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Via email to eric.becker@waterboards.ca.gov Eric Becker San Diego Regional Water Quality Control Board 9174 Sky Park Court Suite 100 San Diego, California 92123-4340

> San Diego Coastkeeper's Comments on Shipyard WDRs Tentative Order No. R9-2013-0093, Place ID: 794466

Dear Mr. Becker:

San Diego Coastkeeper has reviewed the proposed Waste Discharge Requirements for the San Diego Shipyard Sediment Remediation Project, Tentative Order No. R9-2013-0093. We are pleased to see that the Waste Discharge Requirements, in general, track the requirements from the Cleanup and Abatement Order, Technical Report, and Remedial Action Plan closely. However, the Waste Discharge Requirements could be improved by making the changes detailed below.

Background

In March 2012, the San Diego Regional Water Quality Control Board issued landmark Cleanup and Abatement Order No. R9-2012-0024 to restore the beneficial uses of San Diego Bay at the Shipyards site. Because contaminated marine sediment at the Shipyards site has impaired the beneficial uses of San Diego Bay, threatening aquatic life, aquatic-dependent wildlife, and human health, the Waste Discharge Requirements are essential to protecting water quality while the responsible parties dredge the polluted sediment.

- THE WASTE DISCHARGE REQUIREMENTS SHOULD APPLY TO ALL I. RESPONSIBLE PARTIES.
 - The Waste Discharge Requirements cannot legally list the San Diego Bay A. **Environmental Restoration Funds as dischargers.**

The Waste Discharge Requirements list both the San Diego Bay Environmental Restoration Fund North and San Diego Bay Environmental Restoration Fund South as dischargers. Tentative Order No. R9-2013-0093 § II(F) at 7. These funds are not "persons" subject to regulation under the Clean Water Act or the Porter-Cologne Water Quality Control Act. See 33 U.S.C. § 1362(5); Cal. Water Code Div. 7 § 13050(c). Including these funds as dischargers creates the possibility of confusing who is actually responsible for doing the cleanup—which are the Responsible Parties under the Cleanup and Abatement Order. The Responsible Parties cannot be shielded from liability for having to clean up the Shipyard site in a way that protects water quality by creating "funds" that apply for the permit. Unless the funds' trustee agrees to be listed as a discharger and accepts liability for the cleanup, the funds should not be listed as dischargers.

B. The Waste Discharge Requirements should list the City of San Diego, San Diego Gas & Electric, and San Diego Marine Construction Company, Campbell Industries as dischargers.

The Waste Discharge Requirements recognize that the City of San Diego, San Diego Gas & Electric, and Campbell Industries are responsible parties under the Cleanup and Abatement Order. See Tentative Order § II(F) at 7. However, the Waste Discharge Requirements fail to include these responsible parties as dischargers. See Tentative Order at 1, 4. Listing all responsible parties as dischargers increases accountability and ensures that the cleanup proceeds in an efficient and effective manner.

- II. RECEIVING WATER LIMITATIONS MUST INCLUDE NUMERIC LIMITATIONS TO CLEARLY DEFINE COMPLIANCE.
 - A. The Waste Discharge Requirements should specify what "natural" pH, turbidity, and dissolved oxygen concentration are in San Diego Bay at the Shipyards site.

The Waste Discharge Requirements require compliance within the range of "natural" pH, turbidity, and dissolved oxygen concentration within the remedial footprint. See Tentative Order at 15. But narrative standards such as "natural" water quality are difficult to interpret consistently and nearly impossible to enforce, which is not useful to the regulators, the regulated, or the community. The Waste Discharge Requirements should define what "natural" pH, turbidity, and dissolved oxygen conditions are in San Diego Bay at the Shipyards site and include those in the permit. By including numeric limitations, the Waste Discharge Requirements gain specificity, allowing the dischargers to confirm they are complying with the requirements and the Regional Board to bring enforcement action if they are not.

B. The Waste Discharge Requirements should establish protocol for monitoring applicable water quality objectives established in the Regional Board's Basin Plan and all contaminants of concern listed in the Cleanup and Abatement Order.

The Waste Discharge Requirements prohibit the dischargers from exceeding applicable water quality objectives from the Basin Plan. Tentative Order § IV(I) at 15. The only way to ensure that the dischargers do not exceed Basin Plan water quality objectives is to require dischargers to monitor those parameters that may be exceeded during dredging. Because dredging may mobilize the primary and secondary contaminants of concern listed in the Cleanup and Abatement Order – copper, mercury, HPAHs, PCBs, tributyltin, arsenic, cadmium, lead, and zinc – the Waste Discharge Requirements must include monitoring requirements to ensure that these contaminants are not mobilized into the water column during dredging.¹

¹ Donald MacDonald argued for this approach in his March 11, 2011 expert report: "[Analysis of primary and secondary contaminants of concern] must be compared to numeric water quality standards established in the...Basin Plan...to determine whether...Dischargers are complying with applicable water quality standards during remediation." Expert Report of Donald MacDonald prepared March 11, 2011 (MacDonald Report) § E.2.1 at 22.

III. THE WASTE DISCHARGE REQUIREMENTS SHOULD CLEARLY LIST REQUIRED CONSTRUCTION BEST MANAGEMENT PRACTICES TO ENSURE COMPLIANCE.

A. The Waste Discharge Requirements should list Construction Best Management Practices in an appendix.

Dischargers must comply with several sets of Best Management Practices. Compiling all of the requirements into one appendix, or at least listing the documents that contain requirements, will aid consultants and contractors in implementing each of the Best Management Practices.

- B. Best Management Practices related to silt curtains should specify how dischargers can meet water quality objectives.
 - 1. The Waste Discharge Requirements should not allow silt curtains to be extended only 20 feet into the water column.

The Waste Discharge Requirements should not allow silt curtains to be extended only 20 feet into the water column. See Tentative Order § V(I)(6) at 17. This is inconsistent with Mitigation Measure 4.2.3 as detailed in the Mitigation, Monitoring, and Reporting Program. See Tentative Order Exhibit B at 6.

2. The Waste Discharge Requirements should use the term "construction area" consistently.

The Waste Discharge Requirements refer to the "construction area," "active dredge area," and "area of construction and dredging" interchangeably. See Tentative Order § VII(B)(4) at 29; see also Tentative Order § V(I) at 17. So that the Waste Discharge Requirements are consistent with the Remedial Action Plan, "construction area" should replace "active dredge area" and "area of construction and dredging." Remedial Action Plan at 7.

- C. Best Management Practices related to clean sand covers should specify what dischargers must do to meet water quality objectives.
 - 1. The Waste Discharge Requirements should include a decision matrix for determining how thick clean sand and gravel covers must be or list the appropriate thickness.

Mitigation Measure 4.2.7 states that clean sand covers shall be "thick enough" to meet certain goals related to water quality and the health of aquatic organisms. Tentative Order Exhibit B at 8. But because narrative standards such as "thick enough" only provide vague guidance, the Waste Discharge Requirements should include a decision matrix that dischargers can use to determine how thick clean sand and gravel covers must be. Or, if the appropriate thickness has been determined in the course of similar projects, such as the Campbell's Shipyard Sediment Remediation Project, that quantity should be listed in Mitigation Measure 4.2.7.

2. The Waste Discharge Requirements should clarify that Borrow Source Characterization Reports must be reviewed and approved by the Regional Water Quality Control Board.

The Waste Discharge Requirements require dischargers to submit a Borrow Source Characterization Report prior to any on-site placement of import materials. See Tentative Order § V(S)(4) at 20. The Waste Discharge Requirements should specify that the Regional Board must review and approve Borrow Source Characterization Reports before these materials can be used in order to avoid contractors using problematic borrow materials.

- D. Best Management Practices related to sediment dewatering and staging areas should specify requirements to reduce air quality impacts that the dredging has on surrounding communities.
 - 1. The Waste Discharge Requirements should require that dischargers secure the permit necessary to discharge wastewater into the community sewer system before beginning dredge operations.

The Waste Discharge Requirements note that dischargers will send wastewater generated during sediment dewatering into the City of San Diego's sewer system to be treated at the Point Loma Wastewater Treatment Plant and discharged through the existing ocean outfall. See Tentative Order § 2(G) at 8. Federal law requires that dischargers obtain a Significant Industrial User Discharge Permit from the City of San Diego's Public Utilities Department prior to discharging wastewater into the sewer system. See 40 C.F.R. §§ 405-71. The Waste Discharge Requirements should require dischargers to obtain this permit prior to beginning dredge operations.

2. The Waste Discharge Requirements should stipulate that dredged sediment stockpiled on shore must be covered at all times unless it is actively being worked on.

The Waste Discharge Requirements properly require that dredged sediment stockpiled on shore be covered with plastic sheeting designed to contain fugitive dust. See Tentative Order § V(T)(4) at 21. Contractors, however, may feel that cover is not necessary while a pile is being added to, which could be virtually any time if sediment is being dredged 24 hours per day and 6 to 7 days per week. See Tentative Order § II(I) at 9. To reduce the risks to the air quality in communities surrounding the staging areas, the Waste Discharge Requirements should mandate that piles be covered at all times except for the specific area being worked on.

- E. Best Management Practices related to the transportation and disposal of dewatered sediment should specify requirements to reduce dredging impacts on communities adjacent to the staging areas.
 - 1. The Traffic Control Plan should protect those who live near the staging areas from continuous truck traffic.

Dischargers anticipate dredging 6 to 7 days per week. See Tentative Order § II(I) at 9. If trucks are allowed to run 6 to 7 days per week, residents of the neighborhoods surrounding the staging areas will be constantly subjected to the noise and air pollution created by trucks transporting

sediment. The Traffic Control Plan should stipulate that trucks will not run on at least one day per week, preferably Saturday or Sunday when the greatest number of people will be at home.

2. The Waste Discharge Requirements should require that the Traffic Control Plan be completed as soon as possible and made available for public comment.

The Traffic Control Plan will determine which routes trucks will travel through the neighborhoods surrounding the staging areas. See Mitigation Measure 4.3.8, Tentative Order Exhibit B at 18-19. Because it is their community that will be impacted, the residents of these neighborhoods, along with the rest of the public, should have an opportunity to comment on the Traffic Control Plan and have their concerns addressed.

- F. Best Management Practices detailing response actions to monitoring results should specify the protocol required to achieve water quality objectives.
 - The Waste Discharge Requirements should require that additional Best Management Practices be implemented if a visual observation or water sample indicates an exceedance of a receiving water limitation along the early warning arc.

Early warning stations were designed to quickly inform Project Team members of potential impacts to water quality so that dredging or Best Management Practices can be adjusted before an exceedance occurs at a compliance station. See Tentative Order § VII(B)(2)(b) at 26. Therefore, the Waste Discharge Requirements should require that additional Best Management Practices be implemented if visual observation or water quality monitoring indicate an exceedance of a receiving water limitation along the early warning arc.

2. The Waste Discharge Requirements should allow the Biological Monitor to determine operational modifications in the event of a confirmed exceedance of a receiving water limitation.

The Waste Discharge Requirements are silent as to who has the authority to determine operational modifications in the event of a confirmed exceedance of a receiving water limitation. Because the Biological Monitor is the Project Team member best able to understand the consequences of an exceedance, and because the Biological Monitor can halt or redirect dredging activities under other circumstances, the Biological Monitor should be able to determine operational modifications in the event of a confirmed exceedance of a receiving water limitation. See Mitigation Measure 4.5.11, Tentative Order Exhibit B at 24-25.

3. The Waste Discharge Requirements should require that dredging stop if there are two consecutive exceedances of a receiving water limitation.

The Waste Discharge Requirements do not define the point at which dredging will stop if Construction Best Management Practices fail to mitigate an exceedance of a receiving water limitation. To ensure that exceedances do not result in unmitigatable impacts to water quality, the Waste Discharge Requirements should require that dredging stop if two consecutive exceedances of a receiving water limitation are confirmed.

IV. STRINGENT MONITORING PROTOCOL IS ESSENTIAL TO PROTECTING WATER QUALITY AND PUBLIC HEALTH.

- A. Monitoring requirements for receiving water should be strengthened to ensure that water quality objectives are met.
 - 1. The Waste Discharge Requirements should clearly define when the dischargers should take water quality measurements.

Language in the Waste Discharge Requirements regarding when, relative to the start of dredging operations each day, water quality measurements will be taken is currently inconsistent. See Tentative Order § VII(B)(3)(a) at 26-27. So that procedure is clear to Project Team members, and to ensure that water quality objectives are achieved, the Waste Discharge Requirements should specify that manual samples will be collected once a day after dredging has been underway for an hour and automated samples will be collected continuously throughout dredging operations.

2. The Waste Discharge Requirements should allow the Regional Board to request split samples.

The Waste Discharge Requirements are silent on the issue of split samples. The Regional Board should be allowed to request split samples in order to ensure that monitoring results are accurate and that water quality objectives are met.

3. The Waste Discharge Requirements should describe the monitoring station beyond the influence of dredging activities as either "background" or "reference," and use the term consistently.

The Waste Discharge Requirements refer to the monitoring station beyond the influence of dredging activities as both a "background station" and a "reference station." See Tentative Order § VII(B)(2)(c) at 26; see also Tentative Order § VII(B)(3)(a) at 27. The Waste Discharge Requirements should use one term consistently so that procedure is as clear as possible.

B. The Waste Discharge Requirements should list the criteria that need to be met before a sand cap is placed and identify the person responsible for determining whether a sand cap is necessary.

Decision rules (b) and (c) discuss the placement of sand caps, but neither describes under what specific circumstances or by whom the decision to place a sand cap will be made. See Tentative Order § VII(D) at 30. The Waste Discharge Requirements should list the criteria that need to be met before a sand cap is placed and identify the person responsible for determining whether a sand cap is necessary. As is noted in Donald MacDonald's Expert Report for the Cleanup and Abatement Order, "failure to establish clearly interpretable decision rules. . .will almost certainly result in decisions that are not consistent with the expectations of the. . .Regional Board and other participants in the process." See MacDonald Report § E.3.7 at 26.

- C. The Waste Discharge Requirements should include stronger sediment disposal monitoring to protect public health.
 - 1. The Waste Discharge Requirements should require that dewatered sediment be tested to determine pollutant concentration before a landfill is selected.

The Waste Discharge Requirements state that dewatered sediment will be stockpiled and tested to determine its suitability for disposal at selected landfills. See Tentative Order § VII(E) at 30. Because landfill acceptance criteria depend on the nature and concentration of pollutants, dischargers must test the sediment before it is stockpiled to determine which landfill phase classification is appropriate.

2. The Waste Discharge Requirements should define how often dewatered sediment will be tested and set a maximum volume of sediment that will be allowed to accumulate in each sediment management area.

The Waste Discharge Requirements are silent as to how often dewatered sediment will be tested and the maximum volume that will be allowed to accumulate in each sediment management area. The maximum volume should be calculated based on the capacity of the plastic sheeting designed to contain fugitive dust. This will reduce the impact the dredging will have on air quality in neighborhoods adjacent to the staging areas.

3. The Waste Discharge Requirements should require protocol to ensure that less-toxic sediment is not mixed with sediment that is more toxic to reduce the net concentration of pollutants.

It is critical that contractors not, inadvertently or otherwise, combine dewatered sediment that is less toxic with sediment that is more toxic to decrease the net concentration of pollutants and qualify the resultant mix for admission to landfills of a lower phase classification. These landfills are often not lined and therefore risk groundwater contamination if filled with toxic sediment.

V. THE WASTE DISCHARGE REQUIREMENTS SHOULD REQUIRE THAT NONCOMPLIANCE REPORTS THAT MAY ENDANGER HUMAN HEALTH OR THE ENVIRONMENT BE SHARED WITH COMMUNITY MEMBERS.

The Waste Discharge Requirements state that dischargers must report any noncompliance that may endanger human health or the environment to the Regional Board. See Tentative Order § VIII(E) at 31. However, the adjacent community should be notified if public health or the environment is at risk. The Waste Discharge Requirements should require that reports of noncompliance that may endanger human health or the environment be shared with community members and should detail a method for disseminating the information.

VI. THE SEDIMENT MANAGEMENT UNIT FOR POLYGON NA19 MUST NOT BE SMALLER THAN THE AREA ESTABLISHED IN THE CLEANUP AND ABATEMENT ORDER.

The sediment management unit for polygon NA19 seems to be smaller than the dredge remedial area for that polygon established in the Cleanup and Abatement Order. See Tentative

Order Attachment A Figure 4; see also Cleanup and Abatement Order at 43. To ensure that the area being dredged is consistent with that agreed upon by the Project's stakeholders during the development of the Remedial Action Plan, the sediment management unit for polygon NA19 must be at least as large as the area established in the Cleanup and Abatement Order.

VII. THE BACKGROUND STATION SHOULD BE LOCATED UPSTREAM OF THE REMEDIAL FOOTPRINT.

The Waste Discharge Requirements note that the background station will be located 1,000 feet from the dredging activity in the direction of the head of the bay and beyond the influence of construction activities. See Tentative Order § VII(B)(2)(c) at 26. But in the Receiving Water Monitoring Diagram, the station is located south, or downstream, of the remedial footprint. See Tentative Order Attachment C. Because an accurate background measurement is vital to the success of water quality monitoring, the background station must be upstream of the remedial footprint and beyond the influence of construction activities.

Conclusion

After decades of delay and continued contamination in San Diego Bay, it was a watershed moment for San Diego when the Regional Board adopted the Cleanup and Abatement Order in March 2012. To successfully implement a cleanup of this size, it is critical that attention be paid to water quality during each phase. The Waste Discharge Requirements are on the right track, but additional measures must be taken to ensure that dredging is effective in helping to restore the waters of San Diego Bay to their beneficial uses.

Respectifully submitted,

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San Diego Coastkeeper

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