

San Francisco Bay Conservation and Development Commission

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TO: Commissioners and Alternates

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SUBJECT: Corrections to Staff Recommendation on BCDC Permit Application No. 2001.008.41 (Material Amendment) for Caltrans' Use of Controlled Explosives to Demolish Piers E4 to E18 of Former East Span of San Francisco-Oakland Bay Bridge
(For Commission consideration on August 18, 2016)

Proposed Revisions

The staff recommends the following revisions to its recommendation to the Commission dated August 12, 2016 on BCDC Permit No. 2001.008.41 (Material Amendment) for the Department of Transportation's (Caltrans) demolition of Piers E4 to E18 of the former east span of the San Francisco-Oakland Bay Bridge using controlled explosives. Added language has been underlined, deleted language has been ~~struck through~~.

1. Page 9 (Authorization)

Item I.A.5.o: "...temporarily place and...remove up to 20 cages and ~~two buoys anchored to the Bay floor~~ associated equipment..."

2. Page 33 (Special Conditions):

¶1, Line 16: "...the approximately 28,210 cubic yards of material resulting from the controlled blasting of Piers E4 through E18 authorized in Material Amendment No. Forty-One, up to an elevation no higher than three feet below the lowest elevation of the natural mudline adjacent to and above the scour pit surrounding each former pier footprint, and provided that the debris is covered with sediment over time, thereby resulting in minimal or no net fill on the Bay floor..."

¶2, Line 2: "...except for Piers E4 through E18, which shall be removed to an elevation ~~not exceeding~~ no higher than three feet below the lowest elevation of the natural mudline..."

3. Page 45 (Special Conditions):

¶11, Line 1: ~~“**Marine Mammal and Bird Deterrence.** The permittee shall use acoustic deterrence devices to discourage marine mammals from entering the work area consistent with all approvals from NMFS OPR. The permittee shall also use auditory or visual devices...”~~

¶14, Line 1: ~~“**Bird Exclusion Zone.** The monitoring plan shall specify the distance of the bird exclusion zone for each pier. If, through site monitoring, any listed or fully protected birds are observed diving within the exclusion zone, the permittee shall delay blast until birds are no longer present in the exclusion zone. Prior to commencement of each set of controlled blasts, the permittee shall determine the radius of the bird exclusion zone around each pier, consistent with approvals and/or recommendations from CDFW, for review and approval by or on behalf of the Commission.”~~

¶15, Line 1: ~~“**Pre-Impllosion Sonar Fish Survey.** Prior to each pier blast, the permittee shall deploy sonar technology on the day of demolition to confirm no large schools of fish are present within the vicinity of each pier. If large schools of fish are found, the permittee shall implement the appropriate avoidance and minimization measures determined in consultation with CDFW.” to establish background of fish assemblages in the area.”~~

¶18, Line 1: ~~“**Hydroacoustic Monitoring.** During each test and pier blast, the permittee shall measure in-water pressure and sound waves generated from each blast...”~~

4. Page 46 (Special Conditions):

¶12, Line 1: ~~“**Water Quality Monitoring.** The permittee shall conduct water quality monitoring, consistent with the SWPPP from RWQCB, including measures such as: plume mapping for 1-8 hours after each blast, measuring water quality parameters of the plume (e.g. pH, turbidity, dissolved oxygen, temperature, and conductivity), monitoring of environmentally sensitive areas (ESAs) for 24 hours after each blast, and sediment quality assessment following completion of debris management activities the RWQCB requirements, including measures such as: measuring water quality parameters (e.g. pH, turbidity, dissolved oxygen, temperature, and conductivity) during and after each pier blast and during rubble management activities, measure water quality at environmentally sensitive areas as required by RWQCB, and sediment sampling.”~~

¶13, Line 8: ~~“...If, based on the results of the sedimentation monitoring, the Commission determines that further monitoring is needed to ensure that the sedimentation is occurring in a manner that would cover the debris over time, resulting in minimal or no Bay fill coverage from demolition debris, the permittee shall conduct additional monitoring...”~~

5. Page 47 (Special Conditions):

¶13, Line 2: ~~“...determines that the monitoring results indicate that the work is not being conducted consistent with the authorization in Amendment No. Forty-One or that the work is results in fill impacts to Bay resources not anticipated at the time of project authorization...”~~

¶14, Line 5: “...~~Corrective action may include removal of debris, additional debris management or placement of sediment over the debris and remnant structures.~~”

6. **Page 116 (Staff Analysis):**

¶12, Line 3: “...~~Special Condition II-I-4-i requires sedimentation monitoring to ensure that the remnant structures and debris are covered with sediment in a manner that results in minimal or no Bay fill over time. This condition requires additional monitoring if Caltrans’ monitoring schedule is not sufficient to ensure that sedimentation occurs and that the fill allowances remain consistent with the authorization herein. This information until the end of the year following completion of each set of blasts so that all pier footprints will be monitored and more data will be available on the sedimentation processes at each location. The results shall be included in an annual report, as required in Special Condition II-I-4-k, and shall be reported to the Commission, as required in Special Condition II-I-4-l. In addition, Special Condition requires the permittee to take corrective action if it is determined that sedimentation is not occurring in a manner that results in minimal or Bay fill coverage from demolition debris, and will be used to determine whether the remnant structure and debris are being covered with sediment in a manner that results in minimal or no Bay fill over time and. Special Condition II-I-4-i requires further monitoring if the Commission determines that it is necessary to ensure that sedimentation occurs and that the fill allowances remain consistent with the authorization herein.~~”

6. **Page 118 (Staff Analysis):**

¶12, Line 6: “~~Further, prior to each blast, Caltrans is will deploy sonar technology on the day of demolition to confirm that no large schools of fish are present within the vicinity of each pier (required in Special Condition II-I-4-c). If large schools are found, Caltrans will take measures to avoid or minimize impacts to the maximum extent feasible. required to deploy sonar technology to establish background of fish assemblages in the area (required in Special Condition II-I-4-c). Although previous CDFW requirements to conduct post-blast fish trawl surveys and a caged fish study will be removed from the amended ITP, Though it will not be required in the ITP, Caltrans will conduct a caged fish study to examine the effects of the Pier E4 and E5 blasts on fish.~~”

7. **Page 119 (Staff Analysis):**

¶13, Line 5: “~~(as required in Special Condition II-I-3).~~”

8. **Page 120 (Staff Analysis):**

¶14, Line 6: “...~~Based on models and the Pier E3 Demonstration Project, Caltrans expects the area of high pH to be limited to a 100-foot radius around each pier after implosion, to be observed immediately following the implosion and that the effects will diminish within approximately fours...The models show that turbidity is expected to drop to pre-implosion baseline conditions within five hours. Caltrans has stated that the blast attenuation system will may confine sediment released during the blasts.~~”

9. **Page 121 (Staff Analysis):**

¶1, Line 8: “...Caltrans is in the process of improving design details for debris containment best management practices and adding ESA monitoring locations near Alameda Point, south of the project area for the controlled blasts of Piers E4 and E5 to confirm no impacts will be observed to these eelgrass beds.”