roelvink, F. 2025. Sand budget and sand transport in San Francisco Bay. A report prepared by SFEI-ASC

including the study cited in the comment, concluded that sand mining is “not likely a primary mechanism for bed sand erosion” in Suisun Bay, and that additional analysis and bathymetric surveys are necessary to better understand the sediment budget changes through time and to determine the influence of sand mining.

There is also no evidence that sand mining is responsible for the decline of fish or a decline in benthic habitat supporting fish and wildlife. As required in the 2015 Orders and stated in the TOs, a Benthic Habitat Technical Advisory Committee was formed and worked with the sand miners’ consultant, NewFields Sediment Management and Marine Sciences (NewFields), to develop and conduct a study to evaluate whether sand mining had long-term impacts on benthic habitat or the benthic community. This evaluation was performed by:

1. Characterizing benthic habitat conditions and benthic macroinvertebrate community composition in both sand mining areas and adjacent areas with similar benthic conditions before sand mining disturbances and 12 months after the disturbances (i.e., reference areas).
2. Comparing and contrasting the physical and biological characteristics of the benthic habitat and communities in the sand mining areas and the reference areas before and after sand mining disturbance.
3. Assessing the potential impacts of sand mining disturbance on habitat conditions and functions for selected species based on observed differences in the benthic community 12 months after disturbance, and information on the fish community that may utilize the sand mining areas.

The study found that the level of disturbance observed after mining activities was within the background conditions observed in the pre-disturbance surveys. Therefore, sand mining had no long-term impacts on benthic habitat or the benthic community. The study also concluded that use of mining areas by higher trophic level organisms, such as fish and marine mammals, for rearing, foraging, spawning, and migration would not be expected to change significantly. Lastly, the study acknowledged that there may be short-term impacts, but found the spatial area disturbed by sand mining in a typical week is relatively small relative to the overall portion of habitat available.^{3, 4}

Moreover, the TOs require mitigation for short-term impacts to Estuarine Habitat, Fish Migration, Preservation of Rare and Endangered Species, Fish Spawning, and Wildlife

for the State Coastal Conservancy (SCC), and the San Francisco Bay Conservation and Development Commission (BCDC). SFEI Contribution #1125. Richmond, CA.

³ NewFields. 2018. Benthic Assessment of Sand Mining in Central San Francisco and Suisun Bays, Data Report. Prepared for Hanson Marine Operations, Oakland, CA, and Lind Marine, Inc., Petaluma, CA. Prepared by NewFields, Edmonds, WA. April 26, 2018.

⁴ NewFields. 2020. Benthic Assessment of Sand Mining Supplemental Data Evaluation. Prepared for Hanson Marine Operations, Oakland, CA, and Lind Marine, Inc., Petaluma, CA. Prepared by NewFields, Edmonds, WA. January 21, 2020.

Habitat Beneficial Uses (Hereafter, collectively referred to as aquatic habitat beneficial uses) in Provision II.C.6.

Comment 5.

II. LEGAL AND SCIENTIFIC BACKGROUND

As approved by the Commission [SLC], the Project would accelerate the exhaustion of non-renewable mineral resources in San Francisco Bay, where numerous mined pits already pock the Bay's floor, making plain the dramatic and persistent sediment loss that has resulted from past and ongoing sand mining. A growing body of new scientific data points to the harmful impact of sand mining on coastal erosion and wildlife habitat – impacts compounded by accelerating sea level rise and climate change. Crucially, new studies have shown that much of the Bay's sand is ancient and therefore not being actively replenished, let alone at rates commensurate with the proposed extraction. It is not a renewable resource. Despite the depletion of the Bay's sand documented in the record and its concomitant erosive effect on the San Francisco coastline and the Bay's ecosystem, the FSEIR [2026 SEIR] prepared for the Project by the Commission [SLC] fundamentally failed to provide agency decision-makers and the public with the information required to evaluate the full scope of these environmental impacts as required by CEQA.

The historic sand mining in the three areas analyzed by the Regional Board's TOs is unsustainable, leaving unfilled pits pock-marking the Bay's floor. Natural replenishment has been severely deficient across the most intensively mined areas. In the Suisun Channel mining area, only 1 percent of the volume extracted between 2014 and 2019 was replaced by natural infilling, and the bed was lowered by approximately 2.5 meters (8.2 feet). In Suisun Bay lease areas, only 1% of extracted sand was naturally replaced over the 2014–2019 study period – meaning approximately 99% was permanently lost from that portion of the system. In the northern Central Bay lease areas, average recovery rates between 2008–2019 ranged from 14% to 55%, with rates as low as 11% to 15% during peak mining periods – representing a failure to replace between 45% and 89% of the extracted material. Even where there are relatively higher local recovery rates, a sediment sink is created that reduces supply to the broader Bay and outer coast. Published and peer reviewed research by USGS-affiliated scientists documents that over 200 million cubic meters of sediment has been removed from the San Francisco Bay Coastal System through dredging, aggregate mining, and borrow pit mining over the course of the 20th century. Separately, bathymetric change analysis for the period 1997–2008 alone documented a loss of 14.1 million cubic meters of sediment from west-central San Francisco Bay, representing approximately a three-fold acceleration compared to rates observed from 1947 to 1979.

This sustained and accelerating depletion of sediment has contributed to erosion at nearby open coast beaches, including Ocean Beach in San Francisco, by reducing the supply of sand-sized material available for coastal deposition. Continued sand mining will increase erosion. Aggregate mining and dredging occur along sand transport pathways at removal rates that exceed present-day sediment supply from all Bay watersheds combined. And new scientific information developed since 2012 has

substantially advanced knowledge of the detrimental effects of sand mining at actual historical volumes – knowledge that was not addressed in the 2012 EIR [Final Environmental Impact Report] regarding the relationship between in-Bay mining and depletion of sediment supply to adjacent coastlines.

All of these conclusions are supported by the latest science. The Bay Conservation and Development Commission (BCDC) completed a six-year process involving distinguished scientists, regulatory and resource agencies, and industry representatives to compile a report titled “San Francisco Sand Budget, Transport, Provenance, and Bathymetric Change Studies and Potential Physical Effects of Sand Mining Activities.” According to BCDC’s staff summary, key findings from this work include:

- 1. The volume of mined sand is significant relative to the Bay sand budget (it represents the largest outflow of sand from the Bay), larger than the net sand discharge to the ocean. Additionally, sand is mined faster than it is replenished; therefore, Bay sand is a nonrenewable resource over the long term.*
- 2. Suisun Bay sand is not replenished; thus, it is a finite resource, and the sand bed is being lowered. The bathymetric, modeling, and budget studies all support this. Sand mining effects in lease areas appear to be highly localized, with effects diminishing with distance from the event location. The effect is more pronounced in areas of negligible sand transport such as Suisun Bay, where the depressions caused by mining persist in the bed over time.*
- 3. Central Bay sand is relic (i.e., deposited between 20,000 and 6,000 years ago as sea levels rose, and the river discharge point migrated through the Bay to its present location in the Delta) and is part of a large bay-ocean reservoir of sand. Sands derived from the watersheds of the Sacramento and San Joaquin Rivers are no longer a significant source to the Bay and ocean, and large volumes of sand do not move through the system during times of high flows (e.g., wet winters), as was previously assumed. Effects of mining to beaches and ecologically important shoals remain unquantified.*
- 4. San Francisco Bay and the Pacific Ocean share a common pool of sand which sand mining reduces. In each tidal cycle, a huge amount of sand is transported between the Bay and the ocean effectively linking the two sand deposits into a shared pool. The size of this shared pool of sand, and thus the significance of the reduction due to mining, is unknown.*

These are not minor refinements—they are foundational findings about resource renewability, transport connectivity, and persistence of mining effects.

Response 5.

Under Public Resources Code section 21167.3, the Water Board must assume that the SLC’s 2026 SEIR complies with CEQA and proceed with its approval or disapproval of the Tentative Orders; any approval of the projects constitutes permission for the

applicants to proceed at their own risk pending a final determination of the litigation (Pub. Resources Code, § 21167.3, subd. (b).). (See also Baykeeper Response 6.)

The most recent sand mining studies provided a synthesis of and contributed to the body of knowledge regarding sand geomorphology in the San Francisco Bay and outer coast. However, these studies did not significantly change our understanding of the effects of sand mining on water quality or beneficial uses in the Bay or outer coast. As acknowledged in Master Response 3 in the responses to comments on the 2012 EIR and Master Response F in the responses to comments on the 2026 SEIR, “mining is inherently not a sustainable activity because it extracts sand at a rate greater than natural resources can create and/or natural processes can replenish sand.” Moreover, both the 2012 EIR and the 2026 SEIR evaluated the effects of depressions caused by sand mining and the effects of sand mining on sand transport in general and included information supporting their determinations in Appendix G of the 2012 EIR and Appendix D of the 2026 SEIR. Both the 2012 EIR and 2026 SEIR found that sand extracted by mining and the subsequent depressions created are expected to have a limited effect on erosion, sedimentation, and sand transport.

As noted in the Baykeeper comment above, the 2024 Independent Science Panel Findings Report⁵ found that “[e]ffects of mining to beaches and ecologically important shoals remain unquantified.” Further, as stated in the 2024 Independent Science Panel Findings Report,⁵ “...a huge amount of sand is transported between the Bay and the ocean, but the net effect is much smaller than the tidal influx and efflux. On the time scale of a year, sand that leaves to the ocean is likely a little greater than the amount of sand that enters the Bay (i.e., a net loss of sand from the Bay) (Anchor QEA 2023 and McKee et al. 2023), but not conclusively so. Sand mining reduces this net outflux of sand (Anchor QEA 2023 and McKee et al. 2023), but the effect may be diffuse and locally negligible and the significance of this on the open coast and ocean was not addressed by these studies.” As to effects from sand mining in Suisun Bay, the same report states, “[m]ining in Suisun Bay does not appear to have a large effect on sand supply to Suisun Bay, San Pablo Bay, and the rest of the Bay.”

In summary, the studies found that the magnitude of the effect of sand mining on the shared pool of sand in the Central Bay and outer coast is unknown and the impacts to inland and coastal beaches are inconclusive. The effect of sand mining in Suisun Bay on sand supply was negligible.

⁵ Battalio, Robert T., Craig A. Jones, John L. Largier, David H. Schoellhamer, Paul A. Work. 2024. San Francisco Bay Sand Budget, Transport, Provenance, and Bathymetric Change studies and potential physical effects of sand mining activities: Independent Science Panel Findings Report – Best Available Science. Prepared for the California State Coastal Conservancy and San Francisco Bay Conservation and Development Commission.

Comment 6.

III. THE TENTATIVE ORDERS ARE BASED ON AN INFLATED “PAPER” BASELINE

Perhaps most disturbingly, the FSEIR [2026 SEIR] used an egregiously inaccurate baseline to assess the Project’s environmental impacts. Specifically, the FSEIR [2026 SEIR] compared the impacts of the Project not to the actual or average amount of sand mining being conducted, but to the maximum volume of sand mining that could have occurred under the Commission’s [SLC’s] approval of a prior version of the Project in 2012. In its comments on the FSEIR [2026 SEIR], BCDC reported that the maximum annual volume mined since 2012 was approximately 976,000 cubic yards, and that average annual mining volume across lease areas was approximately 700,000 cubic yards.

This use of an artificially inflated baseline rendered the FSEIR’s [2026 SEIR’s] analysis inadequate as a matter of law and fundamentally misleading to decisionmakers and the public. Furthermore, by approving the flawed Project to remove excessive amounts of sand from the Bay’s floor, the Commission [SLC] inappropriately set aside its obligations as a trustee to protect the Bay’s floor and San Francisco’s coastal shoreline, both of which are vital public trust resources. In other words, the Project is functionally a major expansion masked as a reduction.

The Regional Board compounded this error by relying on the faulty FSEIR [2026 SEIR] prepared by the Commission [SLC] and by perpetrating the fiction that the Project is an improvement with minimal impacts simply because it reduces authorized volumes, without any substantive evaluation of actual impacts from actual volumes of sand mined at the mining sites. This conflates regulatory permissions with actual physical conditions in violation of the Regional Board’s duty under the Clean Water Act and fails to implement the San Francisco Bay Water Quality Control Plan (“Basin Plan”) and protect beneficial uses per California Water Code section 13263. It also violates the Regional Board’s duty as a responsible agency under CEQA to independently consider the FSEIR [2026 SEIR]. PRC §§ 21002.1(d), 21081; 15 CCR § 15096(f) and (h).

Under CEQA, a responsible agency has the specific charge to fully consider those aspects of a project that are subject to its jurisdiction. PRC § 21069. And a “responsible agency may refuse to approve a project in order to avoid direct or indirect environmental effects of that part of the project which the responsible agency would be called on to carry out or approve.”

Under CEQA Guidelines § 15164, if some changes or additions are necessary to make a previous EIR adequate, a responsible agency such as the Regional Board must prepare an addendum to a previously certified EIR. If the Regional Board needs to fill in missing technical information or make minor modifications specific to its WDRs or water quality certifications, and those changes do not trigger new or substantially more severe significant environmental impacts, an addendum is the exact legal mechanism designed for this purpose. The responsible agency must then consider the addendum in conjunction with the final EIR before making a decision on the project. Courts have generally upheld the use of an addendum in these cases.

Between 2016 and 2020, actual mining operations averaged approximately 784,000 cy/year. By utilizing the Commission's [SLC's] inflated paper baseline, the Regional Board is masking the true environmental degradation that will occur. Moving from actual historical extraction (~784,000 cy) to the proposed peak of 1.75 million cy/year represents an increase of over 100%. The Board has an independent duty under CEQA and the Basin Plan to evaluate the impact of this massive increase relative to actual existing physical conditions. In this case, a Supplemental EIR or an Addendum would be appropriate options to remedy the deficient FSEIR [2026 SEIR].

Response 6.

We disagree. The commenters raised the baseline issue (and several other concerns in their comment letter) in their comments on the SLC's draft SEIR. In Master Response C in the 2026 SEIR, the SLC explained "[w]hen an SEIR is prepared, the lead agency's scope of environmental review is limited to whether the existing environmental analysis (i.e., the 2012 EIR in this situation) is sufficient to evaluate the impacts of the project as revised or whether further analysis is needed (CEQA Guidelines sections 15162 and 15163). Because the purpose of an SEIR is to analyze changes in the Revised Project as compared to the previously analyzed project, the most appropriate baseline is the approved project analyzed in the original EIR." After SLC's adoption of the 2026 SEIR, Baykeeper initiated litigation against the SLC alleging, among other things, that SLC's CEQA review was inadequate. Under Public Resources Code section 21167.3, the Water Board must assume that the SLC's 2026 SEIR complies with CEQA and proceed with its approval or disapproval of the TOs; any approval of the projects constitutes permission for the applicants to proceed at their own risk pending a final determination of the litigation (Pub. Resources Code, § 21167.3, subd. (b).).

It is not appropriate for the Water Board to prepare a supplemental EIR or addendum to address issues analyzed in the SLC's 2026 SEIR. There are limited circumstances in which an agency can prepare a subsequent EIR or supplemental EIR: (a) substantial changes are proposed in the project which will require major revisions of the EIR due to new significant effects or a substantial increase in the severity of previously identified significant effects; (b) substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report due to new significant effects or a substantial increase in the severity of previously identified significant effects; and (c) new information of substantial importance, which was not known and could not have been known at the time the environmental impact report was certified as complete that implicates new or substantially more severe significant effects, feasibility of mitigation measures or alternatives that were previously found to be infeasible that could substantially reduce a significant effect, or mitigation measures or alternatives that are considerably different from those previously analyzed that would substantially reduce a significant effect (Pub. Resources Code, § 21166; Cal. Code Regs., tit. 14, § 15163.). The comment letter does not identify substantial changes or new information that would trigger a supplemental EIR or identify a basis to prepare an addendum.

The Water Board independently considered the 2012 EIR and the 2026 SEIR with respect to the aspects of the project that are within its jurisdiction and made appropriate findings in the TOs.

Comment 7.

IV. THE TENTATIVE ORDERS FAIL TO CONDUCT A COMPREHENSIVE ANTIDEGRADATION ANALYSIS

The TOs claim compliance with State Resolution No. 68-16, California's Antidegradation Policy, simply because the “proposed” volumes are lower than the 2012 maximum authorized limits. Comparing a new permit to an unused paper limit does not satisfy antidegradation requirements. The Regional Board must evaluate the direct water quality degradation resulting from increasing actual operations.

Suction mining operations generate substantial turbidity plumes and release contaminants, which will temporarily but significantly degrade high-quality waters. The Regional Board has completely failed to execute a rigorous, standalone Antidegradation Analysis to demonstrate that this degradation is consistent with the “maximum benefit to the people of the State.” Here, the miners propose to increase extraction rates above and beyond what has been actually extracted under their prior 10-year leases. The resulting effect will be greater erosion and less re-nourishment of Bay Area beaches, additional disturbances to benthic habitat, additional waste discharges, and less sediment availability system wide. Each of these increases in the severity of projects’ impacts will result in the degradation of water quality beyond that previously experienced.

Response 7.

A standalone antidegradation analysis is not required here. The Antidegradation Policy Implementation for NPDES Permitting⁶ states a simple antidegradation analysis is sufficient, and a complete antidegradation analysis will not be required if one of four criteria are met, including the following:

1. A Regional Board determines that the reduction of water quality will be spatially localized or limited with respect to the waterbody; e.g., confined to the mixing zone; or
2. A Regional Board determines the reduction in water quality is temporally limited and will not result in any long-term deleterious effects on water quality; e.g., will cease after a storm event is over.

⁶ State Water Resources Control Board. 1990. Administrative Procedures Update – Antidegradation Policy Implementation for NPDES Permitting. APU 90-004. July 2, 1990. Although APU-90-004 is not binding here because it is not an NPDES permitting action, it is instructive (See *Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Board* (2012) 210 Cal.App.4th 1255, 1270.)

Items 8, 9, and 10 – Response to Comments

The effect on water quality attributable to sand mining discharges is turbidity from the discharge of decant/overflow water. Contaminants found in fine-grained sediment in the Bay are not expected to be concentrated in mined sand, see Baykeeper Response Nos. 13 and 14. Increases in turbidity from sand mining discharges are spatially localized in the Bay, and temporally limited and will not result in any long-term deleterious effects on water quality.⁷ Therefore, a simple antidegradation analysis is sufficient.

Additionally, none of the factors that would require a complete antidegradation analysis applies here. APU 90-004 directs the regional water boards to make a complete antidegradation analysis if the proposed activity results in the following:

1. A substantial increase in mass emissions of a pollutant, even if there is no other indication, that the receiving waters are polluted; or
2. Mortality or significant growth or reproductive impairment of residential species.

APU 90-004 goes on to explain that an antidegradation finding should be made and, if necessary, a complete antidegradation analysis should be conducted for the following permit activities:

1. Issuance of a permit for any new discharge, including Section 401 certifications; or
2. Material and substantial alterations to the permitted facility, such as relocation of an existing discharge; or
3. Reissuance or modification of permits which would allow a significant increase in the concentration or mass emission of any pollutant in the discharge.

The sand mining TOs would not permit any new discharge, and there are no alterations to permitted facilities. The TOs are reissuance of permits, but they do not increase allowed volumes that would increase turbidity; therefore, they do not allow a significant increase in the emission of any pollutants in the discharge. Nor does the activity result in mortality or significant growth or reproductive impairment of residential species. (See Baykeeper Response Nos. 4, 8, 17.)

Although a simple antidegradation analysis for TOs is sufficient, we agree that additional discussion should be added to describe how the temporary degradation resulting from the discharges is consistent with the maximum benefit to the people of the State. In response to the comment, we revised the antidegradation analysis in the TOs as follows:

⁷ NewFields. 2018. Sand Mining Water Quality Monitoring Program Results Report. Prepared for Hanson Marine Operations, Oakland, CA, and Lind Marine, Inc., Petaluma, CA. Prepared by NewFields, Edmonds, WA. August 10, 2018.

This Order complies with the antidegradation provisions of 40 C.F.R. part 131.12 and State Water Board Resolution No. 68-16. It is not expected to result in water quality less than that prescribed in the policies. No pollution or nuisance is expected to occur, and the highest water quality consistent with the maximum benefit of the people of the State will be maintained. This Order reduces the annual average volume, the peak year volume, and the ten-year maximum volume of sand that [Lind Marine Inc., Martin Marietta, Suisun Associates] is authorized to mine as compared with the volumes authorized under the previous order. The Project will increase turbidity during sand mining activities from overflow discharge described in Findings section E, thereby temporarily degrading water quality. The increased turbidity, however, will be short-lived and localized to the areas in the immediate vicinity of the sand mining. Accordingly, the reduction in water quality will be minor, short-term, and localized, and as a result, will not cause long-term effects. Leaking or overflow of scows are not permitted during transport, preventing turbidity from increasing in route to the offloading facilities. In short, sand mining is temporary, and turbidity quickly dissipates once sand mining is complete. The discharges resulting from the Project will not impair beneficial uses listed in Section I.G of this Order.

The temporary degradation from the permitted discharge is also consistent with the maximum benefit to the people of the State. The Project provides sand for public and commercial construction projects, including public infrastructure and residential projects as described in Section I.B.4 of this Order. Construction-related demand for sand will not cease; therefore, if sand mining in the Estuary as described in this Order were not authorized, demand for sand would be fulfilled by other sources. These other sources include local quarries, aggregate materials recycling facilities, or imported sand from British Columbia or Mexico as described in Section 3.3.1 of the 2012 EIR and Section 4.4.1 of the 2026 SEIR. The increase in other local sources would have significant and unavoidable air quality impacts under CEQA. Because sand mining as described in this Order takes place in open water, there are no impacts to population and housing, public services, or utilities and service systems. Sand quarries in the Region would likely result in additional impacts in these categories. Sand imported from British Columbia or Mexico would result in additional greenhouse gas emissions from consumption of fossil fuels used to transport the material.

In addition, an economic analysis was performed for the Corps in 2014. In this analysis, the cost of sand mined from the San Francisco Bay was estimated at \$18.28 per ton, and the cost of sand from other sources was estimated at \$23.48 per ton. Therefore, the cost of sand from other sources was about 28 percent greater than the cost of sand from the San Francisco Bay. When using a conversion factor of 1.4 tons per cubic yard and the [100,000, 1,141,000, 185,000] cy annual average volume, not authorizing the Project would prevent [140,000, 1,597,400, 259,000] tons of sand per year from being extracted from the San Francisco Bay at an economic cost of about [\$730,000, \$8,310,000, \$1,350,000] primarily to the transportation sector with some minor additional costs to the housing sector. Over 10 years, the cost to the San Francisco Bay

Area would be about [\$7,300,000, \$83,100,000, \$13,500,000] in 2014 dollars. If temporary degradation were not authorized there would be potentially significant environmental and economic costs to the people of the State and particularly to those in the Region.

The permitted discharge will also not result in water quality less than that prescribed in policies and this Order requires the best practicable control through avoidance and minimization measures with receiving water limitations and prohibitions as backstops to assure no pollution or nuisance and the highest water quality consistent with the maximum benefit of the people.

Please note that the combined economic cost to people of the state and particularly those in the Region would be about \$10,390,000 annually and about \$103,900,000 over the 10-year permits in 2014 dollars. Considering inflation over the past 12 years the cost would be considerably more and will likely increase substantially over the next 10 years.

Comment 8.

V. ARBITRARY DOWNGRADING OF BIOLOGICAL IMPACTS & DEFERRED MITIGATION

CEQA requires lead agencies to make significance determinations based on substantial evidence in the record. The improper deferral of significance determinations violates CEQA's fundamental purpose of informed public participation and decision-making.

A. Arbitrary Downgrading of Smelt Impacts (BIO-8)

The 2012 EIR classified Impact BIO-8 (entrainment and mortality of Delta Smelt and Longfin Smelt) as “Significant and Unavoidable” (Class I). The Draft SEIR maintained this classification, acknowledging that “there still remains a potential for take of listed delta or longfin smelt to occur, and therefore the impact remains a Significant Impact (Class I).” The 2026 SEIR and the TOs downgrade this impact to “Potentially Significant with Mitigation” (Class II). This downgrade lacks substantial evidence. The “new” mitigation cited in the TOs consists of the identical fish screens, pipe depth restrictions, and Incidental Take Permits (ITPs) that were already in place and failed to prevent the Class I classification in 2012. No new technology is proposed.

Since 2012, Delta and Longfin smelt have suffered continuous, severe population declines and are in imminent danger of extinction. The San Francisco Bay–Delta distinct population segment of Longfin Smelt was listed as endangered under the federal ESA in 2024. This decline in population status means that any additional take is exponentially more significant, rendering the downgrade scientifically indefensible. The 2026 SEIR therefore lacks substantial evidence and continues to fail to adequately analyze changed conditions since 2012 (e.g., species have continued to decline, increasing significance of impacts; updates to critical habitat and recovery plans; and new science on climate change impacts).

B. Inadequate Protection for White Sturgeon (BIO-9)

White Sturgeon was listed as a candidate for protection under the California Endangered Species Act (CESA) in July 2024, representing a major changed circumstance since the 2012 EIR. White Sturgeon are particularly vulnerable to projects like sand mining because they live almost their entire lives in the Bay, on the bottom. Boat strikes and dredging are potential sources of impact to both Green Sturgeon and White Sturgeon. The TOs fail to explain how identical suction mining equipment and operations will prevent white sturgeon take, while admitting that the species will suffer potential significant impacts from entrainment. Requiring applicants to provide compensatory mitigation credits to a bank does not satisfy the Regional Board's mandate to minimize and avoid actual take in state waters.

Response 8.

As stated above in Baykeeper Response Nos. 5 and 6, under Public Resources Code section 21167.3, the Water Board must assume that the SLC's 2026 SEIR complies with CEQA.

The TOs include avoidance and minimization measures to reduce entrainment impacts to aquatic species, including special status species, such as green sturgeon, delta smelt, and longfin smelt, that are also protective of white sturgeon. Compensatory mitigation is required for impacts remaining after implementation of the avoidance and minimization measures.

In regard to the impacts of boat strikes, the Water Board does not have regulatory authority over impacts from boat strikes. Nonetheless, San Francisco Bay is a major water body for shipping, fishing, transportation, and pleasure vessels. Sand mining vessels represent an extremely small percentage of aquatic navigation in the Bay.

Comment 9.

C. Deferred Mitigation & Public Participation Violations

Like the 2015 certifications, the 2026 TOs continue to defer critical benthic habitat and recovery studies to a Technical Advisory Committee (TAC) to be completed after the permit is issued. Conducting these studies post-certification, outside of public review, violates the California Water Code and established case law (e.g., Topanga Association for a Scenic Community v. County of Los Angeles (1974) and Waterkeeper Alliance v. U.S. EPA (2005)). The Regional Board must require completed, peer-reviewed biological evaluations prior to granting any water quality certification.

Response 9.

The discussion of the benthic habitat TAC refers to a past study effort that was already completed (see also Baykeeper Response No. 4 above). The results of the study have been considered and incorporated into the TOs. Please refer to Section I.C of the TOs, Sand Mining Impacts of Benthic and Aquatic Habitat, for the findings of the studies under the TAC. In addition, Provision II.C.6 of the TOs requires mitigation for short-term impacts to aquatic habitat beneficial uses (see Baykeeper Response No. 4).

Comment 10.

VI. FAILURE TO ADDRESS REGIONAL SEDIMENT DEFICIT AND SHORELINE EROSION

The TOs concur with the FSEIR's [2026 SEIR's] claims that sediment transport impacts are strictly localized to the immediate vicinity of the lease areas and do not affect the outer coast or the San Francisco Bar. This is the obsolete "conveyor belt" sediment model with its localized-impact assumptions which the BCDL Independent Science Panel (ISP) June 2024 Report, utilizing data funded by the 2015 permits, completely shattered.

Response 10.

See Baykeeper Responses Nos. 5 and 6.

Comment 11.

Sand is, actually, an ancient, non-renewable resource. Much of the sand in the Central Bay consists of irreplaceable, ancient relic deposits accumulated over millennia that are not being replenished by modern Delta or watershed inputs. Central Bay sand is part of a single, continuous sand transport pathway linked to the outer coast in a shared Bay-ocean pool.

Sand mining constitutes the single largest sand outflow from San Francisco Bay, representing approximately 66% of all sand outflows from the system. This is a massive system-scale outflow. Extracting this much sand from the Bay floor directly starves the ebb-tidal delta outside the Golden Gate (San Francisco Bar) and adjacent open-coast beaches (Ocean Beach), exacerbating severe coastal erosion. It also results in permanent bed lowering without natural recovery. Advanced multibeam bathymetric and detailed "Ring Analysis" modeling (Deltares 2023/ISP 2024) confirms that mining pits are not recovering. Recovery rates in key Central Bay lease areas (such as PRC 2036, PRC 7779W, and PRC 7780N) are extremely low, resulting in permanent bed lowering and localized deepening.

This permanent loss of sediment and bed lowering directly impairs Basin Plan beneficial uses, including Marine Habitat (MAR), Wildlife Habitat (WILD), Commercial and Sport Fishing (COMM), and Noncontact Water Recreation (REC2).

Response 11.

The Water Board agrees with the conclusions from the most recent body of sand mining studies. As summarized in Baykeeper Response No. 5 above, the studies found that the magnitude of the effect of sand mining on the shared pool of sand between the San Francisco Bay and outer coast is unknown and the impacts to inland and coastal beaches are undefined. Therefore, there are no known impacts of the sand mining to beneficial uses supported by beaches. In addition, as described in Baykeeper Response No. 4, the effects to aquatic habitat are summarized in the TOs under Section I.C. Sand Mining Impacts of Benthic and Aquatic Habitat. The Benthic Habitat Technical Advisory Committee, which developed and completed investigations addressing these

habitat concerns, included, among others, CDFW. While there are depressions and a lowering of the bed in the mining areas, the effects are localized and there is no evidence of effects to beneficial uses outside the locally affected area.

Comment 12.

The TOs also fail to account for how the extraction of beach-quality sands undermines critical public investments, specifically the \$250 million Ocean Beach Climate Adaptation Project. As noted by the California Coastal Commission, Central Bay sand has been designated as a potential backup source of sand for beach nourishment and dune creation. Allowing private entities to extract this public trust resource for private profit while public agencies spend millions to battle coastal erosion is a direct conflict that the Regional Board must address under its public interest mandate.

Response 12.

The Water Board considered public trust uses. Uses protected by the public trust have traditionally been tied to navigation, commerce, and fisheries, including the right to fish, hunt, bathe, swim, and boat, but the public trust also encompasses protection of the ecological value of water bodies (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 434.). The Porter-Cologne Act is, in effect, a codification of the Water Board's public trust duty as that duty applies to the protection of the quality of navigable water bodies and other waters within California, because the statute requires the water boards to adopt water quality control plans establishing water quality objectives necessary to provide reasonable protection of beneficial uses, including fishing, habitat, and recreation. The Water Board thus considered public trust uses when it adopted the Basin Plan and by incorporating requirements into the TOs to ensure the permitted discharges will not cause or contribute to exceedances of those objectives to protect public trust uses and other beneficial uses identified in the TOs. For example, the TOs include restrictions on the location and depth of mining to avoid habitat impacts (see Provision II.C.5) and receiving water limitations to protect beneficial uses (see Provision II.B).

Moreover, there is no evidence that the extraction of sand will impact the Ocean Beach Climate Adaptation Project. Based on our records of necessary annual navigational dredging of the San Francisco Main Ship Channel to the San Francisco Bay there is an abundance of sand for beneficial reuse at Ocean Beach. The U.S. Army Corps of Engineers' (Corps') April 2025 survey measured 857,700 cubic yards of sand in the channel to a depth of -57 feet Mean Lower Low Water that must be dredged. That sand would be available for beneficial reuse at Ocean Beach at a substantially lower cost than a state and locally funded dredging project outside of a federal navigation channel or sand being mined in the Bay, because under section 204 of the 1992 Water Resources Development Act, the City of San Francisco (i.e., the local sponsor) is responsible for 35 percent of the implementation cost with the Corps being responsible for the other 65 percent. There is no indication that this availability will not continue in the future. See also Baykeeper Response No. 7.

Comment 13.

VII. INADEQUATE ANALYSIS OF TURBIDITY PLUMES, TOXICS, AND TMDL CONSISTENCY

A. Impacts on Richardson Bay Eelgrass and Submerged Aquatic Vegetation (SAV)

The TOs dismiss impacts to eelgrass on the basis that no eelgrass beds are located within the designated lease areas. This ignores down-current transport. Large sediment plumes generated during suction mining overflow transport fine sediments to adjacent high-velocity systems. Plume turbidity directly reduces light penetration and photosynthesis for sensitive eelgrass beds (such as the second largest eelgrass bed in the Bay in Richardson Bay). Fine sediment deposition also threatens to bury benthic foraging habitats. Eelgrass has suffered significant declines since 2012 that the TOs fail to discuss or evaluate.

Response 13.

Under Public Resources Code section 21167.3, the Water Board must assume that the SLC's 2026 SEIR complies with CEQA. As required in the 2015 Orders and stated in the TOs, the sand miners hired NewFields to develop and conduct a special study to evaluate decant/overflow water and the impacts on receiving water quality during sand mining operations. This evaluation was performed by:

1. Monitoring receiving waters during mining events to identify the spatial and temporal extent, and the physical and chemical composition of the suspended sediment plumes.
2. Characterizing the physical and chemical composition and toxicity of decant/overflow water.
3. Comparing chemistry results with 1-hour average Water Quality Objectives and 1993 water quality monitoring results.

As discussed in the SLC's responses to Audubon California's comments O5-3 and O5-6 in the 2026 SEIR, the water quality study conducted by NewFields found that the sediment plume dissipated a maximum of approximately 400 meters down current and was visible less than 3 to 4 hours after mining occurred, and that the majority of turbidity readings were below 50 NTU. Therefore, turbidity plumes from sand mining decant/overflow water were spatially limited and ephemeral in nature.⁸ There are no eelgrass beds in Suisun Bay within reach of any turbidity plumes associated with sand mining. The edges of lease areas PRC-7779N and PRC-7779E in Central Bay approach eelgrass beds around Angel Island. The TOs prohibit sand mining within 200 feet of shorelines, 250 feet of depths less than -30 feet Mean Lower Low Water, and 100 feet from the outward edge of any hard bottom feature, providing a buffer between

⁸ NewFields. 2018. Sand Mining Water Quality Monitoring Program Results Report. Prepared for Hanson Marine Operations, Oakland, CA, and Lind Marine, Inc., Petaluma, CA. Prepared by NewFields, Edmonds, WA. August 10, 2018.

mining and eelgrass beds. Therefore, sand mining turbidity is not expected to impact eelgrass beds.

Comment 14.

B. Contaminant Mobilization and Mercury/PCB Total Maximum Daily Load (TMDL) Non-Compliance

The Basin Plan prohibits the discharge of wastewater with “particular characteristics of concern to beneficial uses.” Suction mining and overflow plume discharges mobilize fine sediment fractions (clays, silts, and organic matter) back into the water column. These fine sediments are known to carry bioaccumulative contaminants, including Mercury and PCBs, which pose severe toxic exposure risks to pelagic food webs.

The TOs fail to evaluate whether the proposed sand mining operations comply with the SF Bay Mercury and PCB TMDLs, which specifically designate sediment disturbance as a major source of impairment. Prior to certification, the Regional Board must require a complete chemical characterization of sediment in the lease areas to ensure no toxic mobilization will occur.

Response 14.

Basin Plan Prohibitions 1 through 5 refer to “wastewater which has particular characteristics of concern to beneficial uses,” but the quoted text in the comment does not capture the full descriptions of the prohibitions. Prohibition 1 applies to such wastewater that does not receive a minimum dilution of at least 10:1 or that is discharged into confined waters; Prohibition 2 to such discharges to San Francisco Bay south of the Dumbarton Bridge; Prohibition 3 to such discharges to Suisun Marsh during dry weather; Prohibition 4 to such discharges to Alameda Creek when there is no natural flow; and Prohibition 5 to such discharges to Tomales Bay, Drakes Estero, Limantour Estero, Bolinas Lagoon, or Richardson Bay. None of those prohibitions apply here. Moreover, the overflow/decant water discharged from sand mining operations does not have particular characteristics of concern to beneficial uses.

The TOs appropriately consider the Bay Mercury and Polychlorinated Biphenyls (PCBs) TMDLs. The projects are consistent with the TMDLs, and mercury and PCBs are not expected to be a concern for sand mining. The water quality monitoring study⁸, concluded that “...discharges from sand mining operations do not adversely impact the water column with regards to chemical concentrations or toxicity.” Further, PCBs were not detected in samples collected during the study, and mercury concentrations were detected at levels below water quality objectives.

In addition, the Mercury TMDL does not cite dredging in the Bay as a source of mercury, but rather as an activity that results in a net loss of mercury (Basin Plan section 7.2.2.3). As explained in footnote c to Basin Plan Table 7.2.2-1, “[s]ediment dredging and disposal often moves mercury-containing sediment from one part of the Bay to another. The dredged sediment mercury concentration generally reflects ambient conditions in San Francisco Bay sediment.” For this reason, the mercury load and wasteload allocations in Basin Plan Table 7.2.2.-1 include a “net loss” mercury load estimate for

“sediment dredging and disposal,” and the allocation devoted to this category is “less than or equal to ambient concentration,” meaning as long as the material replaced in the water column is less than or equal to the ambient concentration of the material originally dredged, compliance is achieved (Basin Plan Table 7.2.2.-1). The same is true for the PCBs TMDL and its similar implementation provisions. Basin Plan Table 7.2.3-1 includes PCBs sources and their current loads. The internal source category of “sediment dredging and disposal” has a load of “net loss” of PCBs, with no resulting wasteload allocation in Table 7.2.3-2.

We disagree that a complete chemical characterization of sediment is necessary. The TOs’ approach to sand-dominated dredged sediment (i.e., the kind of sediment dredged during sand mining) testing is based on previous analyses of Bay sand deposits. Based on historical bulk sediment chemistry testing conducted for navigational dredging in areas of the Bay bottom that are predominantly sand (e.g., the Suisun Bay federal channel, the Oakland Harbor channel Merritt Sand formation, and the sand shoal at the entrance to the San Francisco Marina West Harbor) and the physical properties of sand, sediment quality is of limited concern. Since sand mining within Central Bay and Suisun Bay is conducted in areas characterized by relatively high water velocity and dynamic substrate movement, the sand deposits characteristically have a very low percentage of fine-grained sediment. The sand miners actively seek material with fines content of less than 10 percent. As described in Section I.B.6, Sand Mining Methods, of the TOs, the dredge operators take grab samples as mining commences and visually inspect the slurry in the samples to determine the suitability of the sediment for mining. Measurements of the slurry density and vacuum on the suction pipe also indicate whether the sediment is suitable. The mining episode will only proceed once the sediment is determined to be predominantly sand (i.e., sand content is about 90 percent or greater). The dredge operators cease mining if the sand becomes too coarse, fine, or consolidated and proceed to another location to repeat the process. Pollutants are much more prevalent in fine-grained sediment consisting of silts and clays and organic material, collectively known as “Bay mud,” than they are in sand. Pollutants, such as mercury, that form positively charged particles or ions bind with (adsorb to) the surface of negatively charged clay particles, while organic pollutants, such as PCBs, adsorb to organic carbon. The sand deposits mined in the Bay do not contain enough clay or organic material to bind with mercury, PCBs or other pollutants at concentrations likely to cause a threat to beneficial uses.

Section I.B.6. Sand Mining Methods of the TOs’ describe grain size testing of sand-dominated dredged sediment that are consistent with San Francisco Bay Long Term Management Strategy for Dredging (LTMS) testing guidelines. The federal testing guidance known as the “Inland Testing Manual” (ITM), which State and federal regulatory agencies comprising the Dredged Material Management Office (DMMO) follow when determining the suitability of dredged material for various disposal and beneficial reuse sites, allows an exclusion from testing if the dredged material is not a “carrier of contaminants.” According to the ITM, this situation is likely when the dredged material is composed primarily of sand, gravel, and/or inert materials. This guidance is based on federal regulations (40 CFR 230.60 and 40 CFR 227.13(b)), which allow testing exclusions if the dredged material is composed predominantly of sand, gravel,

rock, or any other naturally occurring bottom material with particle sizes larger than silt, and the material is found in areas of high current or wave energy. For most navigation dredging projects that have historically had a sand content of 80 percent or greater, the DMMO has required only periodic grain size analysis to confirm that the material is at least 80 percent sand. Since the sand content of the material mined during sand mining is typically 90 percent or greater, and the material is mined from areas of high current or wave energy, it would be granted a testing exclusion under the LTMS program.

We do not expect sand mining to result in discharges of sediment with concentrations of mercury or PCBs greater than ambient concentrations.

Comment 15.

VIII. COMPLIANCE WITH THE PORTER-COLOGNE WATER QUALITY CONTROL PLAN (BASIN PLAN)

A. Sand Mining Should Be Treated as Active Mining Under Basin Plan Requirements

The Basin Plan requires all active mining sites to submit an “Operation and Management Plan” and a “Site Closure Plan” designed to ensure long-term protection of beneficial uses. Basin Plan 4-59 to 4-61. Historically, these policies have been applied to land-based quarries. However, sand mining in the San Francisco Bay via suction dredging is fundamentally a mineral extraction process that directly impacts water quality and Bay ecology. The permanent bed lowering, creation of deep underwater pockmarks, and lack of replenishment in Bay sand mining leases present identical, if not greater, long-term threats to benthic ecology and beneficial uses. The Regional Board must require these marine sand mining sites to submit formal Operation and Site Closure plans prior to permitting. See Basin Plan 4-61.

Response 15.

We disagree. This section is not applicable to the proposed activity, subtidal Bay sand mining using suction dredges. Basin Plan Section 4.21 is generally addressed to and has been historically applied to upland, or generally upland, mining sites (e.g., the New Almaden mercury mining district, which includes creeks and wetlands, but is largely upland), not to mining of subtidal sand deposits in the Bay. The rationale for limiting the application of this section to land-based mining is reflected in the requirements of section 4.21.4, such as a requirement for a permit for the discharge of polluted stormwater runoff, and creation of a mine site Operation and Management Plan to address potentially polluted stormwater runoff and erosion control issues. Because sand mining sites are subtidal, they do not have stormwater runoff.

Comment 16.

B. Sand Mining Requires Clean Water Act §§ 402 and 404 Compliance

The TOs only constitute Waste Discharge Requirements (WDRs) and Clean Water Act (CWA) section 401 water quality certification. Neither of these approvals satisfies the requirements of the CWA. CWA section 301 provides that “the discharge of any pollutant by any person shall be unlawful” except for discharges permitted under CWA

*section 402 or 404. (33 U.S.C. 1311(a).) Congress further defined “pollutant” to include “dredged spoil, rock, [and] sand” (33 U.S.C. § 1362(6)), and the discharge of material from mining of submerged lands has been determined by the courts to constitute a discharge that may be regulated with permits issued pursuant to Section 402 of the CWA. See *Rybachek v. USEPA* (9th Cir. 1990) 904 F.2d 1276, 1285-1286 (“even if the material discharged originally comes from the streambed itself, such re-suspension may be interpreted to be an addition of a pollutant under the Act.”); *Idaho Conservation League v. Poe*, 86 F.4th 1243, 1244 (9th Cir. 2023) (instream suction dredge mining required a § 402 permit in addition to a § 404 permit). There is no dispute that the applicants propose to discharge pollutants from a point source into waters of the United States. A CWA 402 permit is required for this activity.*

In addition, or, at a minimum, in the alternative, the project applicants should be required to obtain CWA section 404 authorization for the placement of dredge or fill materials into waters of the U.S. There is no doubt that the project will dredge the Bay floor and redeposit dredged materials to the Bay. The U.S. Code of Federal Regulations states that, “[e]xcept as provided in § 323.4 of this part, [Corps] permits will be required for the discharge of dredged or fill material into waters of the United States,” and a review of the exceptions listed in section 323.4 shows that none apply. 33 C.F.R. 323.3(a).

Without including evaluation of CWA 402 and 404 requirements, the TOs are incomplete. See 23 Cal. Code Regulations § 3856(c).

Response 16.

We disagree that the discharge should be regulated under CWA section 402 and agree that the discharge should be regulated under CWA section 404. The discharge at issue is the overflow water from mined sand that contains material that does not settle out of the water (e.g. silt and clay particles, detritus, and plankton). This discharge of overflow water and suspended material is a discharge of dredged material that is subject to section 404.

The “discharge of dredged material,” as defined by U.S. EPA and the Corps, includes “the runoff or overflow, associated with a dredging operation, from a contained land or water disposal area” and “[a]ny addition, including redeposit other than incidental fallback, of dredged material, including excavated material, into waters of the United States which is incidental to any activity, including mechanized land clearing, ditching, channelization, or other excavation.” The overflow water and redeposited excavated material from the sand mining operations are discharges of dredged material and are therefore regulated under CWA section 404 as opposed to section 402 (33 CFR 323.2(d)(1)(ii), 40 CFR 232.2.). Under CWA section 402(a)(1) and 40 CFR § 122.3(b), discharges of dredged or fill material into waters of the United States that are regulated by the Corps under CWA Section 404 do not require NPDES permits. (See also *Idaho Conservation League v. Poe* (9th Cir. 2023) 86 F.4th 1243, 1245 [“When a discharge requires a Section 404 permit, it does not require a Section 402 permit.”].) Indeed, section 402 forbids the Water Board from exercising its NPDES permitting authority if

the Corps has authority to issue a permit under section 404. (See *Couer Alaska, Inc. v. Southeast Alaska Conservation Council* (2009) 557 U.S. 261, 273.)

Martin Marietta, Lind Marine, and Suisun Associates included information regarding the discharge of dredged material in their applications for a Corps permit. Further, the Corps issued Public Notices on March 11, 2026, soliciting comments for the three sand mining operations pursuant to both CWA section 404 (33 U.S.C. §1344) and section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403). The Corps, not the Water Board, has the authority to decide whether to issue a section 404 permit for discharges of dredged material (33 U.S.C. § 1344(a) [“The Secretary [of the Army] *may* issue permits, . . . for the discharge of dredged or fill material into the navigable waters”] [*italics added*]).

The cases cited in the comment—*Rybachek v. U.S. EPA* (9th Cir. 1990) 904 F.2d 1276 (*Rybachek*) and *Idaho Conservation League v. Poe* (9th Cir. 2023) 86 F.4th 1243 (*Poe*)—are not controlling here. Both cases addressed discharges from gold placer mining. In *Rybachek*, the court upheld U.S. EPA’s authority to promulgate regulations for discharges from gold placer mining operations. In *Poe*, the court held that discharges from a placer mining operation that used a suction dredge to mine required a section 402 NPDES permit. The cases do not specifically address discharges from sand mining. Unlike the discharges from gold placer mining operations, sand mining does not involve a sluicing process that changes the nature of the dredged material prior to the discharge. Here, the discharge occurs when water and a minimal amount of sediment overflows or is otherwise released from a hopper box where the sand is contained. This discharge of dredged material is analogous to the overflow of water and sediment from a hopper barge that could occur during navigational dredging, which the Corps classifies as a discharge of dredged material. Moreover, as indicated by monitoring results, the discharges covered by the TOs do not pose a threat to water quality. (See Baykeeper Response Nos. 13–14.) That is not the case with placer mining discharges. (See 53 Fed.Reg. 18766–18767.) The discharge of dredged material here is subject to CWA section 404, not CWA section 402.

In response to this comment, the second paragraph on page 1 of the TOs was revised as follows:

[Lind, Martin Marietta, Suisun Associates] has applied for a new 10-year sand mining permit from the U.S. Army Corps of Engineers (Corps) for mining in navigable waters under pursuant to section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and for the discharge of dredged material under Section 404 of the CWA. On March 11, 2026, the Corps issued a public notice to solicit comments on the proposed project pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403).

Comment 17.

C. The TOs Inadequately Consider Beneficial Uses Relating to Habitat, Recreation, and the Pacific Coast

Owing to the nature of the projects, the TOs should include evaluation of numerous biological and coastal objectives currently missing. The projects' impacts range far more broadly than the immediate impacts resulting from suction dredging and the subsequent discharge of waste back into the Bay. Sand mining in San Francisco Bay has already contributed to permanent sediment loss, which these projects will accelerate. Peer-reviewed research published by the USGS and others indicates that sand mining has reduced the available sand supply to open coast beaches along the San Francisco coast. These studies draw a clear connection between sand mining in the Bay, and the observed shrinking of the San Francisco Bar and erosion at Ocean Beach.

These impacts have consequences for numerous goals and objectives relating to San Francisco Bay, including but not limited to, the Baylands Ecosystem Habitat Goals, the California Ocean Plan, and existing and planned Basin Plan objectives for biological resources and recreation. Yet, other than a pro forma recitation of beneficial uses and a conclusory statement that the Regional Board has taken beneficial uses into account in establishing the requirements of the TOs, there is no analysis of impacts to beneficial uses. In particular, sand mining will have impacts on the following beneficial uses (from Basin Plan Cha. 2):

- Noncontact Water Recreation (REC2) – recreational activities involving proximity to water, such as picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment all could be impacted by reduced sand supplies at Bay and Pacific beaches.*
- Water contact recreation (REC1) – recreational contact with water such as swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, or fishing, all of which could be temporarily degraded or disrupted by localized turbidity plumes, suspended sediment concentrations, wildlife impacts, or beach erosion resulting from sand mining operations.*
- Industrial service supply (IND) – industrial activities such as mining, cooling water supply, hydraulic conveyance, gravel washing, and fire protection which could face operational challenges if extreme sediment loads or bathymetric changes alter local water intake conditions.*
- Navigation (NAV) – shipping, travel, or other transportation could be disrupted if dredging vessels temporarily create physical obstacles to navigation, or if long-term bottom lowering modifies the bathymetry of deep-water shipping channels or erosive effects impact port facilities.*
- Marine habitat (MAR) – marine ecosystems including vegetation, fish, shellfish, or marine wildlife which could be degraded by sand depletion and ship traffic.*
- Shellfish harvesting (SHELL) – collection of crustaceans and filter-feeding shellfish which could be adversely affected by beach erosion, the smothering resettlement of sediment plumes, or direct damage from the suction drag head.*

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- *Commercial and sport fishing (COMM) – commercial or recreational collection of fish, shellfish, or other organisms which could face localized declines due to direct fish entrainment and mortality, or indirect impacts such as reduced fish foraging success caused by the loss of benthic prey resources.*
- *Wildlife habitat (WILD) – estuarine, terrestrial, or wetland ecosystems, including the preservation and enhancement of habitats, vegetation, and wildlife, all of which could be degraded by sediment deficits and turbidity plumes that erode foraging beaches, disrupt the foraging behaviors of protected marine mammals (like humpback and gray whales), or reduce the biomass of preferred benthic prey.*
- *Fish migration (MIGR) – habitats necessary for migration, acclimatization between fresh water and salt water, and protection of aquatic organisms that are temporary inhabitants, which could be disrupted by suction dredging, dredging noise, and water column disturbances that physically block, displace, or stress migrating anadromous species like Chinook salmon, steelhead trout, and sturgeon.*
- *Fish spawning (SPWN) – high quality aquatic habitats suitable for reproduction and early development of fish, which could be degraded by sand depletion and turbidity plumes that smother submerged vegetation (like eelgrass) utilized by spawning Pacific herring, or by bottom-oriented suction dredging that entrains sensitive larval fish stages.*
- *Preservation of rare and endangered species (RARE) – habitats necessary for the survival and successful reproduction of species established under state or federal law as rare, threatened, or endangered, which is directly threatened by the risk of entrainment and mortality of listed species (such as White Sturgeon, Delta Smelt and Longfin Smelt) during suction pumping, necessitating strict intake screen regulations, seasonal restrictions, and compensatory mitigation.*

The Regional Board has a legal duty under the Basin Plan to protect each of these specific beneficial uses from sand mining impacts. The loss of coastal beaches and in-Bay erosion as a result of the project's unsustainable rate of mineral extraction from the Bay floor must be evaluated for consistency with these policies, prior to issuance of any certification that the project will not conflict with or exceed any applicable beneficial use.

Response 17.

We disagree that there has not been an analysis of beneficial uses. The effects of sand mining on aquatic species habitat and water quality have been evaluated with the best available science (see Baykeeper Response Nos. 3, 4, 5, 7, 11, and 13). Further, as indicated by the Independent Science Panel report, there is not enough evidence to assess the effect of sand mining on shorelines within the San Francisco Bay. The Independent Science Panel found that while sand mining could have effects beyond the Bay, the information in the sand mining studies could not determine this potential impact because of the dynamic nature of sand transport processes outside and inside the San

Francisco Bay. Further, the effects of sand mining near the mouth of the San Francisco Bay are confounded by natural variability in the size and position of the San Francisco Bar as well as the effects of sea level rise. As a result, Baykeeper's assertion that there are effects beyond what is addressed on the TOs is speculative. Below is a more detailed assessment of potential impacts to beneficial uses.

- Noncontact Water Recreation (REC2) – Shoreline impacts remain unquantified and inconclusive; therefore, it would be speculative to find that sand mining will impact recreation on beaches and shorelines. See Baykeeper Comment Nos. 5 and 11. The 2012 EIR and 2026 SEIR also analyzed indirect impacts to noncontact water recreation resulting from interference with sand replenishment to beaches and found that impacts of sand mining to beaches would be less than significant. As discussed in the 2012 EIR and 2026 SEIR, navigation hazards and localized disturbances could potentially impact boating and sightseeing, especially on weekends and holidays. BCDC permits require quarterly reporting navigation conflicts. BCDC has not received reports of navigation conflicts as of the certification of the 2026 SEIR. Sand mining has been operating for decades with minimal impacts to REC2; therefore, it can be reasonably assumed to continue as such.
- Water contact recreation (REC1) – Sand mining is not expected to impact shallow water recreation as the TOs prohibit mining near shorelines, hard rock bottom, and in shallow depths, and there is no quantifiable or conclusive evidence of impacts to shorelines. The 2012 EIR and 2026 SEIR also analyzed indirect impacts to water contact recreation resulting from interference with sand replenishment to beaches and found that impacts of sand mining to beaches would be less than significant. Like noncontact water recreation, there are potential impacts to fishing and other recreation in open waters; however, as discussed in the 2012 EIR and 2026 SEIR, it can be reasonably assumed that ongoing sand mining operations can continue to operate with minimal conflicts given the current absence of conflicts.
- Industrial service supply (IND) – There is no evidence that sand mining has or will affect local water intake for industrial activities. The Water Board has no records of sand mining conflicting with industrial activities. The commenter did not provide any evidence of impacts.
- Navigation (NAV) – Like boating under noncontact water recreation above, there are potential navigation impacts from sand mining. However, it can be reasonably assumed that sand mining can continue to operate with minimal conflicts. Vessel traffic is managed by the U.S. Coast Guard as described in the 2012 EIR. The BCDC and the Corps include conditions in their permits to that require permittees to comply with the Operating Procedure for Vessel Traffic Safety of San Francisco to avoid hazards to commercial and military navigation. Compliance with the procedures is monitored by the Coast Guard. Moreover, deep-water shipping channels and ports need to be dredged regularly to maintain navigation

depths; therefore, any lowering of beds would be beneficial to navigation. Sand mining will not impair the beneficial use.

- Marine habitat (MAR) – The San Francisco Bay where sand mining occurs does not support the marine habitat beneficial use. The best available science has not been able to quantify or define the effects of sand mining on the outer coast where marine habitat occurs.
- Shellfish harvesting (SHELL) – The Water Board is not aware of any commercial or recreational shellfish harvesting within or adjacent to sand mining leases. The Water Board also has no records of sand mining conflicting with any shellfish harvesting. The commenter did not provide any evidence of impacts. In addition, the sand deposits mined in the Bay do not contain enough clay or organic material to bind with pollutants at concentrations likely to pose a threat to human health from consumption of fish caught in the San Francisco Bay, see Baykeeper Response No. 14.
- Commercial and sport fishing (COMM) – Sand mining will not impact commercial and sport fishing. As discussed above, the sand deposits mined in the Bay do not contain enough clay or organic material to bind with pollutants at concentrations likely to pose a threat to human health from consumption of fish caught in the San Francisco Bay, see Baykeeper Response No. 14.
- Wildlife habitat (WILD) – Sand mining does not cause physical and chemical changes to water quality that would be harmful to wildlife habitat, see Baykeeper Response Nos. 5, 11 and 14. As discussed under REC2 and REC1 above, potential impacts of sand mining on shorelines remain unquantified and inconclusive; therefore, there is no quantifiable evidence of impacts to shorelines. In addition, the 2012 EIR and 2026 SEIR assessed impacts to wildlife habitat from: a) physical displacement; b) noise; c) temporary disturbance and alteration benthic habitat; d) suspended sediments in overflow discharges and from disturbance of bayfloor; e) resettlement of discharged sediment; f) entrainment of aquatic species; and g) physical modification of bottom habitat. Both the 2012 EIR and 2026 SEIR found that impacts were less-than significant with inclusion of mitigation measures including: a) maintaining a 100-foot buffer around hard bottom areas and adjacent to Central Bay mining leases; and b) prohibiting mining in areas of shallow depths and away from sensitive habitat.
- Fish migration (MIGR) – The TOs require avoidance, minimization, and mitigation measures to reduce and compensate for impacts to special status species and their habitats in Section I.D. Avoidance, Minimization, and Mitigation Measures. Preventing entrainment reduces potential impacts to fish migration by allowing safe migration through sand mining activity. With these measures, sand mining will not impair the beneficial use. Sand mining impacts to bay-wide erosion and shorelines are unquantifiable and unknown, and are not linked to any impacts on fish migration. The TOs have been revised to reflect that all measures in Section I.D are also protective of fish migration. In addition, the 2012 EIR and 2026 SEIR

assessed impacts to fish movement and migration and found impacts to be less-than-significant.

- Fish spawning (SPWN) – The TOs currently specify that seasonal volume limitations and compensatory mitigation are to protect fish spawning. Like fish migration above, all avoidance, minimization, and mitigation measures required in the TOs are also for impacts to fish spawning. The measures reduce entrainment of fish at all life stages that impacts spawning by causing failure of the life cycle to achieve spawning. While there is a potential for sand mining to have an impact at shorelines in shallow-water fish spawning habitat, the best available science has not identified or quantified these impacts. Therefore, there is no evidence that sand mining is indirectly impacting spawning habitat along shorelines. In addition, the prohibition on sand mining near shorelines, in shallow waters, and near hard bottom areas will avoid and minimize direct impacts to spawning habitat along shorelines, see Baykeeper Response No. 13. The TOs have been revised to reflect that all measures in Section I.D are also protective of fish spawning.
- Preservation of rare and endangered species (RARE) – The TOs specify that Section I.D. Avoidance, Minimization, and Mitigation measures are for the protection of special-status species and their habitats. However, sand mining impacts to shorelines are currently unknown, and there is no evidence that declines of protected fish are caused by sand mining, see Baykeeper Response Nos. 4 and 5. In addition, there are no long-term impacts to benthic communities or habitats, see Baykeeper Response No. 4. In addition, the 2012 EIR and 2026 SEIR assessed impacts to rare and endangered species habitat from: a) physical displacement; b) noise; c) temporary disturbance and alteration benthic habitat; d) suspended sediments in overflow discharges and from disturbance of bayfloor; e) resettlement of discharged sediment; entrainment of aquatic species; and f) physical modification of bottom habitat. The 2012 EIR and 2026 SEIR both found that impacts were less-than significant with inclusion of mitigation measures including: a) maintaining a 100-foot buffer around hard bottom areas and adjacent to Central Bay mining leases; b) implementing operational measures to minimize the potential for entrainment of special status fish species, including seasonal restrictions for delta and longfin smelt and use of fish screens; and c) prohibiting mining in areas of shallow depths and away from sensitive habitat.

Comment 18.

IX. PROPOSED REGIONAL BOARD ACTIONS AND MANDATORY CERTIFICATION CONDITIONS

To comply with the Porter-Cologne Water Quality Control Act, the Clean Water Act, and the SF Bay Basin Plan, the Regional Board must incorporate the following conditions into any issued 401 Water Quality Certification and WDRs:

1. Reduce Authorized Mining Volumes to the FSEIR's [2026 SEIR's] Reduced Project Alternative

The Regional Board should reduce the annual permitted extraction ceiling across all lease areas to no more than the FSEIR's [2026 SEIR's] Reduced Project Alternative (~700,000 cy/year total). This reflects the actual historical operations from 2018–2022 (~784,000 cy/year) and prevents severe water quality and sediment degradation compared to the proposed 1.75 million cy/year ceiling.

Response 18.

We disagree that sand mining volumes should be reduced. The volumes currently in the TOs are less than the 2015 10-year Orders and there is no evidence of water quality or sediment degradation. See Baykeeper Responses Nos. 2, 3, 7, 11, and 18.

Comment 19.

2. Impose Regional/Seasonal Closures During Smelt Spawning and Salmonid Migration

The Board must establish complete seasonal bans on suction dredging in sensitive areas during the critical spawning and migration window for Delta Smelt, Longfin Smelt, and Salmonids (December 1 through June 30).

Response 19.

We disagree that seasonal bans should be included in the TOs. As addressed under Section I.B.5 of the TOs, seasonal volume limitations from the 2014 U.S. Fish and Wildlife Service (USFWS) Biological Opinion are incorporated in Suisun Bay. In addition, the TOs prohibit sand mining in Suisun Bay at depths shallower than -25 feet from December 1 through June 30. These restrictions are to protect listed species. As such, the avoidance, minimization, and mitigation measures in the TOs are adequate to protect the Rare and Endangered Species Habitat, Spawning, and Migration Beneficial Use that support Delta Smelt, Longfin Smelt, and salmonids, see Baykeeper Response No. 18.

Comment 20.

3. Mandate Pre-Dredging Sediment Quality Testing (TMDL Compliance)

Require the permittees to submit a comprehensive Sediment Sampling and Analysis Plan (SAP) to characterize sediment quality in all proposed mining areas prior to any dredging operations. No dredging shall be permitted in areas where sediment concentrations exceed the Basin Plan's Mercury and PCB TMDL targets.

Response 20.

We disagree that sediment quality monitoring should be included in the TOs. See Baykeeper Response No. 14.

Comment 21.

4. Require Complete Benthic and Morphological Monitoring Studies

Condition any permit on the completion of the BCDC Independent Science Panel's recommended studies, including high-resolution multibeam bathymetry surveys, to

monitor localized bed lowering and ensure mining operations do not exceed localized sand supply rates. Any expanded mining should be premised on further study of beach/shoal impacts, Golden Gate flux, and effects on Longfin Smelt habitat.

Response 21.

We agree that additional information is necessary to better understand sediment transport within the San Francisco Bay. Currently, the Regional Monitoring Program (RMP) is in the process of developing conceptual models for sediment transport within the Suisun, San Pablo, and Central San Francisco bays to inform multiple regulatory programs. These conceptual models will identify the key information needs for both fine and coarse grain sediments. Based on data gaps identified in the conceptual models, the RMP will collect the pertinent information to support regulatory decisions. In addition, the RMP is developing a workplan to evaluate feasible methods to measure Golden Gate sediment flux because this is widely recognized as a critical source of uncertainty for the San Francisco Bay sediment budget that needs to be addressed to inform regulatory decisions.⁹

We also agree that additional morphological studies are important to inform future analysis of sand mining impacts. The TOs have been revised to include additional bathymetric surveys and change analysis reports at regular intervals over the permit term as recommended by the Independent Science Panel. The TOs already require sand miners to provide data in reports and self-monitor mining activities in Provisions II.C.8 and II.C.9. The finding in Section I.C. Sand Mining Impacts on Benthic and Aquatic Habitat of the TOs have been revised to include the following:

As required by BCDC in 2015, [Lind, Martin Marietta, Suisun Associates] and stakeholders created a Sand Studies Technical Advisory Committee and an Independent Science Panel (ISP) to develop and carry out studies to better understand sand mining impacts on the Estuary's sediment budget and transport. In 2024, the ISP concluded that even with localized erosion and bed lowering, the best available science is unable to determine sand mining's effect in the Estuary on bathymetric change trends or to the outer coast. The studies did not determine sand mining impacts to beaches. The ISP identified key information gaps limiting the ability to assess the effects of sand mining and recommended future studies. One recommendation is to continue bathymetric surveys of lease areas and collect mining data. Provision II.C.10 of this Order requires bathymetric surveys as recommended. Provisions II.C.8 and II.C.9 of this Order requires [Lind, Martin Marietta, Suisun Associates] to provide reports in accordance with the Self-Monitoring and Reporting Program.

The TOs have been revised to add Provision II.C.10 as follows:

⁹ Erikson LH, Wright SA, Elias E, Hanes DH, Schoellhamer DH, Largier J. 2013. The use of modeling and suspended sediment concentration measurements for quantifying net suspended sediment transport through a large tidally dominated inlet. Marine Geology, Special Issue San Francisco Bay 345, 98-114.

[Lind, Martin Marietta, Suisun Associates] shall monitor the changes to Estuary bathymetry through bathymetric change analysis, utilizing multibeam surveys of the lease area and adjoining control areas. A minimum of three multibeam surveys of the lease areas shall be completed at least three years apart, the first between January 1 and June 1, 2027. The bathymetric change analysis shall be conducted by surveying the lease area and control areas using the same location and methodology of the original multibeam survey conducted in January 2014. By October 1, 2027 and at a minimum two additional times during the permit period, [Lind, Martin Marietta, Suisun Associates] shall submit to Water Board staff a written report and analysis including:

- a. the multibeam survey of the lease and control areas;
- b. an analysis of the changes in bathymetry, areas of depletion, accretion or other trends;
- c. a discussion of the findings; and
- d. a quality control analysis completed by an independent third party.

Comment 22.

5. Prohibit Suction Dredging in Deficit Lease Areas

Establish zero-extraction limits in lease areas where current scientific modeling (e.g., Coast and Harbor Engineering 2025) has demonstrated that proposed mining volumes exceed available sand supplies (specifically PRC 7779.1 West and PRC 7780.1 North).

Response 22.

We disagree. Currently, there is no basis for prohibiting sand mining in areas where sand mining volumes exceed replenishment rates. See Baykeeper Response No. 5.

Comment 23.

X. Conclusion

For each of the reasons stated above, we urge that the proposed Waste Discharge Requirements and 401 Certifications be denied. The peer-reviewed scientific record, developed by USGS researchers and confirmed by the studies BCDC commissioned under the 2015 permit, establishes that sand mining is the single largest outflow of sand from San Francisco Bay; that mining removes sand along transport pathways that supply the outer coast, at rates exceeding present-day sediment supply from all Bay watersheds combined; and that the Bay and the Pacific Ocean share a common pool of sand which mining reduces. What remains unquantified is the magnitude of mining's effect on open-coast beaches and ecologically important shoals, a gap that BCDC's own findings acknowledge. Under the Regional Board's antidegradation obligations and its duty to protect Basin Plan beneficial uses, that uncertainty is a reason for caution, monitoring, and reduced extraction volumes, not a basis for certifying a substantial increase in extraction over actual historical operations. The authors of this body of

research expressed the hope that “...the planning community can now more skillfully address the challenges of managing sediment in SF Bay in a manner that promotes the sustainability of open-coast beaches and submarine habitats.” Certifying the Tentative Orders as drafted would squander that opportunity.

Response 23.

We disagree that the comment letter provides a basis to deny the sand mining permit applications. The Water Board thoroughly reviewed the applications, Project, CEQA documents, and body of related science, and independently analyzed the impacts to water quality and beneficial uses. Based on our review and analysis, we determined that any discharge from the Project will comply with the applicable provisions of CWA section 301, 302, 303, 306, and 307, and with other applicable requirements of state law. The TOs include requirements for the Project to ensure compliance with applicable water quality requirements and other appropriate requirements of state law, and to implement the Basin Plan. See detailed responses to Baykeeper’s comments above.

SUISUN ASSOCIATES, MARTIN MARIETTA, AND LIND MARINE (PERMITTEES)

Comment 1.

1. Discharge Description (Section I.B.2)

In each order's discharge description section, we recommend replacing the term “wastewater” with “process water” when referring to discharges from Bay Area offloading facilities. The term “wastewater” can carry a connotation associated with sewage, use of the term “process water” more accurately describes the water generated from sand washing and other offloading and processing activities.

Response 1.

We agree that the discharge is process water generated while processing the sand at offloading facilities. However, the General National Pollutant Discharge Elimination System Permit for Aggregate Mining and Sand Washing/Offloading Facilities, Order No. R2-2020-0028 uses the term wastewater, so we are going to retain this term for consistency across orders.

Comment 2.

2. Discharge Prohibitions (Section II.A.5)

Each order prohibits “[t]he discharge of effluent which meets the definition of a hazardous or designated waste” We recommend replacing “effluent” with “water, material, or wastes” for consistency with Section II.A.1 and to more accurately describe the nature of the authorized discharge.

Response 2.

We agree. We revised the TOs as requested.

Comment 3.

3. Receiving Water Limitations (Section II.B)

*In the introductory language to Section II.B, each order refers to “**decant/overflow effluent.**” We recommend revising this phrase to “**decant/overflow water or material**” to maintain consistency with the terminology used elsewhere in the orders and more accurately characterize the discharge.*

Response 3.

We agree. We revised the TOs as requested.

Comment 4.

4. Reporting and Monitoring (Section II.C.10)

*Each order requires reporting of any material change in the character, location, or quantity of the “**effluent discharge.**” We recommend deleting the word “effluent” so that the provision instead refers to “**changes in the character, location, or quantity of the discharge.**”*

Response 4.

We agree. We revised the TOs as requested.