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samples will be collected from the outfalls of the existing 8th Avenue storm drain and Switzer Creek. A work plan will be prepared for the collection of the outfall samples.

## 7.2.4. Sampling Procedures

For samples obtained from the surface of the armor rock layer, the sampling equipment and utensils in contact with the sediment shall be decontaminated at an upland location by a primary wash with a brush and Liquinox<sup>®</sup> solution, or equivalent, a rinse with potable water, and a rinse with de-ionized water. Two pre-cleaned, 8-ounce jars shall be completely filled (without headspace) with sediment from each discrete location.

The following is a summary of the sample types and containers for the different sampling locations and media:

- pore water samples shall be collected in laboratory-supplied glass containers with the appropriate preservatives, based on the type of analysis,
- ambient bay water samples shall be collected in laboratory-supplied glass containers with the appropriate preservatives, based on the type of analysis,
- the sediment core samples from the habitat backfill shall be collected in clear polycarbonate tubes, cut into appropriate lengths to obtain the top, middle, and base samples, capped with Teflon® paper and PVC end caps for each sample segment,
- the base cap sample in the nylon mesh bag shall be kept in a watertight resealable plastic bag, and
- the sediment samples collected from the surface of the armor rock layer shall be kept in 8-oz. glass jars.

The sample containers shall be labeled with the following information:

- unique sample identification number (also labeled on the sampling location map);
- sample collection date (month/day/year);
- time of collection (24-hour clock); and
- sampler initials.

The sample containers shall be placed in labeled resealable plastic bags and placed in a cooler maintained at 4 degrees Centigrade. Samples may be picked up in the field by a

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state-certified analytical testing laboratory. The samples shall be kept in the sample cooler if they are picked up the same day that they were sampled. If the samples are not scheduled for pickup until the following day, then the samples shall be maintained at 4 degrees Centigrade in the cooler by adding bagged ice or they may be transferred to a refrigerator. A chain-of-custody record shall be maintained for samples collected throughout the sampling process. This record shall accompany the samples to the analytical laboratory. The chain-of-custody documentation shall be completed and signed by the laboratory-assigned courier.

Field notes shall be maintained during the sampling operations, and shall include the following:

- names of person(s) collecting and logging the samples;
- GPS horizontal coordinates for each sample location (fixed for the samples from the permanent sediment stations);
- depth of each location sampled as measured from the water surface;
- date and time of sample collection;
- unique sample identifier;
- description of sample; and
- deviations from this plan, if any.

### 7.2.5. Analytical Testing Program

The sediment samples shall be analyzed by:

- copper, lead, and zinc by United States Environmental Protection Agency (EPA) method 6010B with a method detection limit (MDL) of 1 milligram per kilogram (mg/kg), or less,
- TPH in the carbon chain range C<sub>7</sub>-C<sub>44</sub> by EPA method 8015M, with an MDL of 1 mg/kg, or less,
- PCBs by EPA method 8082, as modified by the Puget Sound Estuarine Protocols (PSEP), with an MDL of 0.01 mg/kg, or less

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- TPAHs by EPA method 8270C, as modified by the PSEP, with an MDL of 0.1 mg/kg, or less for each constituent, and
- TBT by Gas Chromatography/Mass Spectrometry using Krone, et al (1989).

The sediment sample results will be reported as dry weight concentrations.

The water samples (pore water and ambient bay water samples) shall be analyzed by:

- copper, lead, and zinc by EPA method 200.8 with MDLs of 1 microgram per liter  $(\mu g/\ell)$  or less,
- TPH in the carbon chain range C<sub>7</sub>-C<sub>44</sub> by EPA method 8015M with an MDL of  $100 \ \mu g/\ell$  or less,
- PCBs by EPA method 8082 with an MDL of 0.01  $\mu g/\ell$  or less,
- TPAHs by EPA method 8270C with an MDL of 0.01  $\mu g/\ell$  or less, and
- TBT with an MDL of 0.01  $\mu g/\ell$  or less.

The sediment samples shall be archived (frozen) by the laboratory for potential analytical testing at a later date.

## 7.3. Biological Monitoring

The long-term biological monitoring program shall include laboratory bioaccumulation evaluation and infaunal studies. Biological sampling shall be conducted once every two years for the first eight years (2007, 2009, 2011, and 2013), and in 2016, 2021, and 2026, if the third tier action is not triggered.

#### 7.3.1. Bioaccumulation Monitoring at the Former Campbell Shipyard

There is concern regarding the potential resuspension of contaminated sediments following the remedial action at the former Campbell Shipyard. There is also concern that these sediments may bioaccumulate in organisms and potentially impact the food web. Bioaccumulation monitoring at the remediation site will be conducted to ensure that

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there are no biological impacts associated with the resuspension of contaminated sediments.

The premise of bioaccumulation is that contaminants in sediments are readily available and in the form in which they can enter the food web. Generally, the pathways include either exposure through direct contact (i.e., dermal) or through ingestion. If contaminants are bioavailable (i.e., can be metabolized and stored in the body), they can magnify as they proceed up the food chain (i.e., biomagnification). That is one reason why higher trophic organisms can accumulate high levels of contaminants in their tissues. It should be noted that elevated levels of contaminants in sediments does not necessarily correlate to elevated levels in tissue samples.

There are several possible approaches or methods to address bioaccumulation at the former Campbell Shipyard site. They include:

- the collection of wild-caught organisms,
- in-situ testing, and
- controlled laboratory bioaccumulation tests.

The following is a brief discussion of each methodology.

# 7.3.1.1. Collection of Wild-Caught Organisms

This method would entail the collection of animals that would be on site and potentially exposed to COCs. This is the most realistic measure of bioaccumulation, as organisms are exposed to natural fluctuations and potential contamination. However, there are many challenges with this methodology, the foremost being the selection of a target species. The target species ideally would live on (epibenthic) or in (benthic) the sediment, not be very mobile (i.e., would remain on site throughout its life), and either be very abundant or large so that enough tissue mass could be collected for chemical analyses. Based on previous efforts in San Diego Bay, there are no species that would meet all of these criteria. In addition, a similar collection effort would have to be conducted at a reference or control site to compare the analytical results.

#### 7.3.1.2. In-Situ Testing

With this method, target organisms would be collected from contaminant-free areas, and placed at the Campbell Shipyard site. This would be similar to the California Department of Fish and Game Mussel Watch Program, where mussels are placed in mesh bags and attached to a fixed object for a period of time, and then retrieved and analyzed. The Mussel Watch Program would not apply in this instance since mussels are filter feeders and therefore bioaccumulation is the result of water born contaminants and not from sediments. It may be possible to place benthic species in cages (e.g., small clams such as *Chione* or *Macoma*) and collect them after a period of time. However, there is a potential that the animals would not be present at the end of the study duration. Also, there is little information regarding the appropriate duration of the study, and similar to the collection of wild caught animals, a control site(s) would need to be identified.

# 7.3.1.3. Laboratory Bioaccumulation Tests

This is the standard bioaccumulation test recognized by many of the agencies (e.g., EPA, NOAA, RWQCB, COE), and is used for the testing of sediments to determine potential disposal options.

Sediment will be collected from the test site (former Campbell Shipyard) and from a "reference site." The reference site will be relatively contaminant-free and have similar grain size as the test sediment. Studies conducted by the Southern California Coastal Water Research Project (SCCWRP) may be used to determine an appropriate "reference" site. The test uses the polychaete worm (*Nereis virens*) and the bent-nose clam (*Macoma nasuta*) with a standard 28-day test period under flow-through conditions. Upon test termination, the reference and test sediments

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will be sieved to remove the worms and clams. Surviving animals will be placed, by replicate, in clean sand in an aquarium and held under flow-through conditions to depurate for 48 hours. Following depuration, the animals will be carefully removed from the holding chambers and placed into labeled, water tight resealable plastic storage bags to be frozen. Frozen test tissue will be transported to an analytical laboratory for chemical analyses. As a quality control measure, pre-test samples of tissue from both species are frozen for future analysis, if needed.

The 28-day test period is a standard period used for laboratory bioaccumulation tests. The test period does not imply that organisms will have attained the maximum possible accumulation within that period. Determination of the total possible accumulation would require the study of animals in the field that had existed at the site since recruitment. Such techniques are not possible for this study. The 28-day test provides a consistent and repeatable measure to compare the study and reference sites for biological availability of contaminants.

Statistical analysis of the bioaccumulation test data will compare the tissue concentrations from animals held in reference sediment to concentrations from tissues exposed to test sediments. The statistical significance is determined using a onetailed t-test. For analytes measured at or below the detection limit, the statistical test is carried out using the detection limit as the data point.

## 7.3.1.4. Recommendation Procedure

Taking into consideration the objectives of the bioaccumulation monitoring and the possible methods, it is recommended that laboratory testing be conducted. Compared to the other methods, there are fewer variables and known endpoints.

Collected sediments will be obtained from the same or adjacent sediment chemistry and infaunal sampling stations. The long-term bioaccumulation monitoring program will be conducted on the same timeline as the infaunal studies with samples

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collected on the same sampling date. Sampling shall be conducted once every two years for the first eight years (2007, 2009, 2011, and 2013), and in 2016, 2021, and 2026, if the third tier action is not triggered.

The chemical analysis methods and MDLs for tissue sample analysis are presented in the table below.

Analyte	Analysis Method	Tissue Target Detection Limits
Соррег	EPA Method 6020	0.1 mg/kg
Lead	EPA Method 6020	0.1 mg/kg
Zinc	EPA Method 6020	1.0 mg/kg
ТРАН	EPA Method 8270C	20 µg/kg
РСВ	EPA Method 8082	20 µg/kg

Table 5 - Chemical Analyses for Tissue Samples

The bioaccumulation sediment and tissue sampling will be performed at the same time as the sediment chemistry sampling, when possible. For these events, the bioaccumulation sediment samples will be collected from the same locations as the sediment chemistry samples so that COC concentrations in tissue samples can be correlated with COC concentrations in the sediment samples. All sediment samples will be archived (frozen) so that previously obtained samples can be re-analyzed. There may be events when the biological sampling may not coincide with the sediment chemistry sampling.

# 7.3.2. Infaunal Invertebrate Monitoring at the Former Campbell Shipyard

The goals of the Campbell Shipyard sediment remediation project include isolation of contaminated bay sediments with a sediment cap while increasing the habitat values present at the site. Inherent in these goals is the potential for the site to provide habitat for infaunal organisms. Thus, it is appropriate to specify a monitoring program to assess the colonization of the new substrate after construction.

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# 7.3.2.1. Study Sites

Samples are to be collected from two sampling sites, the Campbell Shipyard site remediation habitat cap and a control site northwest of the remediation site (adjacent to the R.E. Staite leasehold).

# 7.3.2.2. Sampling

Sampling for benthic invertebrates will consist of spatial replicates spread widely across the study and control sites. Sampling stations will consist of three sites immediately adjacent to the three sediment chemistry sampling stations and an additional sampling station. The sampling stations will be randomly chosen with attention paid to avoidance of a clumped sampling station distribution. DGPS will be used to accurately locate the sampling stations. Benthic core samples will be collected at the four replicate habitat cap sampling stations and at four randomly selected sampling stations within the control site (n=4). At each sampling station, three, 46-square centimeter surface area cores will be collected. Cores will be inserted 15 centimeters into the substrate. Samples collected from each sampling station will be combined and rinsed through a 1.0 mm mesh screen, placed in labeled jars, and fixed with a 10% buffered seawater/Formalin solution.

Samples will be transferred to the lab and sorted into major taxonomic phyla (e.g., Crustacea, Annelida). Qualified taxonomists will then identify and count organisms in each phylum to lowest practicable taxon (usually genus or species). Wet weight of each phylum will be determined to the nearest 0.01 g. QA/QC measures will include completion of a chain of custody form, a re-sort of 10% of each sample to ensure a minimum of 95% accuracy, and a minimum of 5% check of taxonomic identification for each sample. Taxonomists will work together to ensure intercalibration of samples.

The taxonomic identification procedures will generally follow those used by the Southern California Coastal Water Research Project's (SCCWRP) Southern Cali-

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fornia Bight Regional Marine Monitoring Surveys (Bight Surveys). The benthic sampling procedures proposed for this project differ from those used in the Bight Surveys for a variety of reasons. The Bight Surveys use modified 0.1-square-meter Van Veen grab samplers to collect infaunal data. A successful Bight Survey sample can collect between 5 and 15 cm of surface substrate. Samples with less that 5 cm of penetration are rejected. Since the current project will involve placement of coarse sand and the planting of eelgrass over the habitat cap, the effectiveness of the Van Veen would be limited. Penetration would be poor given the coarse nature of the sediment, and eelgrass rhizomes would prevent closure of the sampler leading to lost sediments. The proposed diver-collected cores ensure complete sediment penetration, reduce impacts to eelgrass, and allow for greater spatial sampling of the cap. The data will be corrected to present infaunal densities per square meter allowing comparison to data collected in the region on other projects using other sampling methods.

The first sampling event will consist of pre-construction sampling at the habitat cap and control sites. Subsequent events will be scheduled at 2, 4, 6, 8, 10, 15, and 20 years after cap construction. The monitoring timing will correspond directly with the collection of sediments for the bioaccumulation monitoring. Additionally, sampling will occur as close as reasonably possible to the collection of sediments for sediment chemistry monitoring. Resulting data will be used to evaluate changes in invertebrate community composition at the habitat-cap site, using the control site to account for temporal variation in invertebrate communities.

## 7.3.2.3. Reporting

The first report will be prepared within 120 days of the second sampling event (first post-construction sampling). The report will provide invertebrate community comparisons between the habitat-cap and control sites, as well as providing comparisons between the pre- and post-construction invertebrate communities at the habitat-cap site. Subsequent reports will present the same comparisons as the

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first, with the inclusion of the most recent sampling period and any changes in data interpretation that result from changes in the invertebrate community that occurred since the prior sampling.

# 7.4. Habitat Restoration (Eelgrass) Monitoring

After the completion of eelgrass transplanting activities, monitoring will be conducted for a minimum of five years at intervals of 0, 6, 12, 24, 36, 48, and 60 months after cap construction. Additional monitoring may be required where the stability or long-term success of the transplant site is in question. The habitat restoration monitoring shall be conducted in accordance with the Southern California Eelgrass Mitigation Policy (Revision10), adopted by the National Marine Fisheries Services, U.S. Fish and Wildlife Service, and the California Department of Fish and Game (resource agencies) on July 31, 1991 and the "Eelgrass Mitigation Program in Support of Sediment Remediation and Aquatic Enhancement of the Former Campbell Shipyard Site." The areal coverage and density of plants shall be determined during monitoring activities.

A reference site within the same ecological subregion as the transplant site shall be selected and approval obtained from the resource agencies prior to the start of construction activities. The reference site shall be monitored concurrently with the transplant area to assess the effects of large-scale (e.g., El Niño) influences that may cause misinterpretation of mitigation success. Mitigation success shall be based upon a comparison of eelgrass areal coverage and density at the pre-construction project site and the transplant site (currently the same site).

Monitoring shall be performed within the active eelgrass growth period (i.e., March to October). Certified divers experienced in eelgrass surveys shall perform the surveys and record both the areal coverage and shoot densities of the eelgrass beds. The areal extent of eelgrass coverage shall be calculated as the area where eelgrass is present and the gaps in coverage are less than 1 m between shoots. Shoot density shall be calculated from representative samples collected within the reference and transplant sites. The Southern California Eelgrass

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Mitigation Policy requires that the following criteria be obtained for mitigation to be defined as successful:

a minimum of 70% areal coverage of eelgrass bed and 30% density after the first year.

- a minimum of 85% areal coverage of eelgrass bed and 70% density after the second year, and
- a sustained 100% areal coverage of eelgrass bed and at least 85% density for the third, fourth and fifth years.

In the event that the eelgrass transplant site fails to meet the above criteria, a supplementary transplant area shall be constructed, if necessary, and planted in accordance with the Southern California Eelgrass Mitigation Policy (Revision 10).

# 8. LONG-TERM MONITORING SCHEDULE AND REPORTING

Cap integrity monitoring (visual dive inspections and bathymetric surveys) and sediment sampling shall be accomplished within 60 days of the completion of the engineered and habitat caps. The results of initial monitoring shall be reported to the RWQCB within 60 days after completing the visual monitoring.

All sampling for annual monitoring shall be accomplished in March of each year in which monitoring is required following completion of the cap installation. Monitoring shall be conducted every year for the first seven years after cap construction. The seventh year after construction, only visual inspections and biological sampling shall be accomplished. The full monitoring program shall again be completed 10, 15, and 20 years after cap construction. The monitoring program shall continue at five-year intervals beyond the twentieth year unless the RWQCB determines that a reduced monitoring program is appropriate or that monitoring is no longer necessary. The District will re-evaluate the monitoring schedule with the RWQCB and the Bay Council, or successors in interest, to determine if the program should continue with five-year intervals beyond the 20-years prescribed in this plan, or a reduced monitoring program, or if monitoring is no longer necessary.

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The long-term monitoring schedule is summarized in the table below.

Year	2006	2007	2008	2009	2010	2011	2012	2013	2016	2021	2026
Years Following Construction	0	1	2	3	4	5 .	6	7	10	15	20
Cap Integrity (Visual dive and Bathymetric Surveys)	x	х	x	х ·	х	х	x	x	x	x	×X
Sediment Sampling (Annual)			x	х	х		х	х			
Sediment Sampling (Quarterly)	X	x				x			х	х	·x
Biological Sampling (Bioaccumulation and Infaunal Studies)		x		x		X		X	x	. X	X
Habitat Restora- tion (Eelgrass Monitoring)	x	x	x	x	x						
Compliance Statements	x	x	x	x	x	x	x	x	x	х	x

Table 6 – Long-Term Monitoring Schedule

Habitat Restoration monitoring will be conducted during the months 0, 6, 14, 24, 36, 48, and 60, during the post-planting period.

If an inspection or sampling indicates that the cap has in some way been breached, then the sampling schedule shall revert to once per year following any needed repair. Subsequent sampling shall be based on the same intervals given above (1, 2, 3, 4, 5, 6, 7, 10, 15, and 20 years after repair).

The monitoring report shall include a description of the monitoring performed; the various POCs and their performance standards; the date, exact place, and time of sampling or measurements, or observations; the individual(s) who performed the sampling, measurements, or observations; the date(s) analyses were performed; the individual(s) who performed the analyses; the analytical techniques or method used; the results of the analyses; and conclusions and recommendations.

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The schedule indicated in the table below shall be adhered to for submitting monitoring reports to the RWQCB.

Frequency	Report Period	Report Due	
Monthly Compliance Statements	January, February, March, April, May, June, July, August, September, Octo- ber, November, December	By the last day of the following month	
	January 1 to March 31	April 30	
Questady Meniterine Departs	April 1 to June 30	July 30	
Quarterly Monitoring Reports	July 1 to September 30	October 30	
	October 1 to December 31	January 30	
Annual Monitoring Reports	April 1 to March 31	April 30	

 Table 7 – Reporting Schedule

# 9. EVENT MONITORING

Additional monitoring shall be performed after a destabilizing event, such as an earthquake or a storm. An event is defined as a major earthquake, tsunami, or a storm event with winds of strong gale or higher (47 miles per hour [mph] or higher). For purposes of this monitoring program, a major earthquake is one that inflicts significant damage to property in the metropolitan San Diego area, and/or measures 5.5 or greater on the Richter scale within 30 miles of the San Diego Convention Center. A major tsunami is one that inflicts significant damage to property in San Diego Bay. Visual dive inspections will be conducted within two weeks of an event.

# **10. TIERED MONITORING ENDPOINTS AND ACTION**

This section summarizes the performance standards or endpoints for each tier and the recommended action if the standards in any tier are exceeded.

#### 10.1. First Tier Monitoring

The first tier performance standards are:

- visual signs of damage to the cap such as slope failures, damage from boat keels, or significant erosion (significant damage will trigger third tier action),
- total cap thickness not less than 4.5 feet for the engineered cap section, not less than 2.5 feet for the habitat area, and thickness of sand layer not less than 21.6 inches (reduction of 10 percent),

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- tolerable differential settlement within the limits provided in Table 3,
- tolerable lateral deformation of less than 0.1 foot per foot of slope length,
- COC concentrations from sediment chemistry within the action levels specified in Table 2,
- COC concentrations in pore water showing a stable trend, and
- COC concentrations in tissue samples consistent with concentrations in the control samples.

If these first tier endpoints are exceeded, the second tier monitoring will be initiated.

## 10.2. Second Tier Monitoring

The second tier monitoring will include:

- notifying the following (notification list) within 24 hours of discovery that the first tier POCs have been exceeded:
  - the RWQCB Executive Officer by phone (858-467-2952) or fax (858-571-6972),
  - o Mr. Joshua Burnam, COE at Joshua.L.Burnam@sp101.usace.army.mil,
  - Mr. Jim Peugh; Audubon Society,
  - o Ms. Gabriel Solmer, San Diego Baykeeper, and
  - o Mr. Ed Kimura; Sierra Club, San Diego Chapter.
- performing a visual dive inspection and cap probing in the suspect area,
- obtaining sediment core samples if located in the habitat cap, or
- obtaining sediment samples from the sediment sampling stations (Figure 2) if in the engineered cap, or
- obtaining sediment core samples from the engineered cap if the sand layer is exposed,
- performing additional bioaccumulation monitoring if the biological POCs were exceeded, and
- investigating and reporting the cause of exceeding the first tier monitoring standards.

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The second tier monitoring will be initiated within 72 hours of determination that the first tier measurement endpoints were exceeded. The second tier endpoints are discussed in the section below.

#### 10.3. Third Tier Action

The second tier performance standards are:

- visual signs of damage to the cap such as slope failures, damage from boat keels, or significant erosion,
- thickness of the sand cap is more than 18 inches,
- COC concentrations from sediment chemistry within the action levels specified in Table 2,
- COC concentrations in pore water showing a stable trend, and
- COC concentrations in tissue samples consistent with concentrations in the control samples.

If these second tier endpoints are exceeded, third tier action will be initiated and will include:

- contacting the notification list with an update on the second tier monitoring results and if third tier is recommended,
- preparing a remedial action plan,
- implementing the remedial action plan,
- additional monitoring to evaluate the effectiveness and performance of the remedial measures,
- investigating the cause of exceeding the first and second tier monitoring standards, and
- preparing a report documenting the remedial measures, the cause of exceeding the first and second tier monitoring standards, and a revised schedule for first tier monitoring.

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The third tier action will be initiated within 45 days of determination that the second tier measurement endpoints were exceeded. The final report will be submitted to the notification list within 30 days of completing the third tier repairs.

# 11. LIMITATIONS

This monitoring plan has been prepared in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants preparing similar plans in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this plan. Variations in site conditions may exist and conditions not observed or described in this plan may be encountered during subsequent activities. Please also note that this plan did not include an evaluation of geotechnical conditions or potential geologic hazards.

The environmental interpretations and opinions contained in this plan are based on the results of work performed by others. Ninyo & Moore has no involvement in, or control over, work performed by others. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in work performed by others. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this plan may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

This plan is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this removal plan by parties other than the client is undertaken at said parties' sole risk.

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Home ->> Water Issues ->> Programs ->> 401 Certification

# San Diego Region - 401 Water Quality Certification

Last Updated 02/23/2011 - Pending Water Quality Certification Applications (Adobe PDF format) - This link provides access to selected information on pending 401 applications. The public has 21 days from the date posted to comment on projects currently under review by the Regional Board staff.

# Public Notification for Pending 401 Water Quality Certification Applications

The State Water Resources Control Board revised State regulations for the 401 Water Quality Certification Program; these revisions went into effect on June 24, 2000. The revised regulations [23 CCR § 3830-3869] may be found at <u>http://www.waterboards.ca.gov/water\_laws/index.html</u> or <u>http://www.calregs.com/</u>.

Section 3858 (a) states "The executive director or the executive officer with whom an application for certification is filed shall provide public notice of an application at least twenty one (21) days before taking certification action on the application, unless the public notice requirement has been adequately satisfied by the applicant or federal agency. If the applicant or federal agency provides public notice, it shall be in a manner and to an extent fully equivalent to that normally provided by the certifying agency. If an emergency requires that certification be issued in less than 21 days, public notice shall be provided as much in advance of issuance as possible, but no later than simultaneously with issuance of certification."

When commenting on 401 Water Quality Certification, please include the File No. in your correspondence. Comments may be sent to:

California Regional Water Quality Control Board San Diego Region 9174 Sky Park Court, Suite 100 San Diego, CA 92123 Fax: 858-571-6972

#### **Certified Projects**

The link below provides a table with access to all certifications issued by this Regional Board since January 2008. To review a certification issued prior to that date, please contact our main office number. Documents on this page are in "pdf" format (Adobe Reader V6.0 or newer)

Certified Projects

Other Links

401 Water Certification Program - State Water Board site

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#### Public Documents (All files are in PDF format unless noted)

The State Water Resources Control Board adopted a revised Dredge and Fill Fee Calculator on October 7, 2008. The new fee calculator will be applied to all projects whose applications are received by the San Diego Regional Water Quality Control Board on or after Monday, October 27, 2008. A copy of the new fee calculator is available on the State

# Regional Water Quality Control Board - San Diego

Water Resources Control Board, and can be accessed by following the previously provided link. Please note, the application fee has increased to \$640.00, due at the time the application is submitted.

Water Quality Certification Application (Revised December 2008)

Instruction

<u>Attachment 1</u>

401 Guidance for Post-Fire Recovery Actions

Regulatory Requirements of a Complete Application

401 Frequently Asked Questions

Water Quality Certification Application Cover Letter

Certification of Nationwide Permits

#### Presentations

Project Power Presentation January 13, 2007

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The Board is one of six boards, departments, and offices under the umbrella of the California Environmental Protection Agency. <u>Cal/EPA | ARB | DPR | DTSC | OEHHA | SWRCB</u>

ALAN MONJI (858) 637-7140 MIKE PORTER (858) 467-2726 MIKE PORTER (858) 467-2726 CHAD LOFLEN (858) 467-2727 MIKE PORTER (858) 467-2726 CHAD LOFLEN (858) 467-2727 CHAD LOFLEN (858) 467-2727 MIKE PORTER (858) 467-2726 MIKE PORTER (858)467-2726 REGIONAL BOARD CONTACT COUNTY RECEIVING Unnamed tributary to Temecula Creek Carroll Canyon Creek Unnamed tributary to the Pacific Ocean **Temecula Creek** Guajóme Creek French Valley Creek Buena Vista Creek San Marcos Creek Unnamed ephemeral drainage San Diego San Diego San Diego San Diego San Diego San Diego Riverside Riverside Riverside The proposed project is the construction of the widening and extension of Clinton Keith Road between Antelope Road and SR 73. This application applies to the East Segment of the project located east The proposed project includes the reclamation of the remaining 104 acres largely within Carlsbad, including regrading portions of the Buena Vista Creek channel at its current location. The proposed project is the construction of a rock drainage, detention basins, and replacing a 48" metal pipe with a 48"reinforced concrete pipe. he project proposes to develop 1) a high technology Business Park that would encompass 26.8 acres; 2) Discovery Infrastructure improvements pursuant to the City of San Marcos University Business Park Specific Plan Subdivision of approximately 4.2 acres into three lots with a minimum lot size of The proposed project is for a 53.9 acre residential development and an access road coming off of Bobier Drive from the The project consists of the repair and replacement of an existing public storm drain including the placement of an To provide office space, preserve 3/4 of Provide bank stabilization to Carroll Canyon Creek and Rattlesnake Creek site as permanent open space and to improve stream channel stability and residential community with up to 750 residential units on 24.9 acres and 5 acres of public park; 3) San Marcos Creek Open Space of 16.2 acres; 4) Area Residences, a multi-family PROJECT DESCRIPTION energy dissipater. of Liberty Lane 1.0 net acre. water quality duc PROJECT TITLE Wetlands Permitting for El Camino Memorial Park Tentative Parcel Map 35039 Clinton Keith Road Extension Project (EAST) El Camino Executive Center Loveacres Ranch University Business Park, San Marcos Adobe Estates Residentíal Subdivision Quarry Creek Reclamation CWS, Inc. Project 4080 Lemon Street, 8th Floor Riverside, CA 92502 3655 Nobel Drive suite 330 San Diego Ca 92122 7577 Mission Valley Road, Suite 200 San Diego, CA 92108 16935 West Bernardo Dr. suite 112 San Diego,CA 92127 Р 35490 HWY 79 Warner Springs, CA 92086 P.O. Box 580 Pleasanton, CA 94566 43135 Avenida de San Pasqual 1055 Torrey Pines Road, Suite 202 L Jolla, CA 92037 29241 Crown Valley Parkway #220 Temecula, CA 92592 ADDRESS APPLICANT Hanson Aggregates Pacific Southwest, Inc. El Camino Memorial Park Stewart Erterprises Riverside County Transportation Department Yvette Anthony Hawkes-Holdings,LLC Terry Lovingier H.G. Fenton Company Concordia Homes CWS, Inc. DATE POSTED ON WEB 10/11/2006 11/30/2007 2/20/2007 1/31/2008 2/20/2007 3/30/2007 6/5/2006 2/8/2007 9/7/2007 DATE REC'D 11/3/2005 11/20/07 5/25/06 3/29/2007 2/14/07 2/5/07 2/5/07 1/9/08 9/5/07 FILE NO. 05C-131 07C-015 07C-0911 06C-056 07C-009 070-109 08C-005 07C-014 07C-033

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Regional Water Quality Control Board Pending 401 Actions Regional Water Quality Control Board Pending 401 Actions

San Diego Region 9

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REGIONAL BOARD CONTACT	JODY EBSEN (858) 636-3146	JODY EBSEN (858) 636-3146	JODY EBSEN (858) 636-3146	JODY EBSEN (858) 636-3146	JODY EBSEN (858) 636-3146	JODY EBSEN (858) 636-3146	ALAN MONUI (858) 637-7140	JODY EBSEN (858) 636-3146	ALAN MONJI (858) 637-7140
RECEIVING WATER BODY	Unnamed tributaries to San Diego River	Unnamed tributaries to Jamul Creek	Un-named tributary to Tijuana River	10 vernal pools	Unnamed Infoutaries to Tijuana River	Tijuana River	San Marcos Creek, Lake San Marcos, Batíquitos Lagoon	Forester Creek	Laguna Canyon Creek and unnamed tributary
COUNTY	San Diego	San Diego	San Diego	San Diego	San Diego	San Diego	San Diego	San Diego	Orange
PROJECT DESCRIPTION	The proposed project is the development of the commercial and corporate office complex pontions of Phase 2 of the River View at Santee project, as an extension of the existing Town Center.	The proposed project consists of the construction of mixed use residential and equestrian development on 181 acres.	The proposed project consists of the construction of an industrial business park divided into 50 commercial/industrial bots.	Construction of a riew elementary school and related infrastructure to provide the required 850 academic seats within the California Terraces Precise Plan.	Subdivision of a 311.5 acre property into 56 industrial lots, including the potential SR-11 alignment and Port of Entry. Off- site road development is also proposed.	Create approximately 40 acres of native water hydrologic and create a surface water hydrologic connection to the Tijuana River to provide effective flow across the site and conditions for the development of self-sustaining wetlands. 100 ft extension of an existing earthen berm would be constructed to close a berm would be constructed to close a berach in the earthen levee between the southern channel and the northern channel.	The proposed project is the construction of a bridge over a tribulary to San Marcos Creek and a stort section of roadway on either side to complete Borden Road between Twin Oaks Valley Road and Woodward Street (approx. 700 feet total).	Construction of 463,000 sq ft of multi- tenant industrial space, combining light industrial and warehouse uses, site access and circulation improvements, utilities improvements, and landscaping.	The proposed project involves widening road by approximately 6 to 25 feet within the existing right of way. Expansion will cause impacts to 0.445 acre of waters of the U.S. Impact include placement of soli.
PROJECTITILE	River View at Santee Phase (II)	Peaceful Valley Ranch	Otay Business Park	Vista Del Mar Elementary School	Otay Crossings Commerce Park	Tijuana River Valley Wetland Mitigation Project	Borden Road and Bridge Project	Forester Creek Industrial Park Project	Laguna Canyon Road - SR-73 to El Toro Road
ADDRESS	9171 Towne Centre Dr., Ste. 460 San Diego, CA 92122	1012 2nd Street, Suite 100 Encinitas, CA 992024	4225 Executive Square, Suite 920 La Jolla, CA 92037	4350 Otay Mesa Rd San Ysidro, CA 92173	655 West Broadway, Ste 1600 San Diego, CA 92101	4677 Overland Avenue San Diego, CA 92123	1 Civic Center Dr San Marcos, CA 92069	2505 Congress St San Diego, CA 92110	Р.О. Вох 4048 Santa Ала, CA 92702- 4048
APPLICANT	Ryan Companies US, Inc.	Moser Ventures, Inc.	Otay Business Park, LLC	San Ysidro School District	Keamy PCCP Otay 311, LLC	San Diego County Water Authority	City of San Marcos	Pacific Scene Commercial, LTD	County of Orange
DATE	2/6/2008	6/17/2008	10/23/2008	3/4/2009	3/23/2009	600Z/08/£	6/1/2009	8/5/2009	8/25/2009
DATERECP	2/4/08	6/2/08	10/14/08	60/C/C	3/13/09	3/18/09	5/15/2009	7/29/2009	8/19/2009
FILE NO.	08C-008	08C-041	08C-079	09C-017	09C-019	09C-021	09C-041	09C-056	09C-062

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> Regional Water Quality Control Board Pending 401 Actions

ALAN MONJI (858) 637-7140 CHAD LOFLEN (858) 467-2727 JODY EBSEN (858) 636-3146 MIKE PORTER (858) 467-2726 MIKE PORTER (858) 467-2726 CHAD LOFLEN (858) 467-2727 REGIONAL BOARD CONTACT RECEIVING WATER BODY Agua Hedionda Creek Little Encinas Creek Warm Springs . Creek Little Sycamore Canyon Creek Murrieta Creek Aliso Creek South Lake COUNTY San Diego Riverside San Diego San Diego Riverside Orange The proposed project includes the demolition and replacement of four existing culvers located within Aliso Creek with thee-span bridges and the additional installation of another new approximately 3,000 ft in length and will complete a north-south transportation link between El Camino real and Cannon long cast-in-place arch-culvert structure, consisting of six 24 ' wide arch cells, over Warm Springs Creek Construct a commercial development consisting of a retail shopping center and professional office space in addition to Road. the roadway link is planned as a dividec4-lane roadway. The road will be constructed at 82 feet in width, with an The proposed 0.88-mile alignment would be located along portions of the existing Jackson Avenue right-of-way and Larnes Road segment adjacent to the northeast project boundary and partial road improvements to the Clinton Keith Road segment adjacent to the northwest The project involves the construction of two public improvements; a major arterial roadway and a regional flood control The proposed project would increase intake tonnages on a periodic basis, as required by disposal demand, under the includes the construction of a 195-foot-Creation of two docks and a boat ramp. full road improvements to the Stable improved to 100 foot width. Project PROJECT DESCRIPTION oversight of the City's LEA for solid 18-foot wide landscape median road base, asphalt, and concrete detention basin. Reach A is 法国に行われて site boundary waste Jackson Avenue Street Improvement Project PROJECT TITLE College Blvd Reach A and Detention Basin BJ 5 Sycamore Landfill Master Plan South Lake Park Rancho Las Lomas Tentative Parcel No. 35935 Commercial Development ADDRESS 11512 El Camino Real, Ste. 200 San Diego, CA 92130 1 Town Square 24601 Jefferson Avenue Murrieta, CA 92562 1 Civic center Drive San Marcos, CA 92069 1635 Faraday Avenue Carlsbad, CA 92008 Canyon Silverado, CA 92676 19191 Lawrence 8514 Mast Blvd. Santee, CA 92071 APPLICANT City of Carlsbad City of Murrieta Jeannie Lawrence (P) 949-548-2444 Stable Lanes Development, LLC Sycamore Landfill, Inc. City of San Marcos DATE POSTED 10/28/2009 12/29/2009 11/17/2009 10/28/2009 9/30/2009 10/8/2009 DATE REC'D 10/26/2009 12/24/2009 10/28/2009 11/9/2009 8/26/2009 10/7/2009 FILE NO. 09C-086 09C-096 09C-079 09C-084 09C-087 09C-076

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free-span bridge.

> Regional Water Quality Control Board Pending 401 Actions

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REGIONAL BOARD CONTACT	JODY EBSEN (858) 636-3146	ALAN MONJI (858) 637-7140	ALAN MONJI (858) 637-7140	MIKE PORTER (858) 467-2726	MIKE PORTER (856) 467-2726	CHAD LOFLEN (858) 467-2727
RECEIVING	San Diego River	Unnamed tributary to Oso Creek	Unnamed drainages tributary to Laguna Canyon Channel	Two unnamed intermittent streams tributary to Agua · Hedionda	Keys Creek. San Luis Rey River	Unnamed ephemeral drainage tributary to Santa Marganita River
COUNTY	San Diego	Orange	Orange	San Diego	San Diego	San Diego
PROJECT DESCRIPTION	The project proposes improvements to the SR-163/Frias Rd interbange and adjacent streets. Major project elements include a new separate facility for southbound SR-163 traffic to exit onto westbound 8 (including a new bridge over the San Diego River), a new fridge over the San Diego River), a new fridge over the San Diego River), a new fridge southbound SR-163, widening Friars Rd Bridge, and widening and/or restriping other roads.	The improvements to Crown Valley parkway include widening the south side of the street and the three associated bridges over 1) Oso Creek; 2) Camino Capistrano Road, the Oorange County Transit Authority Metrolink; and 3) I-5 Treevat	The proposed project consists of maintenance within three drainage facilities and minor improvements to an existing access road.	Arrendment to Certification condition D.4. to extend the deadline for compliance with this mitigation measure to April 30, 2010.	The channel maintenance activities included removal of sediment within the boundaries of the existing low-flow channel as well as mowing 10 feet of vegetation within the earthen bottom channel immediately adjacent to and east of the concrete channel. A smalt access road was also created in order to access road was also created in order to access	The project will entail the relocation of approximately 2,500 feet of an existing other water of the U.S.
PROJECT TITLE	SR-163/Friars Road Interchange Project	I-5/Crown Valley Parkway Interchange Improvernent Project	Laguna Canyon Road Drainages Project	El Camino Real Widening Project	Lake Rancho Viejo Flood Control Channel Maintenance Project	Ephemeral Drainage Helocation for the Marine Corrps Base Camp Pendleton Main Exchange Main Complex
ADDRESS	600 B Street, Suite 800 San Diego, CA 92101	27801 La Paz Road Laguna Niguel, CA 92677	300 N. Flower Street Santa Ana, CA 92702	1635 Faraday Ave Carlsbad, CA 92008	5469 Kearny Villa Rd, Ste. 305 San Diego, CA 92123	Box 555008, Bldg 22165 Camp Pendleton, CA 92055
APPLICANT	City of San Diego	City of Laguna Niguel	County of Orange	City of Carlsbad	County of San Diego	U.S. Marine Corps
DATE	1/5/2009	1/26/2010	1/26/2010	2/2/2010	2/3/2010	2/3/2010
DATE RECD	12/27/2009	1/19/2010	1/19/2010	1/19/10	1/21/2010	1/28/2010
FILE NO.	09C-101	10C-003	10C-004	08C-074	10C-007	10C-008

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> Regional Water Quality Control Board Pending 401 Actions

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REGIONAL BOARD CONTACT	ALAN MONJI (858) 637-7140	MIKE PORTER (858) 467-2726	JODY EBSEN (858) 636-3146	ALAN MONJI (858) 637-7140	ALAN MONJI (858) 637-7140	MIKE PORTER (858) 467-2726
RECEIVING WATER BODY	La Paz Canyon Gabino Canyon	Unnamed tributary to San Marcos Greek	Several unnamed drainages tributary to and including Oak Canyon drainage	Buena Vista Creek	Santa Gertrudis Creek and Warm Springs Creek	Batiquitos Lagoon and the Pacific Ocean
COUNTY	Orange	San Diego	San Diego	Carlsbad, CA	Riverside	San Diego
PROJECT DESCRIPTION	Emergency road repair work previously completed.	The overall purpose of the Master Plan is to increase the on-campus capacity to accommodate the anticipated growth in student enrollment up to a maximum of 25,000 students through the year 2022. Construction will include a Child Development Center, Relocation of PE/Athietic Fields, and Arboretum PE/Athietic Fields, and Arboretum	The proposed project is the repair of the existing unpaved access road adjacent to TL 2010 and portions of the 20-inch diameter high-pressure gas pipeline located within a 30-look-wide easement in Mission Trails Regional Park.	The proposed project includes the regaration and off-sile improvements to 104 acres consistent with the Surface Mining and Reclamation Act, including regrading portions of the Buena Vista Creek channel within its current location. Large, flat pads would be the result of the reclamation on both sides of the the creek. Thestoration of the creek channel and shores is proposed.	The proposed project includes construction of a new interchange and associated roadway enhancements to facilitate improved operations on the mainfine facility on the 1-15 between the existing Winchester Road Interchange (SR-79) and the 1-15/ L215 junction in the cities of Murrieta and Temecula In priverside County, CA	Maintenance dredging of 300,000 cubic yards of sand located in flood shoals within the western and central basins of Batiquitos lagoon and discharge of the material to the North and South Ponto beaches. Work will be performed every two to three years as needed to maintain
PROJECT ITILE	Marconi Road Work	PCCD San Marcos Campus Fadilities Master Plan	SDG&E 5428 - Permanent Erosion Repair, Gas TL2010, Mission Trails	Former South Coast Quarry Amended Reclamation Plan	French Valley Parkway Interchange Project	Batiquitos Lagoon Maintenance Dredging Project
ADDRESS	31878 Del Obispo St San Juan Capistrano, CA 92675	1140 West Mission Road San Marcos, CA 92069	8315 Century Park Ct. CP21E San Diego, CA 92123	P.O. Box 639069 San Diego, CA 92163- 9069	43200 Business Park Drive Temecula, CA 92583- 9033	4949 Viewridge Avenue San Diego, CA 92123
APPLICANT	Richard Marconi	Palomar Community College District	SDG&E	Hanson Aggregrates Padito Southwest, Inc.	City of Temecula	California Cantment of Fish and Game
DATE POSTED	2/9/2010	2/9/2010	2/24/2010	3/4/2010	3/29/2010	4/6/2010
DATE REC'D	1/20/2010	2/2/2010	2/10/2010	3/1/2010	3/25/2010	3/18/2010
FILE NO.	10C-012	10C-013	10C-016	10C-018	10C-023	10C-025

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Regional Water Quality Control Board Pending 401 Actions

MIKE PORTER (858) 467-2726 REGIONAL BOARD CONTACT JODY EBSEN (858) 636-3146 JODY EBSEN (858) 636-3146 ALAN MONJI (858) 637-7140 Calavera Creek, Lake Calavera Reservoir tributary to Warm Springs Unnamed tributary to the Sweetwater River San Diego Bay Unnamed Creek COUNTY San Diego San Diego San Diego Riverside the project will be mitigated by 0.22 acre-restoration of ripatian habitat. The project proposes to remove fill soil from a tributary to the Sweetwater Filver that was not authorized by the City of National City. The removal of the fill material placed on the stream bank will be done with a smooth-edge bucket on a backhoe so as not to mix fill soil with PROJECT DESCRIPTION a fiberglass floating platform held in place with two concrete piles, driven into the construction of a new recreational dock in beach area. The proposed project would involve three main components. A the transition plate would then connect to Water Conservation District (RCFCWCD) to perform routine maintenance activities within the Wallach mitigation site located the selection of plants used for wetland enhancement. The soil was found to very safty and thus they would like to use concrete sidewalk would be constructed involve the removal of an existing paved to a concrete abutment connecting to an accessible gangway. The gangway would connect to a transition plate, and Amendment to the Certification to adjust driveway area, which would slope down Crown Cove inlet of South San Diego Bay by Cal Boating. The project would walkway which presently traverses the channel. Maintenance would include the tidal prism for the 1997 Batiquitos Lagoon restoration project. Riverside County Flood Control and within the RCFCWCD flood control to extend from the existing paved The amendment would allow the The proposed project involves underlying native material more salt marsh species. bay floor National City Golf Course Removal of Contaminated Fill Soil PROJECT TITLE THE WALLACH PROPERTY Lake Calavera Reservoir Dam Remedial Improvements Crown Cove Dock Project 顿 1536 BROOKHOLLOW DRIVE, SUITE B, SANTA ANA 92705 2000 Evergreen Street, Suite 100 Sacramento, CA 95815 5950 El Camino Real Carlsbad, CA 92008 1439 Sweetwater Road National City, CA 91950 ADDRESS National City Golf Course, An American Golf California, Department of Boating and Waterways (Cal Boating) APPLICANT City of Carlsbad BROOKFIELD LAND COMPANY, Corporation State of Ŋ. DATE POSTED ON WEB 4/20/2010 4/6/2010 4/8/2008 4/6/2010 DATE REC'D 4/19/2010 3/30/2010 4/6/2010 4/5/2010 FILE NO. 10C-027 02C-056 04C-077 10C-026

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> Regional Water Quality Control Board Pending 401 Actions

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REGIONAL BOARD CONTACT	MIKE PORTER (858) 467-2726	JODY EBSEN (858) 636-3146	MIKE PORTER (858) 467-2726	ALAN MONJI (858) 637-7140	ALAN MONJI (858) 637-7140
RECEIVING WATER BODY	Las Posas Creek	San Diego River, San Vicente Creek, Slaughterhouse Creek, Unnamed tributary of San Vicente Creek	Gopher Canyon Creek, South Iork of Gopher Canyon Creek, and the San Luis Rey River	Loma Alta Creek	Pacific Ocean
COUNTY	San Diego	San Diego	San Diego	San Diego	San Diego
PROJECT DESCRIPTION	The City is proposing to improve the site by widening a 750-ioot section of Las proves Creek from the 6-loot-by-3-foot ripole box culvert outlet located at Grand Avenue to the southwest properly line where the creek exits the site. The creek will be widened to a maximum width of 48 feet to restore functions and services to this creek system, to accommodate the 100-year storm event and to increase flood storage and flood flow conveyance in the area.	The East County Sand Mine project consists of 6 phases of soil and topsoil extraction and site reclamation activities over a 20 year period.	The proposed project is a request to subdivide 442 acres into 172 single family residential lots using a Planned Residential Development (PRD). The purpose of the PPD is to allow for the protection of large areas of biological open space which will be encompassed in portions of individual residential lots and two separate open lots.	Amendment to the Certification to repair of the existing Sprinter Wal on Lorna Alta Creek to eliminate potential upfifting during a 100-year storm event. Installation of a sheet pile wall requires minor excavation to expose the exiting wall footing to guide placement of the piles.	The project involves earthwork to stabilize entryon slopes to protect adjacent thomes, repair and restore a severely incised drainage channel, construct a storm drain system to restore hydraulics in the restored channel to pre- development conditions, and construct a deterbion basin to improve water quality and to attenuate 100-year peak (lood events, to the extent possible.
PROJECT TITLE	Grand Avenue Capital Improvements 317 Drainage/Road Improvements Project	East County Sand Mine	Polo Club at Vista Valley, Tract 4736	El Camino Real Detention Basin Project	Alta La Jolfa Dive Drainage Repair Project, Phase 2
ADDRESS	1 Čivic Center Drive.	475 West Bradley El Cajon, CA 92020	601 West Ave. 1 Lancaster, CA 93534	300 N. Coast Highway Oceanside, CA 92054	600 B Street, Suite 800, MS 908 San Diego, CA 92101-4502
APPLICANT	City of San Marcos	East County Sand, LLC	SGM Investments	City of Oceanside	City of San Diego
DATE POSTED ON WEB	4/20/2010	5/4/2010	5/4/2010	5/4/2010	5/6/2010
DATE REC'D	4/8/2010	4/22/2010	4/30/2010	4/30/10	4/19/2010
FILE NO.	10C-029	10C-031	10C-032	08C-078	10C-033

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> Regional Water Quality Control Board Pending 401 Actions

JODY EBSEN (858) 636-3146 MIKE PORTER (858) 467-2726 REGIONAL BOARD CONTACT ALAN MONJI (858) 637-7140 MIKE PORTER (858) 467-2726 ALAN MONJI (858) 637-7140 T RECEIVING WATER BODY San Luis Rey River and Gregory Canyon Mainstem Creek, San Elijo Lagoon, and the Pacific Ocean Upper portion of Viejas Creek San Dieguito Reservoir, Escondido Deschecha Las Flores Creek Prima Canada COUNTY San Diego San Diego San Diego San Diego Orangé facilities including classrooms, indoor and outdoor physical activity facilities, parking constructed. 0.1 acre of wetland water of 473-acre Zone 4. Activities within Zone 4 will include landfill operations, landslide Luis Ray River to handle ingress to and egress from the Gregory Canyon Landfill. Construct the landfill liner (including the landfill face) in the Gregory Canyon A proposed high school development will occur on approximately 49 acres of a 93 acre site. Within the 49 acres school intersection of Aliso Canyon Road and El Camino del Norte and extending north on drain pipes, culverts, curb inlets, catch basins, headwalls, storm drain cleanouts, and associated utility relocations and widen the approach road to the rail road and H5. Widening the H5 undercrossing would consist of clearing the soil material and concrete foundation in front (south) implementation of the Prima Deschecha Landfill (PDL) Zone 4 landfill expansion. The proposed project would widen the I-5 remediation, installation of a stormwater ongoing pre-mitigation efforts. Construct a bridge crossing of the San undercrossing, add an undercrossing of project is expected to start in 2010 and be completed by 2011 and would occur Aliso Canyon road to the T-intersection of the existing abutment and installing a Nine major fill phases of development (Phases A through I) will occur in the the rail road corridor, and improve and with Avendia del Duque. Drainage improvements include removing and replacing existing underground storm lots, football stadium, etc. would be tied-back retaining wall system. The collection and desilting system, and The proposed project consists of drainage improvements along Aliso The proposed project involves the PROJECT DESCRIPTION Canyon Road beginning at the roadway improvements. 時に within 12 months. Mainstern Grossmort Union High School District High School No. 12 Project Prima Deschecha Landfill Zone 4 Expansion Red Beach Operations Access Points (P-159) PROJECT TITLE Gregory Canyon Landfill Project Aliso Canyon Road Improvement Project 5469 Kearny Villa Rd, Ste. 305 San Diego, CA 92123 300 North Flower Street, Box 555008, Bldg. 22165 Camp Pendleton, CA 92055-5088 160 Industrial St. Suite 200 San Marcos, CA 92078 Suite 400 Santa Ana, CA 92703 -1 P.O. Box 1043 La Mesa, CA 91944 ADDRESS APPLICANT Orange County Union High School District Diego Department of Public Works Gregory Canyon, Ltd. LLC County of San Marine Corps Grossmont Base Camp Pendleton (MCBCP) Recycling Waste & DATE POSTED ON WEB 6/10/2010 6/10/2010 6/1/2010 6/1/2010 5/6/2010 DATE REC'D 5/17/2010 5/27/2010 4/29/2010 6/7/2010 5/26/10 FILE NO. 10C-037 . 10C-042 10C-039 10C-041 10C-034

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Regional Water Quality Control Board Pending 401 Actions

2/23/2011

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REGIONAL POARD CONTACT	MIKE PORTER (858) 467-2726	JODY EBSEN (858) 636-3146	JODY EBSEN (858) 636-3146	ALAN MONJI (858) 637-7140
RECEIVING WATER BODY	Unnamed blue line tributary to Kitt Carson Creat Hodges	San Diego Bay	San Diego Bay	Tributaries to San Juan Creek
COUNTY	San Diego	San Diego	San Diego	Orange
PROJECT DESCRIPTION FIGURE CELT DESCRIPTION FIGURE CELT DESCRIPTION FIGURE CELT DESCRIPTION FIGURE CELT DESCRIPTION the US (WOUS) and non wetland WOUS would be figure The contrad ratinge area would be restored and enhanced and ~40 acres placed in open space easement.	Bear Valley parkway from SR-78 to Boyle Avenue would be widened to Major Road standards to include four travel lanes in an approximately 100-took-wide right-of- way, bicycle lanes, shoulders, parkways, sidewalks, turn lanes, and a center median. Proposed drainage improvements include new curb and gutter, curb inlets, extension or replacementy of iour existing reinforced concrete pipe (RCB) or reinforced concrete bipe (RCB) or reinforced concrete pipe (RCB) or reinforced concret	A replacement dock will be floated into the site with the same dimensions as the previous dock (8' x 40' in dock area and a 4' x 22' gangway). The contractor will utilize the three existing 14" round pilings, so no pile diving is necessary. Completion is estimated within 90 days of obtaining permits.	A replacement dock will be floated into the site with the acane dimensions as the previous dock. This includes a 74 <sup>2</sup> by 87 section and a 6 by 12 <sup>2</sup> section. No pile driving is necessary (there are four existing piles). A replacement gangway will be 4 <sup>2</sup> by 20 <sup>2</sup> . Completion is setimated within 90 days of obtaining permits.	The project proposes to repair and prevent roadway losses to use to ension. This will be accomplished through: 1) Removal of excess slide debris material and re-grade roadway shoulder areas to its original condition. 2) The placement of 14 on rook between evisiting slope and the norok bevisiting slope slope slope slope slope slope slo
	Bear Valley Parkway North Wrdening Project	30 Admiralty Cross, Coronado, CA 92118	20 Sandpiper Strand	SR-74 Ortega Highway Storm Damage Emergency 2010
ADDRESS	5469 Kearny Villa Rd, Ste. 305 San Diego, CA 92123	2726 Shetter Island Dr. San Diego, CA 92106	2726 Shetter Istand Dr. San Diego, CA 92106	3347 Michelson Dr. Ste. 100 Irvine, CA 92612
APPLICANT	County of San Diego	M. David Rothschild	Rodolfo Aguilar	Caltrans, District 12
DATE POSTED ON WEB	6/23/2010	6/23/2010	6/23/2010	7/14/2010
DATERECO	6/15/2010	6/22/2010	6/22/2010	6/23/2010
S HE E	10C-044	10C-046	10C-047	10C-053

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Regional Water Quality Control Board Pending 401 Actions

ALAN MONJI (858) 637-7140 REGIONAL BOARD CONTACT MATER BODX 4S Ranch Upper Dam and San Juan Creek Murrieta Creek associated tributaries to Lusardi Creek Unnamed tributary to Santa Ysebel Creek San Maria Creek COUNTY San Diègo Riverside San Diego San Diego Orange will be constructed within the reservoir behind the dam and an outlet structure will be constructed below the dam. Outlet pipes will be constructed between the intake and outlet structure to the north of the dam to convey reservoir The project is stabilization of portions of the eastern road slope and shoulder of Parmo Road, in the unincorporated community of Ramona. Sections of the road slope and shoulder have failed, To Replace the existing outlet works which are inoperable. An intake structure approximately 20 feet downstream of the The proposed project involves replacing an existing cast-in-place concrete, seven-span bridge with a 150-fool-long steel storage ponds within the panhandle area located in the northwestern portion of the study area and a permanent access road to the proposed ponds 3) reconfiguration of the existing spray fields and a construction of two pump stations truss bridge structure, consisting of two steel trusses. The bridge will have two pipe, which is currently exposed in a The proposed project is to: 1) upgrade and expansion of the SMWTP; 2) sections. Road crews stabilized approximately 105 linear feet of slope construction of additional wet weather purpose of the sheet pile will be to provide a long-term protection to the The project will place a subsurface vertical steel sheet pile system pipe within the creek channel. The while failure was imminent in other PROJECT DESCRIPTION concrete pipe in three locations water during drawdown. portion of the channel. and shoulder. Plaint 3A Effluent Transmission Main (ETM) Protection Project San Maria Wastewater Treatment Plant (SMWTP) Expansion Project 4S Upper Dam Outlet Replacement Project PROJECT TITLE Main Street Bridge Replacement Project Ramona Burn Site Bank Stabilization 10815 Rancho Bernardo Road, Suite 310 San Diego, CA 92127 -161 Drive Temecula, CA 92589-9033 27500 La Paz Road Laguna Niguel, CA 92677 43200 Business Park Ste. 305 San Diego, CA 92123 5469 Kearny Villa Rd, 105 Earlham Street Ramona, CA 92065 ADDRESS Ramona Municipal Water District Moulton Niguel Water District APPLICANT County of San Diego Department of Public Works 4S Kelwood General Partnership City of Temecula (MNWD) DATE POSTED ON WEB 7/23/2010 7/26/2010 8/3/2010 8/4/2010 8/3/2010 DATE REC'D 7/23/2010 7/27/2010 8/2/2010 7/1/2010 6/7/2010 10C-057 FILE NO. 10C-063 10C-065 10C-062 10C-056

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abutments with exposed riprap placed

around the abutments for scoul

> Regional Water Quality Control Board Pending 401 Actions

ALAN MONJI (858) 637-7140 CHAD LOFLEN (858) 467-2727 MIKE PORTER (858) 467-2726 JODY EBSEN (858) 636-3146 REGIONAL BOARD CONTACT RECEIVING Creek, a tributary to San Mateo Creek, Talega Creek Temecula Creek San Marcos Creek Chula Vista San Onofre COUNTY Riverside San Diego San Diego San Diego access roads are involved in the access roads are involved in the proposed action. The roads proposed for repair contain surfaces of compact dirt, grevel, and sand in varying conditions of maintenance. The actual improvements Steel Pipeline. Excavation of a 4 foot wide and 5 foot deep trench that will generate 15,000 Cubic Yards of materials, including asphalt, pavement, aggregate base, and riverwash. The The project includes the construction of a bridge at SR-78 to supplement the capacity of the existing culverts under Sam Marcos Creek, existing fill will be removed just downstream of SR-78 to reopen the floodplain and improve flow passage to restore the natural flood passage to restore the natural floodplain functions along San Marcos Creek. The project will disturb south-facing slope on the south side of Main Street (Otay Valley Road) The proposed action is the installation of 750 lineal feet of 12-inch CML&C Welded protection. A buried riprap channel lining will also be installed underneath the bridge across the channel. stabilize 24 existing unpaved access roads throughout the Marine Corps Base Camp Pendleton's training ranges. An access road segments would be subject project will require three weeks for excavation to backfill, and three weeks for backfill to paving. Excavator, backhoe, and dump trucks will be used. Excavated materials will be taken off estimated 54 miles (87 kilometers) of PROJECT DESCRIPTION The proposed action is to repair and would not take place along the entire length of the roads; only intermittent project site and stored until reused o repairs 七部に Pauba Road Pipeline Inter-Tie (Project D1555) State Route 78 Hydraulic Capacity Improvements Project 750 Main Street Chula Vista PROJECT TITLE Repair of 24 Access Roads 42315 Winchester Road Post Office Box 9017 Temecula, CA 92589 Box 555008, Bldg 22165 Camp Pendleton, CA 92055 1 Civic Center Drive San Marcos, CA 92069 2197 Corte Anacapa Chula Vista, CA 91914 ADDRESS APPLICANT Rancho California Water District David Rowland United States Marine Corps City of San Marcos POSTED DATE POSTED DN WEB 8/17/2010 8/17/2010 8/9/2010 8/5/2010 DATERECD , 5/26/2010 8/13/2010 7/29/2010 7/29/2010 10C-068 · FILE NO. 10C-071 10C-072 10C-067

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> Regional Water Quality Control Board Pending 401 Actions

REGIONAL BOARD CONTACT MIKE PORTER (858) 467-2726 MIKE PORTER (858) 467-2726 MIKE PORTER (858) 467-2726 MIKE PORTER (858) 467-2726 Tributaries to San Diego River Waterbodies throughout San Diego County Encinitas Creek ephemeral wash that is tributary Canyon that is tributary to San Dieguito Creek to unnamed intermittent stream in Unnamed Gonzalez COUNTY San Diego San Diego San Diego San Diego provide an earthen cover, then grout filled geo-lextile mattress will be keyed into the banks and bed of the channel. The City is proposing to routinely maintain the existing channels in Murphy Canyon through periodic removal of trash, debris, vegetation, and biologic, aesthetic, and hydrologic values of wetlands with the need to protect human populations and animals form projects that reduce or remove mosquito breeding habitat. Within the wetlands, the primary goal of the VHRP is to portion of the site to reduce the possibility of flooding of the intersection, through the creation of a deepened earthen drainage channel. The channel would be 615 feet long by 85 feet wide and would range 11,000 cubic yards of vegetation removal is proposed to create the main drainage channel, which would extend over an disturbed, of which 0.009 lies within the channel. LS 122 will be cut at both bank implement vegetation removal, sediment removal, debris and trash removal, and eliminate or reduce breeding habitat in a The project proposes to expose the eroded sections of the pipe in the dry wash using a rubber-tired backhoe. An area approximately 0.0018-arre will be manner that balances the water quality, The city proposes to increase flood flow capacity within an approximate 1.7 acre exposed ends. The stream channel around LS 126 will be re-contoured to limits using a hand cutting tool and capped by welding steel plates to the from 4 to 6 feet deep. Approximately wetland enhancement and related DEH will provide grant funding to approximate 2 month period PROJECT DESCRIPTION accumulated sediment. 10月1日の日本語 時間の日本 Vector Habitat Remediation Program (VHRP) Facilities, Map 58 (Murphy Canyon) PROJECT TITLE 122/126 Washout Repair at Sandy's Maintenance of Storm Water Encinitas Creek Drainage Channel Improvements Project Line Section Routine Ranch TALLAND AND 1100 Town and Country 9370 Chesapeake Dr, Ste. 100, MS 1900 San Diego, CA 92123 1255 Imperial Avenue, San Diego, CA 92101 Avenue Encinitas, CA 92024 Road Orange, CA 92868 505 South Vulcan ADDRESS APPLICANT Kinder Morgan Energy Partners Diego, Department of Environmental Health City of Encinitas County of San City of San Diego DATE Posted ON WEB 8/25/2010 8/25/2010 9/8/2010 7/8/2010 DATE.REC'D 8/24/2010 8/23/2010 9/7/2010 6/9/2010 FILE NO. 10C-076 10C-050 10C-077 10C-081

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mosquito-borne disease.

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San Diego Region 9

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REGIONAL BOARD CONTACT	MIKE PORTER (858) 467-2726	JODY EBSEN (858) 636-3146	JODY EBSEN (858) 636-3146	JODY EBSEN (858) 636-3146	MIKE PORTER (858) 467-2726	ALAN MONUI (858) 637-7140	ALAN MONJI (858) 637-7140	
RECEIVING WATER BODY	Gement and earthen drainage channels tributary to the San Diego River	Cement and earthen drainage channels tributary to the San Diego River	Cernent drainage channel and half cernent, half natural bottom tributary to the San Diego Bay	Earthen drainage channels tributary to the San Diego Bay	Carrol Canyon Greek	Unnamed Swale Tributary to Escondido Creek	Pacific Ocean	
COUNTY	San Diego	San Diego	San Diego	San Diego	San Diego	San Diego	San Diego	,
PROJECT DESCRIPTION	The city is proposing to routinely maintain Sorrento channel through periodic removal of trash, debris, vegetation, and accumulated sediments.	The city is proposing to routinely maintain the cement channels near San Diego State University through periodic removal of trash, debris, vegetation, and accumulated sediments.	The city is proposing to routinely maintain the cernent channels along 1-15 under 1-5 through periodic removal of trash, debris, vegetation, and accumulated sediments.	The city is proposing to routinely maintain the cement channels west of I-5 north of Grove Avenue through periodic removal of trash, debris, vegetation, and accumulated sediments.	The proposed project consists of a second main track from Mie Post (MP) 240.8 to MP 251.0 resulting in approximately 6.300 feet of new double track. The project will also result in the replacement of the existing 140 - foot long wooden trestle Bridge 249.9 with a steel deck double track bridge.	The proposed project is the development of 22 lots suitable for single family residences.	The proposed project includes construction of an approximately 256 foot-long, 35-foot high, 2.5 foot thick carved and colored steel-reinforced shotcrete seawall at the base of the bluft fronting five single-family residences below 211–231 Pacific Avenue in Solana	Beach. Activities will include minor trimming of the existing bluff face.
PROJECT TITLE	Storm Water Maintenance, Sorrento Channel Maps 7, 9, 10, 11, 12	Storm Water Maintenance, Alvarado Channel Maps 59, 60, 63, & 64	Storm Water Maintenance, Chollas Channel Maps 91 & 93	Storm Water Maintenance, Nestor Channel Maps 132 & 133	Sorrento to Miramar Double Track Project - Phase 1	Harmony Grove TM 936	211-231 Pacific Avenue Shoreline Stabilization	
ADDRESS	9370 Chesapeake Drive, Suite 100, Ms 1900 San Diego, CA 92123	9370 Chesapeake Drive, Suite 100, Ms 1900 San Diego, CA 92123	9370 Chésapeake Dríve, Suite 100, Ms 1900 San Diego, CA 92123	9370 Chesapeake Drive, Sulte 100, Ms 1900 San Diego, CA 92123	401 B Street, Suite 800 San Diego, CA 92101	11952 Wilshire Blvd. Los Angeles, CA 90025	4325 Livingston Drive Dallas, Texas 75205 215 Pacific Avenue, Solana Beach CA 92075	219 Pacific Avenue
APPLICANT	City of San Diego Storm Water Department	City of San Diego Storm Water Department	City of San Diego Storm Water Department	City of San Diego Storm Water Department	San Diego Association of Governments	Fidelity Mortgage Lender, Inc.	O'Neal Family Trust John Perell	Baker Trust
DATE POSTED ON WEB	9/16/2010	9/16/2010	9/16/2010	9/16/2010	9/21/2010	10/5/2010	10/7/2010	
DATERECD	9/16/2010	9/16/2010	9/16/2010	9/16/2010	9/20/2010	10/1/2010	10/4/2010	
FILE NO.	10C-084	10C-085	10C-086	10C-087	10C-038	10C-091	10C-092	

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> Regional Water Quality Control Board Pending 401 Actions

REGIONAL BOARD CONTACT ALAN MONJI (858) 637-7140 MIKE PORTER (858) 467-2726 MIKE PORTER (858) 467-2726 JODY EBSEN (858) 636-3146 ALAN MONJI (858) 637-7140 RECEIVING WATER BODY Warm Springs Creek, tributary to Murrieta Creek Santa Maria Creek and a tributary to San Vicente Creek tributary to San Dieguito River and the Pacific Unnamed tributary to San Marcos Creek San Diego Bay Unnamed Ocean COUNTY San Diego San Diego Riverside County San Diego San Diego The proposed project is needed to ensure the channel functions adequately for flood control purposes. The channel has been subject to undermining and has detenorated since construction. Several portions of concrete lining are missing or corrugated metal pipe (CMP) with a 117-foot 72-inch reinforced concrete pipe (RCP) culvert to convey the 100-year flow under Del Dios Highway. The replacement culvert would be installed using the jack and bore method so the stabilization, which would replace existing rubble mound revetment (quarry stone, asphalt, and concrete debris), and reinforce it with a concrete barrier. Construction of a medical center in association with construction of Jackson Avenue bridge and connection for through traffic to Cit y of Temecula. construction. The length of the culvert would not change. The new culvert would tie into the existing concrete flume The County proposes to improve an approximately 2.25 mile segment of San Vicente Road that extends from Warnock end within the unincorporated community of Ramona in San Diego County. platform, drilling and installation of steel tied-back anchors, and the application of steel-reinforced shotcrete to the lower bluff. Drive at the northern end to just east of Wildcat Canyon Road at the southern The proposed project is the replacement of an existing 40-inch concrete lined roadway can remain open during The proposed activity is bank PROJECT DESCRIPTION north of Del Dios Highway. severely damaged. PROJECT TITLE Del Dios Highway Romeria Street Drainage Improvement Project 311, 407, 409 First Street Seawall Improvement<sup>-</sup> Project Improvements San Vicente Road Murrieta 18 5555 Overland Avenue, Building 2 San Diego, CA 92123 3 2726 Shelter Island Dr. San Diego, CA 92106 5555 Overland Avenue, 39495 Calle de Campanero Murrieta, CA 92562 Building 2 San Diego, CA 92123 225 Pacific Avenue Solana Beach, CA 92075 231 Pacific Avenue, Solana Beach, CA 92075 1635 Faraday Ave Carlsbad, CA 92008 ADDRESS SLDPR, LLC (407) Ann Goodfellow APPLICANT County of San Diego, Department of Public Works County of San Diego, Department of Public Works (409) Seawall Family City of Carlsbad Bernard L. Truax II Gary Garber Trust (311) Mark Barr DATE POSTED ON WEB 10/28/2010 10/12/2010 10/28/2010 10/20/2010 11/2/2010 10/28/2010 10/19/2010 10/7/2010 10/26/10 10/25/10 . FILE NO. 10C-096 10C-095 10C-098 10C-097 10C-093

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> > 2/23/2011

gazatel			- 0	~ ~ ~ ~
	MIKE PORTER (858) 467-2726	ALAN MONJI (858) 637-7140	JODY EBSEN (858) 636-3146	LINDA PARDY (858) 627-3932
HECENING WATER BODY	Santa Maria Creek and Lake Hodges	Linnamed ephemeral tributary to San Onofre Creek	San Diego Bay	Unnamed drainage channel that drains to Murrieta Creek
COUNTY	San Diego	San Diego	San Diego	Riverside
PROJECT DESCRIPTION	The project consists of drainage improvements on San Vicente Road which will carry storm water from the east side of San Vicente Road for a distance of 200 feet and outfall 200 feet west of the road. The inlet will consist of a head wall and wing wall and a 18" reinforced concrete pipe supplemental inlet on the east side of San Vicente Road located at an unmanned private road south of Barger Road. The 672° underground culvert will be built on the east side of San Vicente Road. The 672° underground culvert will Road for a distance of 200 feet before crossing San Vicente Road just north of San Vicente I Farrace. The culvert will heat travel 200 feet to the west aross a then travel 200 feet to the west aross a then travel 200 feet to the west outfal will consist of a headwall, outfal will consist of a headwall.	The project will access the stream bed to demolish and replace Culvert No. 3 on San Mateo Road, a 48' diameter corrugated metal pipe storm drain culvert embedded in masomy. The pipe spans approximately 220' and has natural field store headwalls at the inlet and outlet. The existing pipe is to be replaced with 4- 222' long, 48' diameter corrugated metal pipes and wingwalls with rip-rap pipes and wingwalls with rip-rap all existing structures and fills followed with replacement.	The proposed work includes construction of two new finger piers for a new 50 metric ion travel lift system, new concrete marginal wharf, a new boatyard paving on grade, existing building improvements and new two-story shop building.	The project would widen the existing Clinton Keith Road overcrossing at 1-15, reconstruct the interchanger amps, and add limited length auxiliary lanes on 1-15; prior to, and after the exit, and entrance ranns.
PROJECT III LE	San Vicente Drainage Improvement Project	Restoration of Culvert No. 3 - San Mateo Road	Nielson Beaumont Marine Boatyard Capital Improvements Project	Interstate 15 and Clinton Keith Road Interchange Improvement Project
ADDRESS	5469 Kearny Villa Rd, Ste. 305 San Diego, CA 92123	Box 555008, Bidg. 22165 Camp Pendleton, CA 92055-5088	2420 Shelter Island Drive San Diego, CA 92106	3525 14th Street Riverside, CA 92501
APPLICANT	County of San Diego Department of Public Works	Marine Corps Base Camp Pendleton (MCBCP)	Nielson Beaumont Marine, Inc.	Riverside County Transportation Department
DATE POSTED ON WEB	11/12/2010	11/12/2010	1/24/2011	11/18/2010
DATE REC'D	11/3/2010	11/4/2010	11/9/2010	11/5/2010
FILE NO.	10C-099	10C-101	10C-102	10C-103

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> Regional Water Quality Control Board Pending 401 Actions

REGIONAL BOARD CONTACT JODY EBSEN (858) 636-3146 CHAD LOFLEN (858) 467-2727 JODY EBSEN (858) 636-3146 ALAN MONJI (858) 637-7140 ALAN MONJI (858) 637-7140 ALAN MONJI (858) 637-7140 ephemeral stream that is a tributary to Rattlesnake Creek Prima Deshecha Creek Outlets at COUNTY RECEIVING Ocean. An unnamed drainage outlet Poche Beach into the Pacific Beach Outlet No. 1 into the Pacific Ocean. San Diego Bay San Diego Bay Escondido Creek at Capistrano Mission Bay Unnamed San Diego San Diego San Diego San Diego San Diego Orange separating undercrossing of Ash Street/SR-78. The crossing under the bridge at Ash Street/SR-78 consists of a 12-foot wide, 6-foot high, and 170-foot long modified reinforced concrete (RC) box culvert that will provide for the PROJECT DESCRIPTION and gangway access to the floating docks at the Bahia Resort, removal of the temporary access dock and gangway, The project involves a 12-foot wide, 584-foot long concrete surface bike path ramp constructed in the southern channel bank of Escondido Creek to create a grade Amendment to the original certification to correct design errors in the previous project. They seek to add a support structure to the piles so the system Identical Replacement of ten (10) steel H-pile fenders on the POSD west mooring replacement of a new access causeway, and mitigation of impacts to eelgrass habitat by on-site eelgrass restoration Beach Outlet No. 1 in the City of Dana Point. The Maintenance regime consists the remaining elements of the failed pier Removal of the HDPE pipe and re-grade property pre-modification conditions pursuant to grading plan based on topographic maps. The proposed project is the removal of under the southern California Eelgrass of semi-annual outlet maintenance and as-needed minor maintenance activities. The project consists of conducting recurring maintenance activities at the Poche Beach Outlet and Capistrano operates correctly. Mitigation Policy. dolphin. Ash Street/SR-78 Bike Path Undercrossing Access Replacement Work at the Bahia Resort Poche Beach and Capistrano Outlet No. 1 Ocean Outlet PROJECT TITLE BAE Systems -Pride of San Diego, Dry Dock Fender System Assessment and Identification of Complete Dock Stream Restoration Plan Susceptibility Maintenance Repair Mine STATES III ADDRESS 998 W Mission Bay Drive San Diego, CA 92101 13042 Old Myford Road Irvine, CA 92602 201 N. Broadway Escondido, CA 92025 Bldg 291 San Diego, CA 92136 Foot of Sampson St San Diego, CA 92113 2730 McKean Street, 14272 Jerome Drive Poway, CA 92064 2205 East Belt BAE Systems San Diego Ship Repair DATE POSTED ON WEB Lori Brown (formerly Moritz) Department of the Navy BH Partnership Bahia Hotel Orange County Parks City of Escondido 12/14/2010 12/14/2010 12/14/2010 11/23/2010 11/18/2010 12/7/2010 DATE REC'D 11/29/2010 12/14/2010 11/15/2010 11/15/2010 12/1/2010 11/24/10 FILE.NO. 10C-109 10C-107 10C-108 08C-034 10C-106 10C-105

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Regional Water Quality Control Board Pending 401 Actions

ALAN MONJI (858) 637-7140 REGIONAL BOARD CONTACT JODY EBSEN (858) 636-3146 ALAN MONJI (858) 637-7140 CHAD LOFLEN (858) 467-2727 San Diego Mesa Hardpan Vernal Pool Tributary to the Batiquitos Lagoon Rose Creek and Rose Canyon Drainage. ephemeral streambed with upland vegetation similar to the upland surroundings A linear 金沢のほうかん COUNTY San Diego San Diego Riverside San Diego Construction of Murrieta Learning Center. Construction will entail clearing of non-native vegetation, ornamental trees, remova of illicit dumping, and installation of storm drain system to direct off-site, flows to existing culvert located off-site, new aircraft fueling lanes that contain two fueling stations each, for a total of eight fueling stations. In addition to the MV-22 CH-53 rotary-wing aircraft and transient C-130 and C-17 aircraft. The new fueling lanes will be constructed of concrete and To prevent pooling water in the area of the localizer the project proposes to raise the grade of the critical area to match the localizer pad elevation as recommended design grade (approximate depth of 5 foot). The goal of removing the sediment in these ponds is to return lost flood graded decomposed granite or similar material to be submitted for approval and testing. Compaction shall be 55% of the will be large enough to accommodate the MV-22 aircraft (85 feet wide by 65 feet by the FAA, and grade to drain away from the critical area. Imported material for fill shall be free of organic and capacity to the ponds and to eliminate odors emanating from algal blooms as a result of the shallow pond depths and The project proposes the construction of excess nutrient input. No existing vegetation would be removed as part of the excavation activities. maximum dry density by ASTM D 1557 and on-site infiltration basin for on-site The project proposes sediment removal within ponds to the aircraft, this facility also will be used by a new fueling facility that will have four construction material and be a well PROJECT DESCRIPTION uninterrupted flow of storm water. flows. Montgomery Field Murrieta Regional Learning Center La Costa Resort and Spa Pond Maintenance Project Miramar MV-22 In-line fueling Facility Construction Project PROJECT TITLE Localizer Remediation Project 「日本」の一部である ADDRESS 600 B Street, Suite 800, MS 908 San Diego, CA 92101-4502 P.O. Box 452001, Bldg. 6022 San Diego, CA 92145-2001 4384 Tequesquite Avenue Riverside, California 92501 2100 Costa Del Mar Carlsbad, CA 92009 Road County of Riverside Office of Education La Costa Resort Marine Corps Air Station Miramar APPLICANT City of San Diego & Spa DATE POSTED ON WEB 12/22/2010 12/22/2010 12/23/2010 12/22/2010 DATE REC'D 12/16/2010 12/8/2010 12/7/2010 12/20/2010 10C-113 10C-112 10C-111 FILE NO. 10C-110 .

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ong). All project related construction

> Regional Water Quality Control Board Pending 401 Actions

CHAD LOFLEN (858) 467-2727 CHAD LOFLEN (858) 467-2727 ALAN MONJI (858) 637-7140 JODY EBSEN (858) 636-3146 REGIONAL BOARD CONTACT Long Canyon Creek and Murrieta Creek RECEIVING WATER BODY tributary to the San Diego River Agua Hedionda Trabuco Creek Unnamed Lagoon COUNTY San Diego San Diego Orange Riverside The project proposes to replace the existing partially underground stormwater drainage system parallel to Woodside Avenue with an upgraded underground drainage system for approximately 1,800 feet and construct two 14, x5 box culvens that would transport surface water flows under State Route 67 (SR 67) for a distance of approximately 340 67) for a distance of approximately 340 PROJECT DESCRIPTION of 4 inches of decomposed granite over 6 inches of aggregate rock base for the up to the entrance of the Cleveland National Forest. The project would also include the installation of two concrete dip constings. The first dip crossing at would replace an existing dip crossing at exist, so no driving is necessary. The dock will be floated in from land using a boom truck. No discharge of dredged or Repair and restore stream bank area altered by erosion before damage occurs along equestrian arena, the roadway at Via Norte, the clubhouse facilities, and Trabuco creek. The second dip crossing An existing 4-fingered, 480 square foot dock will be replaced, in kind, with a pre-fabricated wood/composite dock. Piles The proposed project would improve the existing dirt road, which varies from 11 feet wide to 20 feet wide, by installing a entire, approximately 2.8 mile length of Trabuco Creek Road from the intersection with Trabuco Canyon Road would be constructed to a side drainage consistent, 16-foot-wide road composed fill material involved. Once approved, of Trabuco Creek. Additional road project will begin within 90 days. activities III be conducted within the project footprint. private residential lots. Replacement at 4517/45f9 Cove Dr., Carisbad, CA PROJECT WILE Avenue Drainage Improvement Meadowview Erosion Repair Long Canyon Creek Improvement Project Trabuco Creek Woodside Road Project Dack ADDRESS 5469 Kearny Villa Rd, Ste. 305 San Diego, CA 92123 2726 Shelter Island Dr. San Diego, CA 92106 300 N. Flower Street Santa Ana, CA 92702 41050 Avenida Verde Temecula, CA 92591 County of Orange, Public Works Meadowview Community Association, Inc. Hacienda Cala Homeowners Association APPLICANT County of San Diego DATE POSTED ON WEB 11/18/2011 1/5/2011 1/5/2011 1/6/2011 DATE REC'D 1/18/2011 12/28/2010 1/5/2011 1/1/2011 11C-001 · FILE NO. 11C-003 10C-114 and the second 11C-002

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improvements will be made to a small section of the road to make it 16-foot-

> Regional Water Quality Control Board Pending 401 Actions

ALAN MONJI (858) 637-7140 CHAD LOFLEN (858) 467-2727 JODY EBSEN (858) 636-3146  $\cdot \tau$ ALAN MONJI (858) 637-7140 CHAD LOFLEN (858) 467-2727 REGIONAL BOARD CONTACT 湖湖 RECEIVING WATER BODY ephemeral non-riparian, upland dominated Unnamed tributaries to Tucalota Creek. trībutaries to Warm Springs Creek. and Glass Creek Unnamed tributaries to Canyon Lake. Unnamed tributary to Rattlesnake Creek San Diego Bay Four unnamed tributaries to Glass Creek, Unnamed Escondido Creek San Diego San Diego San Diego Riverside COUNTY Orange The Escondido Unified School District plans to build a new career technology high school on the sile. The new school is designed to serve 800 students in grades 9 through 12. channel bottom, and contouring the banks to a 2:1 slope where easement boundaries allow. Minor grading will occur in a portion of the stream channel. Rip rap and fitter fabric will be placed at the toe of the slope to key-in TRM. The project includes the construction of a park and recreation center over approximately 59 acres. The project includes streambed and bank reinforcements/enhancements along a reach and encompasses areas that need to be stabilized. Measures include TRM The proposed project is to wider State Route 79 form 2 lanes to 4 lanes from Thompson Road to Domenigoni removing and replacing the damaged concrete piles, removing and replacing old timber piles with concrete piles, and installing a new landing, dock float, and wide. The proposed project includes the construction of a gabion structure in this The proposed Nichols Street pier and dock renovation project involves with native vegetation, widening the PROJECT DESCRIPTION Parkway. gangway ocation. State Route 79 Widening Project: Thompson Road to Domenigoni Lake Forest Sports Park and Recreation Center PROJECT TITLE Citracado High School Nichols Street Pier and Dock Renovation Ephemeral Tributary to Rattlesnake Creek Stabilization Project Parkway 25550 Commercenter Drive, Suite 100 Lake Forest, CA 92630 ADDRESS 302 North Midway Drive Escondido, CA 92027 2900 Nichols Street San Diego, CA 92106 3525 14th Street Riverside, CA 92501 13325 Civic Center Poway, CA 92064 Drive APPLICANT County Transportation District Escondido Union High School District Brian Arrington City of Lake Forest City of Poway Riverside DATE POSTED ON WEB 1/28/2011 1/20/2010 1/26/2011 1/27/2011 1/20/2010 DATE RECID 1/27/2011 1/10/2011 1/24/2011 1/18/2011 1/19/2011 FILE NO. 11C-006 11C-007 11C-008 11C-005 11C-004

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> Regional Water Quality Control Board Pending 401 Actions

CHAD LOFLEN (858) 467-2727 ALAN MONJI (858) 637-7140 CHAD LOFLEN (858) 467-2727 REGIONAL BOARD CONTACT Mission Bay in tidal waters at the mouth of Rose Creek Unnamed drainage tributary to Murrieta Creek ephemeral tributary to San Mateo Creek RECEIVING WATER BODY unnamed COUNTY San Diego Riverside San Diego 1-2-2-4 the pipelines. The drainage channel will first be graded to fully expose the pipelines. Sinelding material will be wrapped around the pipelines to reinforce them. Approximately 2 feet of earthen fill will then be placed above the pipelines to cover them, and articulated concrete revetment mats will be placed over this cantilevered box girder bicycle/pedestrian bridge to clear span regulated tidal waters of Rose Creek. and nearly exposed Lines 1028 and 1027. The project is to cover and protect PROJECT DESCRIPTION bridge and east and west bikeway sections will connect the existing western bikeway terminus at Pacific Beach Drive with the eastern terminus along North bikeway segment will involve the installation of a 260 foot long and 16 foot Headcutting from a recently installed box portion of Sempra Energy gas lines 6900, conditions and access to non-automobile The project will entail constructing a connection between two existing bikeway circulation routes in and around Mission Bay Park. Construction of the proposed Native riparian habitat similar to upstream conditions will be planted. culvert upstream, below Santiago Road rissipatiens at either end. Work includes demolition and removal of old structures, excavation, backfill, de-watering existing culvert on Christinaitos Road, a 30" diameter, 125' long corrugated metal The project will allow access to the stream bed to demolish and replace the installation of new structures (upgraded in Temecula has exposed the upper Mission Bay Drive. The proposed pipe with wingwalls and rip-rap energy sections in order to improve safety culvert, wingwalls, rip-rap dissipators) wide cast in place pre-stressed erosion control, BMP Rose Creek Bike Path and Pedestrian Bridge Project Ternecula Pipeline Repair Project replacement and upgrade-Christianitos road, Marine PROJECT TITLE Corps Base, Camp Pendleton Culvert 600 B Street, MS 908A San Diego, CA 92101-4502 ADDRESS 2400 Oakdale Avenue, Chatsworth, CA 91311 Box 555008, Bidg. 22165 Camp Pendleton, CA 92055-5088 California Gas Company (SEMPRA) APPLICANT Marine Corps Base Camp Pendleton (MCBCP) City of San Diego Southern DATE POSTED ON WEB 2/11/2011 2/9/2011 2/7/2011 DATE REC'D 2/10/2011 2/9/2011 2/2/2011 FILE NO. 11C-011 11C-010 11C-009

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> Regional Water Quality Control Board Pending 401 Actions

JODY EBSEN (858) 636-3146 ALAN MONJI (858) 637-7140 ALAN MONJI (858) 637-7140 REGIONAL BOARD CONTACT RECEIVING WATER BODY Agua Hedionda Creek San Diego Bay Pacific Ocean San Diego COUNTY San Diego San Diego 日の生ま Version of the materials onto Oceanside Beach. Dredging will be a hydraufic pipeline dredge. Approvimately 130,000 cubic yards will be used to rebuild the beach in front of North Coast Village and the remainder placed at a site south of Tyson Steet. Dredging is expected to take approximately two weeks. Vegetation that is hanging over/into the desilting basin will be trimmed back, and The proposed project will remove existing pilings and 6,280 square feet of floating docks from the water between Broadway and B Street piers; relocate existing high speed ferry dock to water between Broadway and B Street piers; install guide and support piles and 7,994 square feet of floating docks between Broadway vegetation that is growing within the basin itself will be cut down to above grade level and placed into bins; the basin bottom will be excavated from the access road using a backhoe where excess sediment will be lifted out of the basin and placed into bins; all extracted material will be transported from disposal and Navy Piers; and install concrete Aportion of Oceanside harbor and placing Jacks and eelgrass as habitat enhancement with shallow water area The proposed project is dredging of approximately 260,000 cubic yards of sediment from the Channel Entrance between Broadway and Navy Piers. PROJECT DESCRIPTION at an approved landfill. San Diego Harbor Excursion Redevelopment PROJECT TITLE Carlsbad Canterbury Desitting Basin Maintenance Maintenance Dredging Project Oceanside Harbor た相 1050 North Harbor Drive San Diego, CA 92101 ADDRESS 915 Witshire Blvd. Los Angeles, CA 90017 5927 Priestly Drive, Sulte 110 Carlsbad, Ca 92008 APPLICANT Carlsbad Cantebury HOA San Diego Harbor Excursion U.S. Army Corps of Engineers DATE POSTED ON WEB 2/16/2011 2/23/2011 2/16/2011 DATE REC'D 2/22/2011 2/14/2011 2/14/2011 FILE NO. A. 11C-012 11C-013 11C-014 

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EPA/ROD/R10-89/020 1989

# EPA Superfund Record of Decision:

COMMENCEMENT BAY, NEAR SHORE/TIDE FLATS EPA ID: WAD980726368 OU 01, 05 PIERCE COUNTY, WA 09/30/1989

EXHIBIT NO. 1284 Barker

1282

CONSF 11.2 9/01/89

U.S. Environmental Protection Agency Region 10 Seattle, Washington

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# Commencement Bay Nearshore/Tideflats RECORD OF DECISION





September 1989

### PREFACE

This Record of Decision documents the remedial action plan for contaminated sediments and associated sources within eight discrete problem areas at the Commencement Boy Nearshore/ Tideflats site. The Record of Decision serves three functions:

- It certifies that the remedy selection process was carried out in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act as antended by the Superfund Amendment and Reauthorization Act, and to the extent oracticable, with the National Contingency Plan.
- It summarizes the technical parameters of the remetiy, specifying the treatment, engineering, and institutional components, as well as remediation goals.
- a It provides the public with a consolidated source of information about the site, the selected remedy, and the rationale behind the selection.

In addition, the Record of Decision provides the framework for transition into the next phases of the temedial process, Remedial Design and Remedial Action.

The Record of Decision consists of three basic components: a Declaration, a Decision Summary, and a Responsiveness Summary. The Declaration functions as an abstract for the key information contained in the Record of Decision and is signed by the U.S. Environmental Protection Agency Regional Administrator. The Decision Summary provides an overview of the site characteristics, the alternatives evaluated, and an analysis of those options. The Decision Summary also identifies the selected remedy and explains how the remedy fulfills statutory requirements. The Responsiveness Summary addresses public comments received on the Proposed Plan, the Feasibility Study, and other information in the administrative record.

This Record of Decision is organized into three main sections: the Declaration, the Decision Summary, and Appendicas. Appendix A provides letters of concurrence from the state of Washington and the Puyallup Tribe of Indians, Appendix B consists of the Responsiveness Summary, and Appendix C presents implementation schedules for source- and sediment-related remedial activities in the eight problem areas addressed in this Record of Decision.



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APPENDIX A - LETTERS OF CONCURRENCE

APPENDIX B - RESPONSIVENESS SUMMARY

APPENDIX C - IMPLEMENTATION SCHEDULES FOR SOURCE CONTROL AND SEDIMENT REMEDIAL ACTION

APPENDIX D - REVISED COST ESTIMATE FOR CONFINEMENT OPTIONS

ADVERSE EFFECTS ARE PREDICTED. THE AET APPROACH CAN BE USED TO PROVIDE CHEMICAL-SPECIFIC SEDIMENT QUALITY VALUES FOR THE GREATEST NUMBER AND WIDEST RANGE OF CHEMICALS OF CONCERN IN COMMENCEMENT BAY AND THROUGHOUT PUGET SOUND. AET CAN ALSO BE DEVELOPED FOR A RANGE OF BIOLOGICAL INDICATORS, INCLUDING LABORATORY-CONTROLLED BIOASSAYS AND IN SITU BENTHIC INFAUNAL ANALYSES. AN ADDITIONAL ADVANTAGE OF USING EXISTING AET FOR THE CB/NT SITE IS THAT THE REMEDIAL INVESTIGATION DATA CONSTITUTE A RELATIVELY LARGE PROPORTION OF THE TOTAL DATA SET USED TO GENERATE AET VALUES. THE AET APPROACH HAS ALSO BEEN SELECTED FOR APPLICATION IN OTHER PUGET SOUND REGULATORY PROGRAMS.

THE CALCULATION OF AET FOR EACH CHEMICAL AND BIOLOGICAL INDICATOR IS STRAIGHTFORWARD:

- 1. COLLECT "MATCHED" CHEMICAL AND BIOLOGICAL EFFECTS DATA AT MANY SAMPLING STATIONS, INCLUDING POTENTIALLY IMPACTED SITES AND REFERENCE AREAS.
- 2. IDENTIFY IMPACTED AND NONIMPACTED STATIONS BASED ON STATISTICAL COMPARISONS WITH REFERENCE STATION CONDITIONS.
- 3. IDENTIFY AET USING ONLY NONIMPACTED STATIONS. FOR EACH CHEMICAL AND BIOLOGICAL INDICATOR, THE AET IS IDENTIFIED AS THE HIGHEST DETECTED CONCENTRATION AMONG SEDIMENT SAMPLES THAT DO NOT EXHIBIT STATISTICALLY SIGNIFICANT EFFECTS.

A PICTORIAL REPRESENTATION OF THE AET APPROACH APPLIED TO A DATA SET FOR TWO EXAMPLE CHEMICALS IS PRESENTED IN FIGURE 13. FOR EACH CHEMICAL, THE RANGES OF SIGNIFICANT AND NONSIGNIFICANT SEDIMENT TOXICITY RESULTS ARE SHOWN ALONG A CONCENTRATION GRADIENT. FOR EACH CHEMICAL, THE AET IS SHOWN AS THE HIGHEST CONCENTRATION WHERE NO SIGNIFICANT TOXICITY WAS MEASURED (I.E., THE TOP BAR FOR EACH CHEMICAL). ABOVE THIS CONCENTRATION FOR EACH CHEMICAL, TOXICITY WAS ALWAYS MEASURED (SOLID PART OF LOWER BAR).

DURING THE REMEDIAL INVESTIGATION, AET WERE GENERATED FOR THREE BIOLOGICAL EFFECTS (AMPHIPOD MORTALITY, OYSTER LARVAE ABNORMALITY, AND BENTHIC INFAUNA ABUNDANCES) FOR A DATA SET OF 50-60 STATIONS. FOLLOWING THE REMEDIAL INVESTIGATION, THE AET DATA SET WAS EXPANDED CONSIDERABLY BY THE ADDITION OF OTHER SYNOPTIC DATA SETS FROM VARIOUS AREAS IN PUGET SOUND. THE AET DATA SET USED IN THE FEASIBILITY STUDY TO ESTABLISH SEDIMENT CLEANUP GOALS CONSISTED OF 334 STATIONS, AND INCLUDED DATA FROM OTHER AREAS OF PUGET SOUND. A LIST OF AET USED TO DEFINE THE SEDIMENT QUALITY OBJECTIVES FOR THE CB/NT FEASIBILITY STUDY IS PROVIDED IN TABLE 5. THESE VALUES REPRESENT THE LOWEST AET FOR THE THREE BIOLOGICAL EFFECTS INDICATORS.

THE THREE BIOLOGICAL EFFECTS INDICATORS USED TO DEFINE AET-DERIVED SEDIMENT QUALITY OBJECTIVES FOR THE CB/NT FEASIBILITY STUDY WERE SELECTED BASED ON THEIR SENSITIVITY TO SEDIMENT CONTAMINATION, AVAILABILITY OF STANDARD PROTOCOLS, AND ECOLOGICAL RELEVANCE. THE RESULTANT AET ARE APPLICABLE TO A WIDE RANGE OF RELEVANT BIOLOGICAL EFFECTS, THEREBY PROVIDING PROTECTION AGAINST A WIDE RANGE OF IMPACTS.

BENTHIC INFAUNA ARE VALUABLE INDICATORS BECAUSE THEY LIVE IN DIRECT CONTACT WITH THE SEDIMENTS, THEY ARE RELATIVELY STATIONARY, AND THEY ARE IMPORTANT COMPONENTS OF ESTUARINE ECOSYSTEMS. IF SEDIMENT-ASSOCIATED IMPACTS ARE NOT PRESENT IN THE INFAUNA, THEN IT IS UNLIKELY THAT SUCH IMPACTS ARE PRESENT IN OTHER BIOTIC GROUPS SUCH AS FISHES OR PLANKTON.

THE TEST SPECIES USED IN AMPHIPOD TOXICITY TESTS (RHEPOXYNIUS ABRONIUS) RESIDES IN PUGET SOUND AND IS A MEMBER OF A CRUSTACEAN GROUP THAT FORMS AN IMPORTANT PART OF THE DIET OF MANY ESTUARINE FISHES. AMPHIPODS ARE GENERALLY POLLUTION SENSITIVE, AND SPECIES SUCH AS R. ABRONIUS HAVE A HIGH POLLUTANT EXPOSURE POTENTIAL BECAUSE THEY BURROW INTO THE SEDIMENT AND FEED ON SEDIMENT MATERIAL. THE OYSTER LARVAE BIOASSAY USES A TEST SPECIES (CRASSOSTREA GIGAS) THAT RESIDES IN PUGET SOUND AND SUPPORTS COMMERCIAL AND RECREATIONAL FISHERIES. THE LIFE STAGES TESTED (EMBRYO AND LARVA) ARE VERY SENSITIVE STAGES OF THE ORGANISM'S LIFE CYCLE. THE PRIMARY ENDPOINT IS A SUBLETHAL CHANGE IN DEVELOPMENT THAT HAS A HIGH POTENTIAL FOR EFFECTING LARVAL RECRUITMENT.

#### 7.3 MITIGATING FACTORS

ASSESSMENT OF CHEMICAL CONTAMINATION AND BIOLOGICAL EFFECTS AT THE CB/NT SITE INDICATED THE PRESENCE OF SIGNIFICANT ENVIRONMENTAL AND HUMAN HEALTH RISKS IN SEVERAL AREAS. EVALUATION OF THE NATURE, EXTENT, AND MAGNITUDE OF CONTAMINATION AND BIOLOGICAL EFFECTS AT THE CB/NT SITE INDICATES THAT THE PRIMARY MITIGATION FACTOR INFLUENCING SEDIMENT REMEDIATION DECISIONS IS NATURAL RECOVERY OF THE SEDIMENT ENVIRONMENT.

#### 7.3.1 NATURAL RECOVERY PROCESS

NATURAL RECOVERY OF CONTAMINATED SEDIMENTS IS THE PROCESS WHEREBY THE MAGNITUDE AND EXTENT OF SEDIMENT CONTAMINATION IN THE UPPER SEDIMENT LAYERS IS REDUCED OVER A PERIOD OF TIME FOLLOWING SIGNIFICANT REDUCTION OR ELIMINATION OF CONTAMINANT SOURCES THAT ADVERSELY IMPACT SEDIMENT QUALITY. REDUCTIONS IN SURFICIAL SEDIMENT CONTAMINATION ARE EXPECTED TO RESULT IN CORRESPONDING REDUCTIONS IN ENVIRONMENTAL AND PUBLIC HEALTH

#### NEWLY AVAILABLE DISPOSAL SITES.

#### 10.1 CLEANUP OBJECTIVES

THE OBJECTIVE OF THE SELECTED REMEDY IS TO ACHIEVE ACCEPTABLE SEDIMENT QUALITY IN A REASONABLE TIMEFRAME. THIS OBJECTIVE HAS BEEN DEFINED IN TERMS OF BIOLOGICAL AND CHEMICAL TESTS, AS DESCRIBED IN SECTION 7 AND SUMMARIZED IN SECTION 8.1. AS DESCRIBED IN SECTION 8.2, SAMPLING AND TEST EVALUATION PROTOCOLS FOR ENVIRONMENTAL EFFECTS, AS WELL AS THE AET DATABASE, ARE TO REMAIN CONSISTENT WITH ANY ADJUSTMENTS ADOPTED BY THE PUGET SOUND ESTUARY PROGRAM. BECAUSE THE OBJECTIVE OF THE SELECTED REMEDY IS TO ACHIEVE THE SEDIMENT QUALITY GOAL IN A REASONABLE TIMEFRAME, NATURAL RECOVERY IS INTEGRATED INTO THE OVERALL REMEDY. NATURAL RECOVERY CONSIDERATIONS ARE USED TO IDENTIFY SEDIMENT REMEDIAL ACTION LEVELS THAT DELINEATE SEDIMENTS THAT ARE ALLOWED TO RECOVER NATURALLY FROM THOSE THAT REQUIRE ACTIVE SEDIMENT CLEANUP. THE SEDIMENT QUALITY OBJECTIVE ALSO APPLIES TO SOURCE CONTROL, REQUIREMENTS. MONITORING OF SOURCES AND SEDIMENTS WILL BE USED TO DETERMINE THE EFFECTIVENESS OF SOURCE CONTROLS. HABITAT FUNCTION AND ENHANCEMENT OF FISHERIES RESOURCES WILL ALSO BE INCORPORATED AS PART OF THE OVERALL PROJECT CLEANUP OBJECTIVES. FOR EXAMPLE, THE PHYSICAL CHARACTERISTICS AND PLACEMENT OF MATERIAL USED FOR CAPPING CONTAMINATED SEDIMENTS IN THE MARINE ENVIRONMENT WILL BE REQUIRED TO PROVIDE A SUITABLE SUBSTRATE AND HABITAT FOR AQUATIC ORGANISMS THAT MAY UTILIZE THAT ENVIRONMENT.

#### 10.2 KEY ELEMENTS OF THE SELECTED REMEDY

THE SELECTED REMEDY INCLUDES THE FOLLOWING MAJOR ELEMENTS:

- SITE USE RESTRICTIONS
- SOURCE CONTROL
- NATURAL RECOVERY
- SEDIMENT REMEDIAL ACTION (I.E., CONFINEMENT AND HABITAT RESTORATION)
- MONITORING.

#### 10.2.1 SITE USE RESTRICTIONS

SITE USE RESTRICTIONS CONSIST MAINLY OF PUBLIC WARNINGS AND EDUCATIONAL PROGRAMS INTENDED TO REDUCE POTENTIAL EXPOSURE TO SITE CONTAMINATION, PARTICULARLY INGESTION OF CONTAMINATED SEAFOOD. LOCAL HEALTH ADVISORIES ARE AN INTEGRAL PART OF THE OVERALL REMEDY BECAUSE THE ULTIMATE OBJECTIVE WILL BE ACHIEVED OVER A 15-20 YEAR PERIOD.

#### 10.2.2 SOURCE CONTROL

THE GENERAL CHARACTERISTICS OF SOURCE CONTROL AT THE CB/NT SITE ARE DESCRIBED IN SECTION 8.2.2. IMPLEMENTATION SCHEDULES FOR SOURCE CONTROL ACTIVITIES IN THE EIGHT HIGH PRIORITY PROBLEM AREAS ADDRESSED IN THIS RECORD OF DECISION ARE SUMMARIZED IN APPENDIX C.

THE SUCCESS OF SOURCE CONTROL IS EVALUATED USING MONITORING DATA, TYPICALLY COLLECTED AS PART OF PERMIT REQUIREMENTS. IN ADDITION TO EXISTING SOURCE CONTROL PROGRAMS, ECOLOGY IS DEVELOPING SEVERAL SOURCE-RELATED REGULATIONS AND REQUIREMENTS TO BE IMPLEMENTED STATEWIDE. ECOLOGY REQUIREMENTS THAT ARE SPECIFIC TO PUGET SOUND, AND WHICH MAY BE INTEGRATED INTO SOURCE CONTROL ACTIVITIES, INCLUDE THE FOLLOWING:

- STANDARDS FOR IDENTIFYING AND DESIGNATING SEDIMENTS THAT HAVE ACUTE OR CHRONIC ADVERSE EFFECTS ON BIOLOGICAL RESOURCES OR THAT POSE A SIGNIFICANT HEALTH RISK TO HUMANS
- DEFINITIONS OF ACCEPTABLE SOURCE CONTROL TECHNOLOGIES (I.E., AKARTS) FOR VARIOUS TYPES OF SOURCES (E.G., PULP MILLS, SEWAGE TREATMENT PLANTS, SHIPYARDS, STORM DRAINS)
- ADMINISTRATIVE RULES FOR ESTABLISHING RECEIVING WATER AND SEDIMENT DILUTION ZONES IN THE VICINITY OF WASTEWATER DISCHARGES (THE SEDIMENT DILUTION ZONE IS COMMONLY REFERRED TO AS A SEDIMENT IMPACT ZONE, A SPECIFIC AREA ADJACENT TO A MUNICIPAL OR INDUSTRIAL DISCHARGE WHERE SEDIMENT STANDARDS ARE RELAXED BY PERMIT; SEDIMENT IMPACT ZONES MAY BE ESTABLISHED WHEN TECHNICAL FEASIBILITY, TIME, OR COST LIMITS THE ABILITY OF A DISCHARGER TO COMPLY WITH SEDIMENT STANDARDS)

#### TABLE 5.

### SEDIMENT QUALITY VALUES REPRESENTING THE SEDIMENT CLEANUP OBJECTIVES RELATED ENVIRONMENTAL RISKS

CHEMICAL	SEDIMENT CLEANUP OBJECTIVEA(A)
METALS (MG/KG DRY WEIGHT; PPM)	
ANTIMONY	150B
ARSENIC	57B
CADMIUM	5.1B
COPPER	390L
LEAD	450B
MERCURY	0.59L
NICKEL	
140A,B	
SILVER	6.1A
ZINC	410B
ORGANIC COMPOUNDS (UG/KG DRY WEIGHT; PPB	)
LOW MOLECULAR WEIGHT PAH	5,200L
NAPHTHALENE	2,100L
ACENAPHTHYLENE	1,300A,B
ACENAPHTHENE	500L
FLUORENE	540L
PHENANTHRENE	1,500L
ANTHRACENE	960L
2-METHYLNAPHTHALENE	670L
HIGH MOLECULAR WEIGHT PAH	17,000L
FLUORANTHENE	2,500L
PYRENE	3,300L
BENZ (A) ANTHRACENE	1,600L
CHRYSENE	2,800L
BENZOFLUORANTHENES	3,600L
BENZO (A) PYRENE	1,600L
INDENO(1,2,3-C,D) PYRENE	690L
DIBENZO (A, H) ANTHRACENE	230L 720L
BENZO(G,H,I) PERYLENE	7201
CHLORINATED ORGANIC COMPOUNDS	
1, 3-DICHLOROBENZENE	170A,L,B
1,4-DICHLOROBENZENE	110B
1,2-DICHLOROBENZENE	50L,B
1,2,4-TRICHLOROBENZENE	51A
HEXACHLOROBENZENE (HCB)	22B·
TOTAL PCBS	1,000B,*
PHTHALATES	
DIMETHYL PHTHALATE	160L
DIETHYL PHTHALATE	200B
DI-N-BUYTL PHTHALATE	1,400A,L
BUTYL BENZYL PHTHALATE	900A, B
BIS (2-ETHYLHEXYL) PHTHALATE	1,300B
DI-N-OCTYL PHTHALATE	6,200B

#### PHENOLS

PHENOL	420L
2-METHYLPHENOL	63A, L
4-METHYLPHENOL	670L
2,4-DIMETHYLPHENOL	29L
ENTACHLOROPHENOL	360A

MISCELLANEOUS EXTRACTABLES

BENZYL ALCOHOL	73L
BENZOIC ACID	650L,B
DIBENZOFURAN	540L
HEXACHLOROBUTADIENE	11B
N-NITROSODIPHENYLAMINE	28B

VOLATILE ORGANICS

TETRACHLOROETHENE	57B
ETHYLBENZENE	10B
TOTAL XYLENES	40B

PESTICIDES

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P,P'-DDE	9B
P,P'-DDD	16B
P, P'-DDT	34B
•/•	

A OPTION 2 - LOWEST AET AMONG AMPHIPOD, OYSTER, AND BENTHIC:

AMPHIPOD MORTALITY BIOASSAY А -

OYSTER LARVAE ABNORMALITY BIOASSAY

BENTHIC INFAUNA В

THE	SEDIMENT	QUALITY	OBJECTI	VE FOR	HUMAN	HEA	LTH HZ	AS
BEE	N ESTABLI	SHED AT	150 PPB	FOR PC	BS AT	THE	CB/NT	SITE
ACC	ORDING TO	A METHO	D COMBIN	JING EQ	JILIBF	NUL		
PAR	TITIONING	AND RIS	K ASSESS	SMENT M	ETHOD5	5.		

EPA/ROD/R10-00/516 2000

# EPA Superfund Record of Decision:

# PUGET SOUND NAVAL SHIPYARD COMPLEX EPA ID: WA2170023418 OU 02 BREMERTON, WA 06/13/2000

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#### 9.0 REMEDIAL ACTION OBJECTIVES

#### 9.1 NEED FOR REMEDIAL ACTION

Limited contact with marine sediment and occasional consumption of common seafood species from Sinclair Inlet do not appear to constitute significant human health risks. The most significant finding of the risk assessment is that unacceptable risks are posed to subsistence seafood harvesters relying on seafood collected in Sinclair Inlet as a principal component of their diet. These risks are primarily from the presence of PCBs in tissues of bottom-dwelling fish. Subsistence consumption of seafood with elevated levels of PCBs could expose a person to a chance of both cancer and noncancer health effects.

Although mercury has been found at concentrations above the State cleanup screening level of 0.59 mg/kg in marine sediments throughout much of Sinclair Inlet, a wide variety of marine studies completed during the RI indicate little or no ecological or human health risk from mercury.

Since the OU B risk assessment was completed, additional information has become available showing that mercury levels in rockfish, especially older fish, tend to be considerably higher than have been measured in English sole. This may be because rockfish live longer than sole and can accumulate chemicals for a longer time. The Kitsap County Health Department has issued an advisory recommending against consumption of rockfish from the inlet, and the recent findings are a source of concern. A study of rockfish tissue by Washington State Fish and Wildlife found some mercury concentrations greater than 1 mg/kg. U. S. Food and Drug Administration guidelines require that action be taken to prevent human consumption of fish with concentrations above 1 mg/ kg.

Elevated levels of a variety of chemicals are found in the surface marine sediments of Sinclair Inlet. However, the results of the ecological risk assessment suggest that chemicals in inlet sediments pose only a limited threat to marine life and seabirds preying on marine species. The ecological risk assessment did not confirm the need for remedial action. Some areas that have sediment concentrations of several key inorganic and organic chemicals exceeding the SQS and that are colocated or adjacent to areas with minor adverse bicassay results may be remediated as part of a human-health-based cleanup program. In these locations, an improvement in ecological health is expected.

The results of the baseline human health risk assessment indicate that potential long-term risks associated with fish tissue contamination in Sinclair Inlet are above acceptable levels defined under both the state (MTCA) and federal (Superfund) regulations. The response action selected in this ROD is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment. Such a release or threat of release may present an imminent and substantial endangerment to public health, welfare, or the environment. Consistent with the NCP, EPA policy, and MTCA, remedial action is warranted to address these potential risks.

### 9.2 REMEDIAL ACTION OBJECTIVES

Based on the risk assessment, the following remedial action objectives (RAO5) were developed for marine OU B:

- Reduce the concentration of PCBs in sediments to below the minimum cleanup level (MCUL; defined in Section 9.3) in the biologically active zone (0-to 10-cm depth) within marine OU B, as a measure expected to reduce PCB concentrations in fish tissue
- Control shoreline erosion of contaminated fill material at Site l
- Selectively remove sediment with high concentrations of mercury colocated with PCBs

# 9.3 MINIMUM CLEANUP LEVELS, ACTION LEVELS, AND LONG-TERM CLEANUP GOALS

This section describes the minimum cleanup levels, action levels, and long-term cleanup goals for the remedial alternative selected for marine OU B:

The MCULs represent site-specific concentration limits to protect human health and the environment, conditioned by site-specific circumstances (e.g., sensitive habitats, engineering feasibility, and cost). Achievement of the MCUL in shallow sediment (0-to 10-cm depth) signals compliance with the first RAO listed above.

Action levels are based on a number of factors described below and have been set to define areas of sediments for active remediation and to develop remedial action alternatives.

The concept of area-weighted averaging is widely used in sediment management and is integral to the following discussion. An area- weighted average sediment concentration is similar to a simple arithmetic average of the measured values, except that each individual measured value is weighted in proportion to the sediment area it represents.

The relationship of these criteria to one another and the way in which they are used to define elements of the remedial action (eg., active remediation and monitoring) are described in the following subsections.

#### 9.3.1 Minimum Cleanup Levels (MCULs)

The primary measurable objective for the cleanup of PCBs in OU B sediments is the MCUL of 3 mg/kg OC, as defined by modeling results for natural recovery. The Washington State sediment management standards (SMS) define a reasonable timeframe for achieving cleanup levels as less than 10 years. The current area-weighted average concentration of PCBs in sediments within OU B is approximately 7.8 mg/kg OC. Immediately following cleanup and as a result of active remediation, the area-weighted average concentration of PCBs concentrations over time, primarily as a result of natural recovery is expected to further reduce PCB concentrations over time, primarily as a result of natural deposition of clean sediments that is occurring in Sinclair Inlet. Natural recovery modeling predicts that the MCUL of 3 mg/kg OC can be achieved within the 10-year timeframe. The assumptions used in the natural recovery modeling are documented in the administrative record.

Achievement of the MCUL signals compliance with the RAO to "reduce the concentration of PCBs in sediments to below the minimum cleanup level in the biologically active zone (0-to 10-cm depth)."

#### 9,3.2 Action Levels

Action levels have been set to define areas of sediments for active remediation and to develop the remedial action alternatives. The action levels are summarized in Table 9-1. These action levels were developed based on consideration of the following factors:

- Whether the action levels will result in OU B sediments achieving established and anticipated sediment quality goals, considering the effects of natural recovery
- Whether the action levels are consistent with actions being contemplated for other marine sediment cleanups in the region
- Whether the action levels are cost effective, optimizing the reduction of risk for the money spent
- Whether implementation of cleanup actions at the action levels is practicable, considering the technical challenges of remediating large volumes of sediment

#### Action Levels for PUBs

Action levels for PCBs are based on the carbon-normalized total PCB concentrations in surface sediments (i.e., the sum of the concentrations of all PCB congeners, divided by the organic carbon concentration). Taking action to remediate sediments containing PCBs above a given action level will result in a reduction in the area- weighted average PCB concentrations in surface sediments. It is assumed that, over time, reductions in area- weighted average PCB concentrations in surface sediments will result in a corresponding decrease in both marine tissue PCB concentrations and the resultant predicted human health risk.

Development of action levels for dredging of PCBs in sediments included an analysis of the costs associated with the relative risk reduction that would be anticipated. The relative cost-effectiveness of dredging to successively lower action levels was defined as the incremental reduction in areaweighted average PCB concentrations divided by the incremental volume of sediment requiring dredging. The relative cost-effectiveness decreased significantly at PCB action levels below 14 mg/kg OC. A PCB action level of 12 mg/kg OC was selected to identify areas of sediment to be dredged, which provides a degree of conservatism below the cost-effectiveness threshold. The PCB action level of 12 mg/kg OC is consistent with the Washington State SQS criterion and generally falls within the range of other regional marine sediment cleanup actions.

Dredging and disposal is not considered cost-effective at PCB levels below 12 mg/kg OC. However, additional lower cost actions were considered to address areas of intermediate PCB concentrations and accomplish further risk reduction in response to resource agency concerns. A PCB action level of 6 mg/kg OC was selected to identify areas of sediment in which enhanced natural recovery actions would be considered (as accomplished by thin-layer capping). This action level is an intermediate value between the dredging action-level and reference-area concentrations and is consistent with criteria reportedly under consideration by resource agencies. However, as explained in Section 10, navigational requirements of the Naval Complex restrict the areas in which thin-layer capping can be implemented.

These action levels for PCBs are designed to address the areas in which remediation will provide the greatest reduction of risk for the money spent. Combined with incidental removal of PCBs accomplished by the planned navigational dredging and considering the effects of natural recovery, remediation of PCBs at these action levels is predicted to result in attainment of the MCUL of 3 mg/kg OC within 10 years.

#### Action Level for Mercury

The remedial action objective for mercury is to selectively remove sediments containing the highest concentrations of mercury that are colocated with elevated PCB concentrations. Existing mercury concentrations in sediments will be reduced as a result of remediating PCBs, because many of the areas of sediment with the highest mercury levels coincide with areas where PCBs exceed the remedial action levels. By focusing additional mercury remediation on areas containing elevated concentrations of both mercury and PCBs, the greatest overall risk reduction can be achieved.

The Navy, Ecology, and EPA selected a combined action level of 3 mg/kg mercury and 6 mg/kg OC PCBs to accomplish the remedial action objective for mercury. Applying this action level, sediment management units would be dredged in which mercury concentrations exceed 3 mg/kg and PCB concentrations exceed 6 mg/kg OC. This action level was developed after analyzing the spatial distribution of both mercury and PCBs and considering the areas already targeted for cleanup as a result of the PCB action levels. This action level was based primarily on the practicability of remediating the additional volume of sediments. At lower action levels, constraints on access to dredging areas and limitations on the construction season for in-water work rendered the additional cleanup work impracticable.

#### Use of Action Levels in Developing Alternatives

Remedial alternatives were developed based on implementing the action levels, using the sample results / within each sediment management unit. However, the need for active remediation within each specific sediment management unit is determined on a case-by-case basis by considering such practical factors as vessel moorage requirements, depth requirements in navigational areas, slope stability considerations, and safety issues. These considerations are discussed further in Section 10.

#### 9.3.3 Cleanup Goals

MTCA establishes that if the risk-based cleanup goals are less than natural background, enforcement will be at the natural background level. MTCA acknowledges that some persistent organic compounds (e.g., PCBs) are found in surface soils and sediment throughout much of the state as a result of the global use of these substances.

Insufficient information was available to develop defensible risk-based cleanup goals within the timeframe of this early action ROD. Until such a risk-based goal can be developed the conservative approach of basing cleanup goals for both sediment and fish tissue on reference-area concentrations (i.e., natural background) has been adopted, consistent with MTCA. Use of reference-area concentrations is protective of human health, as this will result in no excess cancer risk, compared to background conditions, and no increased potential for noncarcinogenic health effects, compared to background conditions.

For PCBs in fish tissue (as represented by English sole), the cleanup goal is the reference-area concentration of 0.023 mg/kg wet weight. This reference- area concentration represents the 90th percentile concentration of PCBs in English sole collected from nonurban embayments.

For PCBs in Sinclair Inlet sediments, the cleanup goal is the reference-area concentration of 1.2 mg/kg OC, based on an area-weighted average. The reference-area concentration represents the 90th percentile concentration of PCBs in sediments collected from approved Puget Sound reference areas.

These long-term cleanup goals represent a conceptual target condition for all of Sinclair Inlet sediments and fish tissue and represent ideal "clean" conditions (i.e., no acute or chronic adverse biological effects and no significant human health threat). Monitoring of sediments and fish tissue will continue even if the RAOs are achieved until either of the cleanup goals is met, or the Navy, Ecology, and the EPA agree that the monitoring program is no longer providing useful information.

Table 9-2 presents the MCULs and cleanup goals for OU B. Remedial alternatives were developed for marine OU B with the objective of attaining these MCULs and contributing to meeting the cleanup goals.

		Tal	ole 9-1			
Action	Levels	for	Marine	ΟU	в	Sediments

Chemical of Concern	Response Action	Action Level a	Basis of Determination
PCBs	Dredging and disposal or in situ capping	>12 mg/kg OC PCBs	Relative risk reduction Sediment quality standard
PCBs	Enhanced natural recovery	>6 mg/kg OC PCBs	Resource agency concern and relative risk reduction
Mercury	Dredging and disposal	<pre>&gt;6 mg/kg OC PCBs and &gt;3 mg/kg mercury</pre>	Resource agency concern and practicability

a Exceptions are noted in Section 10.

Notes:

mg/kg OC - milligram per kilogram organic carbon PCB - polychlorinated biphenyl

Minimum Cleanup Levels and Long-Term Cleanup Goals for Marine OU B

Point of Compliance	Biologically active zone (0 to 10 cm) Sinclair Inlet		English sole from Sinclair Inlet	
Basis of Determination	90th percentile of Biologically reference-area active zone concentrations 10 cm) Sinclé Inlet		90th percentile of reference-area	concentrations
Cleanup Coal	<pre>1.2 mg/kg OC (based on the area-weighted average)</pre>		0.023 mg/kg wet weight	
Point of Compliance	Biologically active zone (0 to 10 cm) marine OU B			
Basis of Determination	Natural recovery modeling			
Richt.	3 mg/kg OC (based on the area- weighted average)			
Chemical of Concern Sediments	Total PCBs	ti sh ti ssne 200	Total PCBs	

Notes:

-- not applicable

mg/kg - milligram per kilogram OC - organic carbon PCB - polychlorinated biphenyl MCUL - minimum cleanup level cm - centimeter

Table 9-2

Page 1

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

# SAN DIEGO REGION

)

IN RE THE MATTER OF

TENTATIVE CLEANUP AND ABATEMENT ORDER NO. R9-2011-0001

# DEPOSITION OF CRAIG CARLISLE

Volume I, Pages 1 - 148

San Diego, California

February 9, 2011

Reported By: Anne M. Zarkos, RPR, CRR, CSR No. 13095

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2	SAN DIEGO REGION
3	
4	IN RE THE MATTER OF
	TENTATIVE CLEANUP AND ABATEMENT )
	ORDER NO. R9-2011-0001 )
7	)
8	
9	
10	
11	
12	DEPOSITION OF CRAIG CARLISLE,
13	taken by the Attorney for NASSCO, commencing at the hour
14	of 1:04 p.m. on Wednesday, February 9, 2011, at
15	600 West Broadway, Suite 1800, San Diego, California,
16	before Anne M. Zarkos, RPR, CRR, CSR No. 13095, Certified
17	Shorthand Reporter in and for the State of California.
18	
19	
20	
21	
22	
23	
24	
25	

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1 **APPEARANCES:** 2 For the State Water Resource Control Board: 3 STATE WATER RESOURCES CONTROL BOARD BY: CHRISTIAN CARRIGAN, ESQ. P.O. Box 100 4 Sacramento, CA 95812-0100 916-322-3626 5 6 For National Steel and Shipbuilding Company: 7 LATHAM & WATKINS, LLP BY: JEFFREY P. CARLIN, ESQ. KELLY E. RICHARDSON, ESQ. 8 600 West Broadway, Suite 1800 San Diego, CA 92101 9 619-236-1234 10 For the Port of San Diego: 11 BROWN & WINTERS BY: WILLIAM D. BROWN, ESQ. 12 120 Birmingham Drive, Suite 110 13 Cardiff-by-the-Sea, CA 92007 760-633-4485 14 -and-15 PORT OF SAN DIEGO LESLIE FITZGERALD, ESQ. 16 BY: 3165 Pacific Highway 17 San Diego, CA 92101 619-686-7224 18 For Star & Crescent Boat Company: 19 OPPER & VARCO, LLP 20 SUZANNE R. VARCO, ESQ. BY: 225 Broadway, Suite 1900 21 San Diego, CA 92101 619-231-5858 22 23 24 25

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		P	age 6
1		CRAIG CARLISLE,	
2	having fir	st been duly sworn, testified as follows:	
3		***	
4		EXAMINATION	
5	BY MR. CARLIN	:	
6	Q. Good	afternoon, Mr. Carlisle. We've introduced	
7	ourselves off	the record. But my name is Jeff Carlin,	
8	and I represe	nt NASSCO in these proceedings.	
9	Can	you please state and spell your name for the	Э
10	record.		
11	A. Crai	g Carlisle. C-r-a-i-g, C-a-r-l-i-s-l-e.	
12	Q. Have	you ever been deposed before?	
13	A. Yes.		
14	Q. How	many times?	
15	A. Twic	e.	
16	Q. When	was the most recent time?	
17	A. It w	as over 15, 20 years ago.	
18	Q. Okay	. I'm going to come back to that later.	
19	Give	n that it's been a while you are familia:	r
20	with the proc	ess, but it has been a while. So I'd like	
21	to go over th	e procedures and rules that will help to	
22	make things g	o smoothly today.	
23	We h	ave a court reporter who's going to take	
24	down everythi	ng that we say. With that in mind, it's	
25	important tha	t we don't talk over one another. So I'd	

ask that you wait for me to finish my question before you 1 start your response. And likewise, I'll wait until you 2 finish your response before I ask another question. 3 Because the court reporter is taking down 4 5 everything we say, it's also important that you answer audibly; for example, with a "yes" or a "no" rather than 6 shaking your head or saying "uh-huh" and so forth. 7 Do you understand? 8 9 Ά. Yes. If you do not hear a question, please let 10 0. Okay. me know, and I'll be happy to repeat it. I'll try and 11 rephrase it to make it more clear for you. 12 If you do answer a question, I'll assume that 13 you understood it. Is that okay? 14 15 Α. Yes. 16 From time to time you may hear other lawyers Ο. 17 register objections. Those are for the record, and they'll be ruled on later by a fact finder or a judge. 18 Unless your attorney instructs you specifically not to 19 20 answer, you are still required to answer the question 21 after the objection has been made. Do you understand? 22 23 Α. Yes. Although this is a relatively informal setting, 24 Ο. your testimony has the same effect as if it was made in a 25

Page 7

court of law subject to the penalty of perjury. 1 2 Do you understand? 3 Α. Yes. After the deposition is finished today, the 4 Q. 5 court reporter will prepare a transcript. You'll have a chance to review that transcript and make any corrections 6 7 you believe are necessary. However, the usual caution is that if you make a 8 9 change of a substantive nature, that can be commented upon later at a hearing in this matter and at time of 10 11 trial with respect to your credibility. Do you understand? 12 13 Α. Yes. If you need to take a break at any time today, 14 Q. 15 just let me know, the attorney that's asking you know. 16 We'll be happy to accommodate that request as soon as the 17 pending question has been answered. 18 Α. Thank you. Is there any reason you can think of that you 19 Ο. 20 can't give your best testimony today? Α. 21 No. You're not taking any medication or drugs that 22 Ο. would affect your ability to answer fully and accurately? 23 24 Α. No. 25 You're here today to testify with respect to 0.

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your role as a member of the San Diego Regional Board's 1 cleanup team for Tentative Cleanup and Abatement Order 2 No. R9-2011-1 and the accompanying Draft Technical 3 Report. I'll refer to those documents as "CAO" or "DTR." 4 When I do so, I'm referring to the most recent version of 5 those documents unless I indicate otherwise. 6 7 Is that agreeable? Α. Yes. 8 As we explained a little bit, I'll also be 9 0. referring to the Shipyard Sediment Site or "Site." When 10 I do so, I'm referring to the adjoining leaseholds of 11 NASSCO and BAE Systems as defined as the Shipyard 12 Sediment Site in the DTR and CAO. 13 14 Is that okay? 15 Α. That might raise a little question. Because 16 their leaseholds don't cover what we call the Shipyard 17 Sediment Site, which includes some step-outs on the extent of the investigation. 18 19 Q. Fair enough. 20 When I refer to the site, it will be as defined in the CAO and DTR. Is that workable? 21 22 Α. Yes. 23 As I mentioned, there have been what's been Q. designated as master exhibits in this proceeding. 24 Those 25 are exhibits that the parties assume will be used in all

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Page 10 the depositions in this proceeding. 1 2 For example, Master Exhibit 1 is the current version of the CAO. Master Exhibit 2 is the DTR. We may 3 also introduce other exhibits specific to your 4 deposition. Those will begin with Exhibit No. 1000. 5 Is that clear? 6 7 Α. Yes. Are you ready to go ahead and get started? 8 Q. MR. BROWN: I have one question. Who's on the 9 speaker phone? 10 11 MR. CARLIN: Jill Witkowski is on the phone on 12 behalf of Coastkeeper. Are you with us, Jill? 13 MR. BROWN: I heard her come in, and it didn't 14 work. 15 MR. CARLIN: Jill? MS. WITKOWSKI: Yeah, I'm here. 16 17 MR. CARLIN: Can you hear us? 18 MS. WITKOWSKI: Yes. 19 MR. CARLIN: Okay. 20 BY MR. CARLIN: 21 Did you meet with anyone to prepare for your Q. deposition today? 22 23 Α. Yes. 24 Who did you meet with? Q. 25 Α. Cris Carrigan.

		Page
1	Q.	When did you meet?
2	Α.	We met yesterday, and we met about two weeks
3	ago.	
4	Q.	Did you have any other meetings?
5	Α.	Regarding the deposition?
6	Q.	Correct. Any other meetings with Mr. Carrigan
7	to prepa	re for the deposition?
8	Α.	Not that I recall.
9	Q.	When you met yesterday, was anybody else
10	present?	
11	Α.	No.
12	Q.	When you met two weeks ago, was anybody else
13	present	aside from you and Mr. Carrigan?
14	Α.	Yes. Some of the other cleanup team.
15	Q.	Do you recall which members?
16	Α.	Probably David Barker, Tom Alo, Julie Chan.
17	Q.	When you met yesterday, did Mr. Carrigan show
18	you any	documents to prepare for your deposition today?
19	Α.	Yes.
20	Q.	Which documents were those?
21	Α.	The DTR, CAO, and I believe one of the other
22	interrog	atories. I can't remember which one. It was a
23	response	e to an interrogatory, I believe.
24	Q.	Do you believe it was Star & Crescent's response
25	to an in	iterrogatory?

11

A. Perhaps. It was a legal-looking document with a
 lot of lease things in it.

Page 12

Q. Other than the CAO, the DTR, and the document you just described regarding Star & Crescent, did Mr. Carrigan show you any other documents to get ready for the deposition today?

7 A. Not that I recall.

Q. And same question with respect to the meeting you had two week months ago. Did Mr. Carrigan show you any documents at that meeting?

11 A. I don't think so.

12 Q. You can't recall any documents at that meeting?13 A. I don't recall any specific documents.

Q. Outside of your meetings with Mr. Carrigan, did you review any other documents to get ready for your deposition today?

A. I glanced through, again, the two documents, the DTR and the CAO, and some of our responses to the interrogatories.

20 Q. You say, "Some of our." Some of the cleanup 21 team's responses?

A. The cleanup team's responses, yeah, some of thediscovery responses.

Q. That were served by the cleanup team in this proceeding?

Page 13 That were served to the cleanup team? Is that 1 Α. how it works? I don't know the right legal term. 2 Well, I was just --3 Ο. The documents we wrote in response to discovery 4 Α. 5 requests. That clarifies. Ο. 6 Did you bring any of those documents with you 7 8 today? 9 Α. No. I'd like to go ahead and mark as Exhibit 1000 10 Ο. the NASSCO Second Amended Notice of Videotaped Deposition 11 of Craig Carlisle. 12 (Exhibit 1000 was marked.) 13 BY MR. CARLIN: 14 If you could take a moment to familiarize 15 Ο. 16 yourself with that, Mr. Carlisle; and particularly, the 17 document requests starting at page 3. I believe I'm familiar with this. 18 Α. You've seen that document before? 19 Ο. 20 Α. Yes. And did you conduct a search for any documents 21 Q. 22 in your possession, custody, or control that are responsive to the document requests included on this 23 notice? 24 25 Α. Yes.

Page 14 What did you do to search for those documents? 1 0. I looked through my emails in GroupWise. 2 Α. Ι looked through the shared drives on our internal storage 3 And I looked through the C and D drives on my own 4 area. 5 computer, my work computer. With respect to your search of your email files, 6 Ο. 7 how did you go about doing that? I looked in the folder that says "Shipyard 8 Α. Sediment." 9 You maintain an archive? 10 Ο. MR. CARRIGAN: Let me just take this opportunity 11 to caution. Let him finish the question fully, and then 12 you can answer fully, and he'll try not to step over you. 13 But it makes it easier for the court reporter. 14 THE WITNESS: Okay. 15 16 MR. CARRIGAN: And then also just to pause to allow me to interject an objection in case I want to. 17 THE WITNESS: All right. 18 MR. CARRIGAN: Thank you. Do you remember the 19 20 question? 21 THE WITNESS: No. 22 MR. CARRIGAN: Okay. BY MR. CARLIN: 23 We were just talking about how you conducted 24 Ο. 25 your search for documents that may have been located on

Page 15 your email system. And I believe you testified that you 1 searched a folder or a file for the Shipyard Sediment 2 Site. Is that correct? 3 Α. Yes. 4 5 And I was just asking, do you maintain an email Ο. archive for this matter? Is that what you're referring 6 to? 7 I don't call it an archive. GroupWise allows Α. 8 9 you to set up various folders to sort emails into. And that's what I searched, is any folders that I might have 10 put emails into besides the inbox folder. 11 How do you typically determine which emails you 12 Q. send to that folder? 13 Well, if it's regarding the shipyard site, I put 14 Α. 15 it in the shipyard folder. 16 0. You send all emails you receive into the --17 regardless of the matter into the shipyard folder? They would either be in the inbox or the 18 Α. shipyard folder or the deleted folder. 19 20 Q. How do you determine whether you're going to delete emails in this matter? 21 If it looks like it's worth saving, I would save 22 Α. it initially. If it looks like it's just being CC'ed in 23 the routine course of business and it was intended for 24 others to act on or consider, I would typically delete 25

Page 16 1 them. Does the Regional Board have an email retention 2 0. policy that you follow on your duties there? 3 Α. No. 4 So the determination whether or not to preserve 5 0. or delete emails is a decision you make individually? 6 Α. Yes. 7 If you delete emails, is it your practice to 8 Ο. 9 print out and retain hard copies first? 10 Α. No. You mentioned that the -- well, first, do you 11 0. maintain a hard-copy file for your work on this matter? 12 Was that a question? 13 Α. Yes. I can repeat it. 140. 15 Do you maintain a hard-copy working file for 16 your work on the Shipyard Sediment Site project? I don't refer to it as a hard-copy working file. 17 Α. I have various documents laying around. 18 And you keep those in your office? 19 0. 20 Α. Yes. And however you group those documents, did you 21 Q. search those when you were looking for responsive 22 documents to this deposition notice? 23 Α. 24 Yes. 25 You also mentioned you searched your shared Ο.

drive. Can you explain how the shared drive system works for me? A. Yes. Most of the office has access to a number of folders on a shared drive. We call it the S drive. And there's a NASSCO/BAE area on there that has a lot of

6 folders and documents.

Q. And is there a policy either by the
Regional Board or the cleanup team as far as which
documents make it to the shared drive?

10 A. No official policy, no.

11 Q. Have you had occasion to send documents to that 12 shared drive in the course of your duties on the cleanup 13 team?

14 A. I've stored documents on the shared drive.

15 Q. How do you make that decision?

16 A. If I think it's something worth putting on the 17 shared drive based on the potential for others to want it 18 or me to know where it is.

19 Q. And again, that's a decision you make 20 individually?

21 A. Yes.

Q. And then you said you also searched your localdrive on your computer.

24 A. Yes.

25 Q. Did you bring any documents here today?

Page 18

1 A. No.

Q. Did you locate any documents during your search that were responsive to the categories in the deposition subpoena?

A. None that weren't already in the record.
Q. And how did you determine whether or not they
were already in the record?

A. Well, I was instrumental in preparing the 9 record. So I'm pretty familiar with -- basically, we put 10 everything we could possibly find related at all to the 11 shipyard matter into the administrative record years ago.

Q. Can you give me a sense of how many documents your search results that would have been responsive to the deposition subpoena but which you determined were already included in the record?

A. Not without you giving me a time period.
Q. Well, I'm just focusing on a time period -A. Since --

Q. I'm focusing on document requests in the
 deposition subpoena.

A. So you're saying since February 9th and 10th, 2011, how many documents did I run across that might have been responsive to this but are already in the record?

25 Q. Not since that time period. Since you conducted

your search for records, how many documents would have been responsive to these document requests but which you felt had already been placed in the administrative record?

A. And you're saying post this date?
Q. No, not -- I'm talking about -- well, your
search, obviously, was post this date because that's when
the deposition subpoena came in and you had to conduct
the search. Is that clear?

A. That's clear. But I guess what's -- what I want to convey is that since -- and I don't even remember what year we started compiling the administrative record.

13 But since that time, any time anybody on the shipyard team has found a document that isn't in the 14 record, we flag it and either put it in the record or 15 16 flag it to be put in the record with the next update. So it's been an ongoing process. It wasn't like we weren't 17 doing it and then we got the deposition notice and we all 18 of a sudden did a search for documents that aren't in the 19 20 record.

Q. Okay. Well, there's two different issues. I just want to be clear with my questioning. One issue is the cleanup team's development of the administrative record for this proceeding. And we'll talk about that a little bit later on.

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The second question is these specific document 1 2 requests in the deposition subpoena asking for, specifically, information you may have responsive to the 3 request. And so I'm just trying to get a sense of what 4 you did to look for documents in response to the 5 deposition subpoena and anything that you found that may 6 have been responsive, just to see what you did. 7 Α. Okay. I understand the distinction now. Again, 8 9 I looked through any emails I might have still had. I don't mean to cut you off. You said you 10 Ο. looked through documents and you found some that you 11 thought were responsive to these categories of requests; 12 is that right? 13 14 Α. Yes. Okay. And you also said that you thought all 15 Ο. 16 those documents were already included in the 17 administrative record. 18 Α. Yes. So I was asking you if you had a sense of the 19 0. 20 number of documents that you found that you think were 21 already included in the record. 22 Five or ten, maybe 10 to 20 at the most. Α. 23 And can you give me a sense of the types of 0. documents that you found? 24 Yes. One was a 1972 Regional Board report. 25 Α. Ι

Page 20

1 found it on the hard drive, the administrative record 2 hard drive. The DTR, the CAO, our responses to some of 3 the discovery requests.

Inspection reports, I found on the hard drive 4 that were notices of violation or letters or inspection 5 letters and responses from the Regional Board to the 6 shipyards, one or more, BAE or NASSCO or Southwest Marine 7 at the time regarding things the inspector found at the 8 site, of things we found in their monitoring reports that 9 were violations, those sort of documents. A lot of them 10 that I'm -- 15 to 20, 10 to 20 I mentioned, most of them 11 was because I was perusing the hard drive. So I knew 12 they were already in the record. 13

Q. What is your practice with respect to retaining any notes that you have for meetings or otherwise with respect to your work in this matter?

For all matters, I periodically purge them when 17 Α. I think they're no longer needed, with no set schedule. 18 When you say "purge," what do you mean by that? 19 Ο. 20 Α. Shred them or recycle them. We may come back to this record issue a little 21 Ο. 22 I would like to move on at this point. bit later. First, are you aware that certain parties to 23 this proceeding, including the cleanup team, are parties 24 25 to a mediation regarding the CAO and DTR?

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Page 22

1 A. Yes.

2 Q. And do you understand that any communications 3 made in the context of that mediation are privileged and 4 confidential?

5 A. Yes.

Q. And do you understand you're not to disclose the
substance of any of those communications during the
deposition here today?

9 A. Yes.

10 MR. BROWN: I'm going to object. You've used 11 the word "our." Because being in the mediation, I 12 understand the cleanup team is not participating in the 13 mediation at this time.

MR. CARLIN: Counsel, I understand there may be disagreement about to what extent the mediations continued as we discussed at the last deposition. But I understand that you made an objection.

18 BY MR. CARLIN:

19 Q. Let's go ahead and talk about your background at 20 this point. Can you describe all of your formal 21 education beyond high school?

A. Yes. I went to the University of California at Santa Barbara and got a B.A. in economics and a minor in mathematics. And then I went to Santa Barbara City College and took two years of geology, geophysics,

Page 23

1 physics.

Then I went to University of California Santa 2 Barbara graduate school and got a master's degree in 3 geological sciences. And then I took postgrad work at 4 Wright State University in Ohio in hydrology. And then I 5 got an MBA from Cal State San Marcos. And I took MBA 6 7 classes at San Diego State. And then ongoing, I've taken various trainings, 8 technical trainings, work-related, in both the 9 oil-exploration fields and the environmental field for 10 11 the last 25 years or more, just ongoing continuing education, various seminars and short courses. 12 13 Going back to your B.A. in economics, when did Ο. 14 you earn that degree? 1983. Α. 15 And what university was that from again? 16 0. It was '83. University of California at 17 Yeah. Α. Santa Barbara. 18 And then you said you started some studies at 19 Q. Santa Barbara City College for about two years. 20 21 Α. Yes. Was that roughly the time period of 1983 to 22 Q. 23 1985? Yes. 24 Α. 25 And then you obtained a master's degree in 0.

Page 24 geology after that; correct? 1 Right. I got the dates wrong. Can I back up? 2 Α. Ο. Please do. 3 I got the B.A. in '74. I was lying about my 4 Α. age, apparently. And then I went after -- actually, five 5 years to get the B.A. Then I went two years to 6 City College and then roughly four years in grad school 7 at UCSB in geology to get a master's degree. The 8 master's was '82. 9 And then you did some postgraduate work at 10 Ο. Wright State? 11 12 Α. Yes. And did you obtain a degree from those studies? 13 Q. 14 Α. No. What time period were your studies there? 15 0. 16 Α. That was just one year, one semester. And what year did you obtain your MBA at 17 0. Cal State San Marcos? 18 Α. 1999. 19 20 Q. And you said you did some MBA work at SDSU as well. Was that --21 22 Prior to when --Α. 23 Again, if you can wait until I finish my Q. question. If you can wait, it just helps clean up the 24 25 record.

Page 25 So I was asking you about your MBA work at 1 2 San Diego State, what years you took courses there. That was prior to '99. 3 Α. Do you have a sense of how many years prior? Ο. 4 5 I'm just trying to get a time frame. Actually, I took MBA classes at San Diego State. 6 Α. I think it was around 1989, 1990. 7 And you mentioned you had some other classes 8 0. 9 you've taken, some professional classes outside of the university or graduate school context; is that correct? 10 Α. Yes. 11 And I think you broke them down to two fields, 12 Ο. 13 oil exploration and generally in the environmental field; is that right? 14 Α. Yes. 15 16 When you said the classes regarding the Q. environmental fields, can you elaborate on what type of 17 classes you took, where you took them, and the type of 18 issues that were involved? 19 Yes. I typically -- annually, I attend the AEHS 20 Α. meetings in San Diego. And they have the typical talks, 21 which is ongoing education on multiple topics including 22 sediments, site cleanup, fate and transport, human health 23 risk assessment, ecological risk assessment. And I've 24 25 been doing that for the last ten years, probably been

Page 26 about eight out of ten. The last ten years, the most 1 2 recent one in 2010 included an additional seminar on I attended that. Previous years, I --3 PCBs. Hang on one second. You said AEHS. What does 4 0. 5 that stand for? Association of Environmental Health 6 Α. Professionals? That doesn't sound right. Society. 7 Association of Environmental Health -- doesn't sound 8 9 right. Let's call them AEHS subject to confirmation of their name. 10 Thank you. Go ahead. You were going to talk 11 Ο. about some other courses. 12 Yeah. I can remember the most recent because it 13 Α. was on PCBs. Prior to that, I think I rattled off some 14 of the typical topics: Fate and transport in the 15 16 environment, geochemistry, environmental chemistry, fingerprinting to determine sources of petroleum 17 hydrocarbons; for example, fingerprinting of PCBs. 18 Those are the general topics. 19 20 Q. How long would these conferences typically last? 21 The conferences are typically two to three days. Α. And then the specialized courses are typically a half day 22 23 or a full day at the most. And are these courses that you attend at the 24 0. 25 urging or the guidance of the Regional Board?

A. I attend them with the support of the Regional Board. Actually, I identify and make a request to go to the conference and attend the additional seminars and courses that they offer. And I have been fortunate to have most of them approved and have been attending virtually every year.

Q. And outside of these AEHS meetings that you described, were there any other courses or training in the environmental field that you've attended?

10 A. Approximately -- I've been with the Water Board 11 for 11 years. Approximately, I attend two or three every 12 year.

13 Q. Two or three what?

14 A. Courses, training, seminars, those type of15 things.

Q. That are provided by the Water Board? A. Or that are either provided by the Water Board or supported by the Water Board or provided by UC Davis Extension in conjunction with -- or support of the Water Board.

I was going to say, that's just the 10 or 11 years I've been with the Water Board. Prior to that in the private sector, I'd be attending two or three major conferences in the year, two-, three-day conferences, sometimes week-long conferences. We'd have, you know,

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ten papers a day presented, typically, on various topics, 1 2 the topics I've somewhat rattled off already. I wanted to go back with the training seminars 3 0. that you've conducted in the last 10 or 11 years since 4 you've an a member of the Water Board. Can you give me a 5 sense of the subject matters of those trainings? 6 I didn't conduct them. 7 Α. I'm sorry if I misspoke. The seminars that you 8 Ο. 9 attended during the last 10, 11 years while you've been with the Water Board. 10 I thought I just answered that with the 11 Α. topics -- you're asking for the topics? 12 You went through the topics of the AEHS 13 0. seminars. And then you described that there are separate 14 training courses you took since you've been at the 15 16 Regional Board. If those overlap with the AEHS seminars, 17 please let me know. But my understanding of your testimony was that, 18 separate and apart from the AEHS seminars, you've 19 20 attended training provided by either the Regional Board, or perhaps you mentioned some UC Davis Extension classes. 21 I understand, yeah. Some of the additional 22 Α. 23 topics, besides the ones I've mentioned -- because there is a strong overlap. It's all in the environmental 24 field. Although, some of it, especially more of the 25

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	Page 29
1	State Board-supported seminars and trainings were
2	involved with supervision. Transition to supervisor was
3	one of them. Personnel issues, how to handle personnel
4	issues, how to maximize your retirement. The more
5	technical ones would be on landfills, landfill siting,
6	Title 23, Title 27, California Code of Regulation titles.
7	Q. Do you currently have any professional
8	certifications?
.9	A. Yes.
10	Q. What certifications?
11	A. I'm a professional geologist in the state of
12	California and a certified engineering geologist by the
13	State of California.
14	Q. When did you become a professional geologist in
15	California?
16	A. I've got to run the numbers.
17	MR. CARRIGAN: Your best estimate.
18	THE WITNESS: My best estimate. I'm trying to
19	think. Around 1986.
20	BY MR. CARLIN:
21	Q. And do you believe that certification has been
22	kept current since that time?
23	A. I know it's been kept current.
24	Q. Same question, when you became a certified
25	engineering geologist in the state of California.

	Page
1	A. Approximately, 1990.
2	Q. And has that certification been kept current
3	since 1990?
4	A. Yes.
5	Q. Are you a member of any professional societies?
6	A. Not currently.
7	Q. Have you been a member of any professional
8	societies previously?
.9	A. I used to be a member of the AIPG, Association
10	of International Professional Geologists, AIPG. And I've
11	been a member of the AAPG, Association of Petroleum
12	Geologists, and also a member of the South Coast Geologic
13	Society.
14	Q. Thank you. Any other societies?
15	A. YMCA.
16	Q. No other professional societies relevant to your
17	duties at the Regional Board?
18	A. No.
19	Q. All right. I would like to go through your
20	employment history. I'm looking back at the timeline.
21	If you could start from after you earned your master's in
22	geology, just give me a thumbnail sketch of your
23	employment history up until your present duties with the
24	Regional Board.
25	A. Okay. Upon getting my master's degree, while I

30

1 was getting my master's degree and thereafter, I worked 2 for Ogle Petroleum, Incorporated in Santa Barbara doing onshore and offshore petroleum exploration throughout 3 California. And then I went with Amerada Hess in 1983, 4 Amerada Hess Petroleum in Houston, and did offshore 5 6 California exploration from Houston. And that was in their frontier group. And so I was an exploration 7 petroleum geologist. 8

9 Then I went with Texas Oil & Gas, also called 10 TXO Corporate, in Sacramento, California, and did onshore 11 central -- well, northern Sacramento Valley, exploration 12 for natural gas for Texas Oil & Gas.

13 Q. Do you have the approximate dates of when you 14 were working for that company?

15 A. Yes. Approximate is from '83 to '86 or so.

And then I left Texas Oil & Gas and went with McLaren Environmental Engineering. That eventually became McLaren/Hart. But that was after I worked for McLaren, Fred McLaren, in Sacramento doing environmental work. So I moved from petroleum to environmental at that point.

Q. Could you elaborate a little bit what you mean by environmental work?

A. Yeah. Investigation and cleanup of contaminatedsites, soil and groundwater.

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Q. Did you do any work with sediment while you were there?

A. Yes. And you might want to ask -- I might want 4 to ask you what's your definition of "sediment."

5 Q. I probably want to ask you what your definition 6 of "sediment" is.

A. Sediment is any fine grain material, pretty much
soil sediment to a geologist, the broad definition of
sediment. And, silts, clays, soils. There's a mixture.
Q. Maybe you could give me an overview of your
primary duties and responsibilities while you were at
McLaren.

A. McLaren was to investigate leaking underground tank sites by designing a program to install soil borings, take soil samples, determine what analytical methods to use, what chemicals to analyze for to evaluate the vertical and lateral extent of any releases into the soil and groundwater;

And then, furthermore, if it went from the groundwater, to try and put in groundwater monitoring wells in the right locations to evaluate the extent of the plume and obtain sufficient information to design the appropriate remedial response.

24 Q. Thank you.

25. And as far as time frame, what was the time

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1 frame that you were working at McLaren?

A. That was about three to four years, might havebeen a little longer.

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4 Q. Into the early '90s, approximately?

5 A. Yeah. It was right up until 1990.

6 Q. And then if you could continue on with the 7 overview.

Α. Then I left McLaren. They moved me from 8 9 Sacramento to San Diego. They closed the San Diego office. So I joined Applied Geosciences, Incorporated, 10 and I became their regional manager of the San Diego 11 office of about 12 professionals. And we did a variety 12 of similar work to what I just described, investigating 13 contaminated sites, doing property Phase 1 evaluations to 1415 evaluate potential risk, due diligence work. A variety 16 of projects, little projects to large projects.

17 And for how long did you stay at that company? Ο. That was approximately three years. And then 18 Α. they closed the San Diego office. And so I left and went 19 20 with Bechtel National, Incorporated, which is a branch of one of the largest engineering firms in the world, 21 privately held, Bechtel. And Bechtel National was their 22 government side of things. 23

And I worked on the Navy Clean II project for almost six years, a little over five and a half years,

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worked on Marine Corps Logistics Base Barstow, Marine
 Corps Air Station El Toro, Marine Corps Air Station
 Tustin, Marine Corps -- no -- Navy Air Corps Station
 El Centro.

5 And it was investigating everything that you 6 would find in a city, because each large Naval base or 7 military base is like a large city. So they have 8 landfills. I investigated. They have large groundwater 9 contamination plumes. They have transformer storage 10 yards. So I've done PCB investigations. Would you like 11 to know any more details?

12 Q. I appreciate that detail. So you're basically 13 doing environmental investigation-type work at these 14 military facilities?

15 A. Environmental investigation and cleanup.

16 Q. And then you started at Bechtel around 1993.
17 And then how long --

18 A. No. That was -- I'm trying to get the dates19 right.

20 Q. I'm just looking for estimates.

A. It was right up until 2000 when I joined the
Water Board, five and a half years I was with Bechtel.
And then I joined the Water Board in January 2000.
Q. And you've continued to work at the
Regional Board from January of 2000 to the present?

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1 A. Yes.

Q. If you could walk me through your duties at the
Regional Board from when you started up until the
present.

5 A. Okay. I'm just trying to recall. I've probably 6 worked on a hundred different projects in the 11 years 7 I've been with the Regional Board.

8

Q. I don't want to go through the projects.

9 A. I was going to start with number one and get to 10 number 100 by tomorrow. I was going to summarize. That 11 was the overview.

12 Q. I appreciate the overview.

A. What aspects would you like me to highlight? Q. Well, we'll get into that. I just wanted to get a sense if you could do it by job title or division or primary duties and responsibilities starting from 2000 up until the present.

A. I started working in landfills, enforcing regulations under Title 23, the state landfill regulations. And then I moved into the TMDL world, Total Maximum Daily Load arena, and was promoted to senior engineering geologist, and supervised a staff of four to five engineers, geologists, and environmental specialists.

25 Q. I just want to be clear. You said you started

work on TMDLs. Was that prior to your promotion to 1 senior engineering geologist, or were you working on 2 TMDLs as a senior engineering geologist? 3 It was contemporaneous. That's the right word. Α. 4 5 Happened at the same time. I like that word. 6 Ο. 7 And what year, approximately, was that? You said you started in 2000 in landfills? 8 9 Α. 2002 or 2003. Thanks. If you could continue, I'd appreciate 10 0. 11 it. Α. So the TMDL work involved investigating sources 12 of contamination loading to a particular watershed or 13 water body. It was the gist of that sort of work. And 14 that brought me into, since this site was a candidate and 15 16 subsequently put on the 303(d) list, that requires the development of the TMDL that got me involved in 17 approximately 2002/2003, is when I started working on the 18 Shipyard Sediment Site. 19 And we'll go through some of the stuff, some of 20 Ο. your work on the Shipyard Sediment Site separately. So 21 just so I get a sense of your duties at the Regional 22 Board, you started working at the TMDL unit in 2002/2003. 23 How long did you continue in that unit for? 24 25 Up until about two, three years ago, and moved Α.

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Page 37 into the site cleanup unit, central groundwater unit. 1 2 They've changed their names a couple times. It's currently called the --3 Ο. Α. Central groundwater unit. 4 5 And you're currently in that unit? Ο. Α. Yes. 6 Can you just give me a summary of your primary 7 Q. duties and responsibilities in that unit? 8 9 Α. I'm the registered professional that needs to -all the work done in that unit is done under my direction 10 for investigating and cleaning up various contaminated 11 sites including -- some of it's with the Shipyard 12 Sediment Site. Some of it's with Mission Valley 13 Terminal, large soil-contaminated sites, all the way down 14 to dry-cleaners, corner gas stations, former gas 15 16 stations, former dry-cleaners. 17 How many employees do you currently supervise? 0. 18 Α. Three. Who are those employees? 19 Ο. 20 Α. Cynthia Rodriguez, Sean McClain, and Sue Pease. 21 Who do you report to? Q. 22 Julie Chan. Α. 23 THE WITNESS: Can we take a break? 24 MR. CARLIN: Sure. Let's go off the record. 25 (A recess was taken.)

Page 38 1 BY MR. CARLIN: 2 0. Mr. Carlisle, we're back on the record. Are you 3 ready to continue? Α. Yes. 4 5 I'd like to go ahead and mark as Exhibit 1001 Ο. the cleanup team's amended witness designation in this 6 proceeding. Take a minute to familiarize yourself with 7 that. 8 (Exhibit 1001 was marked.) 9 10 BY MR. CARLIN: 11 Have you seen this document before? Ο. 12 Α. Yes. 13 And are you aware that you've been designated as Q. a witness on behalf of the cleanup team in this 14 proceeding? 15 16 Α. Yes. And if you could take a look at page 2, second 17 Ο. paragraph from the bottom. It indicates there that each 18 of the witnesses listed on this designation have agreed 19 to testify in this proceeding. 20 21 Do you see that? 22 Α. Yes. And have you agreed to testify in this 23 Q. proceeding? 24 25 Α. Yes.

Q. Do you have any understanding of what the subject matter of your testimony will be in this proceeding?

A. In general, it would be the draft CAO and the5 Draft Technical Report.

Q. You don't have any indication that your subject7 matter may be anything more specific than that?

8 A. You mean within those documents or external to 9 those documents?

Q. You testified that you expect to testify with regard to the CAO and DTR. And I was just trying to get a sense of whether you have an understanding of whether you'll be testifying to something more specific than, speaking broadly, the CAO and DTR with regard to this proceeding.

16 A. It would be speculation.

Q. Yeah. I certainly don't want you to speculate.
I wanted to know if you had an understanding at this
point.

20 A. No.

21 Q. And if you could take a look at the last 22 paragraph on page 2. It indicates that each of the 23 witnesses on this list, with the exception of 24 Vicente Rodriguez, may offer an expert opinion within the 25 scope of his or her expertise as an employee of the

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1 San Diego Water Board.

2 Do you see that?

3 A. Yes.

Q. Is it your understanding that you've been
designated to offer an expert opinion in this matter?
A. What's the definition of being offered as an
expert witness?

Q. There's no specific definition that I can give you. This document indicates that certain witnesses may be designated to offer expert opinion. And I'm just trying to get a sense if you understand that you have been designated as an expert.

A. I think it's likely I'll be offering expertopinions.

15 Q. Do you know with regard to what subject matter 16 you'll be offering an expert opinion?

A. Not specifically. Probably a variety oftechnical items in the DTR.

Q. Which items do you think those would be?
A. Including but not limited to things involving
sediment sampling results, interpretation of the sediment
sampling results, interpretations associated with assumed
or reported deposition rates, sedimentation rates in the
San Diego Bay, potentially responsible parties.

25 Q. When you say, "potentially responsible parties,"

you mean with respect to the naming of those parties? 1 2 Α. Yes. And the basis of liability for those parties? 3 0. I don't understand that term, the basis of Α. 4 liability. I'm not an attorney. 5 6 Let me ask it this way: With respect to the 0. 7 charging allegations in the DTR against the respective parties. 8 I might be asked to participate in providing 9 Α. expert opinions on some aspects of that. 10 11 Are there any other areas aside from what you've Q. 12 mentioned that you think you may be called upon to 13 provide an expert opinion? Would you like me to scan the table of contents 14 Α. 15 and --If that would help you to refresh your 16 0. recollection, that would be fine. 17 Well, we already covered the discharges. 18 So Α. that's the first 11 or so sections. Multiple lines of 19 evidence approach, sediment quality investigation, triad 20 21 measures, bioaccumulation indicator, sediment chemicals 22 aquatic-dependent wildlife. 23 MR. CARRIGAN: Give the court reporter a chance to take it all down. That's okay. 24 25 THE WITNESS: Background sediment quality,

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technical feasibility, economic feasibility. I expect I might be asked to provide opinions on some aspects of that.

The majority of the work, if not all the work, done in these two documents was done as a collaborative effort. We didn't typically have a primary author. Instead, it was a collaborative effort for virtually all the topics in the documents.

9 BY MR. CARLIN:

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Q. Okay. We'll come back to that in a bit.

But based on the topics you've indicated that you believe you may offer an expert opinion on, do you believe that you played a part in the collaborative process for each one of the chapters of the DTR?

A. I probably participated at least to some levelin most all the chapters in the DTR.

17 Q. Are there any chapters or areas of the DTR where18 you would say you were not specifically involved in?

A. I guess we'd have to dig through each one ofthem, and maybe I could answer that.

Q. But there's nothing that comes to your mind off the top of your head, No, I didn't work on this issue or that issue, for example?

A. I mean, we have, what, 20 -- 35 chapters. I couldn't tell you. There might be two or three that I

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didn't touch at all, so to speak, mentally would be 1 2 involved in. I understand. I just wanted to confirm that 3 Ο. there's nothing that jumps out that you did not work on, 4 5 on the DTR. Α. Not off the top of my head. 6 Have you been asked to prepare a written expert 7 Ο. report in this matter? 8 9 Α. No. Do you have any plans to prepare a written 10 0. expert report? 11 Α. No. 12 I understand you've testified that you may offer 13 0. an expert opinion on a variety of fields that we just 14 15 went through. Separate and apart from that, I want to ask you if you consider yourself to be an expert in any 16 17 particular fields relative to your work at the 18 Regional Board. Based on my work at the Regional Board, I 19 Α. Yes. 20 developed an expertise in a number of fields, you know, 21 the ones we've already mentioned. Fate and transport, 22 sediment chemistry, geochemistry, human health risk assessment, ecological risk assessment, triad analysis, 23 sediment quality objective implementation. 24

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25 Q. Can you slow down just a second for me? I have

fate and transport, sediment chemistry, geochemistry, 1 2 human health risk assessment, ecological risk assessment. 3 Did you also say sediment triad measurements? Α. Yes. And sediment quality objectives. 4 Overall, I've worked on and developed an 5 expertise over the last 25 years -- the broad way to 6 describe it would be evaluating the nature and extent of 7 contamination in the environment, particularly soils and 8 9 groundwater and the subsurface and surface water. Let me make sure I understand. You say you've 10 0. developed that expertise over the past 25 years, is your 11 12 understanding, in your on-the-job duties that we went 13 through earlier? On-the-job duties combined with my formal 14 Α. education and subsequent workshops, conferences that 15 we've discussed already. 16 Did any of the formal studies that you took 17 Ο. 18 involve fate and transport? Α. Yes. 19 20 You took classes in fate and transport? 0. Sedimentology involves fate and transport. 21 Α. 22 Actually, all aspects of geological sciences involve fate and transport of materials and their alteration over time 23 and distance. 24 25 I'd ask you the same question with respect to 0.

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1 sediment chemistry. Did your studies involve those
2 issues?

A. Probably two years of physical chemistry at the college level. I've had geochem classes in addition to the work-related training.

Q. How about geochemistry; to the extent your
answer is different, have you had any formal education in
geochemistry?

9 A. Yes. I've had that classwork at the master's 10 level.

Q. Same question with respect to human health risk assessment. Any formal education that you believe relates to your expertise in that area?

A. Statistical formal education, I've had probably six statistics classes, environmental statistics, business statistics, regular old statistics at the college level and graduate level. As you may know, human health risk assessment involves statistics to a considerable degree.

I haven't had academic classes in human health risk assessment. But I've had on-the-job training starting as far back as my work with Fred McLaren's company in Sacramento in about 1983 using a human health risk assessment that took place in an air strip at the Sacramento Airport for United Airlines groundwater

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cleanup, did an air permit, some modeling for human
 health risk assessment.

I've worked on and been the lead scientist on a 3 number of projects, probably 12 at least, that have used 4 5 human health risk assessment. For instance, all the D.O.D. projects I've worked on, CERCLA requires --6 typically requires a human health risk assessment. The 7 Navy's IR program, Installation & Restoration program, 8 9 which parallels the CERCLA process that I worked on with Bechtel for five and a half years involved in a number of 10 human health risk assessments. 11

12 Q. Have you been involved in any human health risk 13 assessments aside from the current matter that relate to 14 sediment contamination?

15 A. Yes.

16 Q. Could you give me a summary of that involvement? 17 Well, I'm defining "sediment" as fine grain Α. material. So I worked on a landfill in the L.A. Basin 18 that was a windblown lead-contaminated dust issue. We 19 20 had to set up a weather station and get the right analyses to design and conduct a human health risk 21 assessment, upwind and downwind of the landfill. 22 23 That's just one example.

24 Q. Any other examples come to mind?

25 A. Involving sediment?

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Q. Any other examples of a human health risk
 assessment you worked on involving sediment
 contamination. And again, please let me finish my
 question before you start. Would you like me to repeat
 the question?

I was just asking, we were going through the human health risk assessment. I was asking for any examples where you've worked on human health risk assessment in connection with sediment contamination project or issue. You mentioned the landfill in L.A. Basin. And my question is if there is any other, you know, work that came to mind.

A. I worked on the Convair Lagoon, C-o-n-v-a-i-r, also called the Teledyne Sand Cap, the remediation project in San Diego Bay. I worked briefly on the Campbell Shipyard Sediment Cap in San Diego Bay. And there was a human health risk assessment aspect, I believe, to both of those. I don't recall exactly to what extent that was a part of the project.

20 Q. Do any other human health risk assessments that 21 you were involved with in regard to sediment 22 contamination come to mind?

A. No. I can't think of any right now.
Q. I want to move on to the ecological risk
assessment and ask you if any of your formal education,

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Page 48 you believe, contributes to your expertise in that area. 1 I've had environmental studies as an 2 Α. undergraduate. Formal, do you mean academia as opposed 3 to seminars and conferences? 4 5 Ο. Correct. That's probably the only formal academic 6 Α. coursework that relates to ecological risk assessment. 7 Just to make sure I understand, general Ο. 8 environmental studies class; is that right? 9 Α. Yes. 10 11 Moving on to sediment triad measurement -- let Q. 12 me step back a second. Have you had any involvement in ecological risk 13 14 assessments with respect to a sediment contamination project? We discussed projects that you were involved in 15 with respect to human health risk assessments. So the 16 same question with respect to the ecological risk 17 18 assessment. Right. I've been working on the shipyard 19 Α. project, as I said, from '02 to '03. So I've been fully 20 versed in that working with NOAA, U.S. Fish & Wildlife, 21 22 California Fish & Game on the ecological aspects of this project. The Convair Lagoon project, Convair Sand Cap 23 involved ecological risk assessment. 24 25 I also, during my D.O.D. work with Bechtel,

1 worked on at least two projects that involved ecological 2 risk to San Diego Bay specifically. And that was 3 North Island -- I don't know if it was Site 1 or 2, one 4 of the sites at North Island.

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5 The chlorinated solvent plume appeared to go via 6 the groundwater and discharge into the bay. So we were 7 involved in putting sample devices on the bay floor to 8 see what the exposure might be to the flora and fauna. 9 And similarly, at Naval Station San Diego, one of the 10 sites right adjacent to San Diego Bay was evaluated 11 relative to the ecological risk to San Diego Bay.

12 Q. And you were involved with both of those while 13 you were at Bechtel?

14 A. Yes.

Q. And then I want to move on to sediment triad measurement and ask you if you've had any formal education with respect to that area that you've described as an area of expertise.

19 A. "Formal" meaning academic, university-type work?20 Q. Correct.

A. I don't think any university has any coursework on triad. But I could be wrong. I know they didn't while I was in school.

Q. Fair enough. I just wanted to confirm.
So your experience with respect to sediment

1 triad measurement would be on-the-job training?

A. It would be on-the-job training, working with the State Board, working with SCCWRP and Steve Bay and the other scientists at SCCWRP that actually helped develop some of the approach for the Shipyard Sediment Site triad measurements.

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7 And also, I've been on the advisory -- I forget 8 the exact name, but the regulatory group of advisors to 9 the Sediment Quality Objective project undertaken by the 10 State Board. And I've attended their various meetings, 11 and I'm on their distribution lists for all their 12 documents to provide input.

Q. Have you ever authored any technicalpublications?

15 A. Yes.

16 Q. Can you summarize what those publications are? 17 If you can do so.

Yeah. I've published my master's thesis. Ιt 18 Α. was about the subsurface structure of the Ivanpah Valley 19 20 in California. And that was also published as a technical report in the -- I forget the documents. Ι 21 think the South Coast Geologic Society. That would be 22 back in the '80s. I don't think I've published anything 23 24 since then in any recognized professional journal. 25 You haven't published anything in, as you 0.

described, a recognized professional journal with respect 1 to sediment contamination? 2 Α. 3 No. Okay. You've listed areas which you believe you 4 Q. 5 have expertise in. We've gone through those. I want to cover some other subject areas we haven't talked about to 6 7 confirm and to ask you whether or not you believe yourself to be an expert in those subject areas. Okay? 8 9 Α. Okay. How about marine ecology? Ο. 10 11 To some degree. Α. 12 What would be the bases of your expertise in Q. marine ecology? 13 Α. On-the-job training. 14 150. How about sediment toxicology? 16 Α. Yes. And what would be the basis of that expertise? 17 Ο. My experience and work with -- at the Water 18 Α. Board and with Bechtel and with the various consulting 19 20 firms for the last 25 years. 21 How about ecotoxicology? Ο. 22 Same answer. Α. 23 Same answer as with respect to sediment Q. toxicology? 24 25 Α. Yes.

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How about human toxicology? 1 Q. 2 Α. Same answer. How about remedial design in connection with the 3 0. sediment remediation project? 4 Same answer. I've worked on projects. So my 5 Α. work-related experience has allowed me to develop an 6 expertise in that area. 7 How about remedial monitoring with respect to Ο. 8 9 sediment remediation? Same answer. 10 Α. To your knowledge have you ever been designated 11 0. as an expert witness in a lawsuit? 12

13 A. Yes.

14 Q. Which lawsuit?

15 A. It was Sesi vs. Signet Landmark.

16 Q. Can you spell that for the record?

A. I'm pretty sure it was -- well, Sesi, S-e-s-i,
And Signet, S-i-g-n-e-t, Landmark.

19 Q. Can you give me a thumbnail sketch of the 20 lawsuit?

A. It was Coronado Cays burn ash material moved to
an unauthorized landfill that contained auto shredder
waste. And so it became a commingled waste issue off
Cactus Road in Otay Mesa area San Diego near the border.
Q. And who were you designated as an expert on

Page 53 1 behalf of? 2 Α. Sesi. And can you estimate when that lawsuit occurred? 3 Ο. It was the early '90s, '93, perhaps. Α. 4 5 Did you testify at trial in that matter? Ο. 6 Α. Yes. 7 And were you also deposed in that matter? 0. Α. Yes. 8 Do you recall the scope of the expert opinion 9 0. that you offered in that litigation? 10 11 It was regarding the commingling of waste, joint Α. 12 and several liability. 13 Have you been designated as an expert witness in 0. 14 any other proceeding? Not that I recall. 15 Α. Have you ever been excluded as an expert witness 16 Q. 17 by a court? Not that I recall. 18 Α. 19 Q. In connection with the Sesi matter, did you prepare a written expert report? 20 21 Probably, but I don't recall the specifics. Α. We had a -- it was our consulting firm that worked on the 22 investigation of the project. So we had a technical 23 report. I don't know if they called that an expert 24 25 report.

Page 54 Do you recall having prepared a written expert 1 Ο. report in connection with any other lawsuit? 2 What's your definition of "expert report"? 3 Α. Typically, in a lawsuit -- well, not typically. 4 Q. In a lawsuit, experts will be designated as 5 They will prepare an expert report on the scope of 6 such. 7 their opinion in this matter. As we've talked about, you've been designated as an expert in the administrative 8 9 proceeding. And so you prepared a report describing your opinions with respect to certain issues in the case. 10 Is this an expert report? 11 Α. Mr. Carrigan has indicated his view in the past 0. 12 that it's an expert report. And I'm asking you separate 13 and apart -- I'm not asking you if you're referring to 14 15 the CAO or the DTR. That's fair. But apart from that, if you believe you prepared any other expert reports. 16 Expert reports for a lawsuit or legal situation? 17 Α. We're talking about a lawsuit right now. 18 Ο. Not just a regular technical report that we 19 Α. 20 prepare all the time for the work we do as a consultant, 21 for example; only if it was a lawsuit involved? Is that 22 the distinction? 23 This question is whether or not you've prepared Q. one in connection with a lawsuit, yes. 24 Besides what we already mentioned, the 25 Α. No.

1 Sesi. 2 0. Right. We discussed lawsuits in the Sesi 3 matter. And we've discussed your designation in this instant matter, the shipyard matter. To your knowledge 4 have you been designated as an expert in any other 5 administrative proceeding? 6 Not that I recall. Α. 7 Earlier, you testified that you were involved in 8 0. 9 the Convair Lagoon and Campbell shipyard sediment cleanups; correct? 10 11 Α. Yes. While at the Regional Board, have you been 12 0. 13 involved with any other sediment remediation projects? 14 Not to any degree. Α. Are there other matters you've been involved 15 0. with in a minor degree? Is that a fair characterization? 16 Because I mentioned we work 17 Α. Yeah. collaboratively in the office. I mean, it's cubicle 18 land. So there's a lot of informal communication, let's 19 say, where someone has a project like the boat channel or 20 the -- some of the other San Diego Bay sites that other 21 22 staff might be working on. 23 So we maybe spend a few hours, you know, less than ten, maybe more like one or two, talking to them 24 25 about their projects and providing input and

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Page 56 collaboration, informal, relatively informal 1 2 collaboration, maybe attend a meeting or two on these other projects because they're similar to yours. But 3 beyond that, the answer is no, I believe. 4 You haven't been assigned to work on a sediment 5 0. remediation project, regularly assigned to work on a 6 sediment remediation project other than the the Convair 7 Lagoon project and the Campbell project? 8 MR. CARRIGAN: Misstates testimony. I believe 9 he also testified he's been working on this project. 10 11 Three. MR. CARLIN: Correct, counsel. Convair, 12 13 Campbell, and the instant project. THE WITNESS: 14 Yes. BY MR. CARLIN: 15 16 0. Aside from the Convair project and the Campbell project, and the current shipyard project, have you been 17 involved in any other matters or projects where the 18 Regional Board investigated the quality of the sediments? 19 20 Α. Could you explain your definition of "investigated the quality of the sediments"? 21 Sure. We were talking about cleanup projects 22 Ο. where the cleanup had actually been required, or cleanup 23 had taken place. And just taking a step back from that, 24 looking at any other situation that involves sediment 25

contamination but maybe where there had not been a
 cleanup or remediation required but the Regional Board
 investigated sediment quality, looked into the quality of
 sediment.

5 A. You're not specifically referring to us 6 collecting the data as opposed to us reviewing data 7 collected by others?

Q. Either scenario. I'm just curious, a situation where the Regional Board wanted to investigate the sediment quality regardless of whether you reviewed the data or asked -- regardless of whether you collected the data yourself or asked somebody else to do so.

A. So now could you repeat the question, please?Q. Fair enough.

We talked about sediment contamination projects in San Diego Bay that you've worked on, cleanup projects. We talked about Convair. We talked about this project. And we also talked about Campbell.

19 So my question is if you've been involved as 20 part of your duties in the Regional Board in any 21 investigation of sediment quality in San Diego Bay aside 22 from those three sites that we described.

A. I was involved a little bit in the
Shelter Island boat harbor TMDL, copper TMDL. I was
involved a little bit with the commercial basin cleanup,

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sediment cleanup project, and also was involved with a 1 State Board-led -- not lead as in metal but lead project 2 on sampling San Diego Bay, various locations, fish and 3 the water column for mercury. And we actually have a 4 boat, and I was the captain of the boat on several trips, 5 sampling throughout San Diego Bay for mercury. 6 That was at the direction of the State Board? 7 Ο. That was the State Board's project, yes. Α. We 8 9 provided the support vehicle and the sampling. 10 Was the State Board just looking for data as 0. 11 part of that project? 12 Α. What do you mean by that? No one just looks for They want to do something with the data. 13 data. 14 Was anything done subsequently as a result of Ο. 15 the data that you collected? It's my understanding they created a draft 16 Α. I don't recall ever seeing a final report. 17 report. What time period were you involved in that work? 18 Ο. That ended -- sampling, the field work ended, 19 Α. 20 might have been three years ago, roughly. 21 Was that data collected throughout Ο. 22 San Diego Bay? 23 Correct, yeah. There was generally a Α. correlation between fishing piers and where we wanted to 24 sample for the water column, multiple depths, water 25

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column samples of the mercury levels. And then they also
 collected fish and were trying to do a BASF -- a ratio
 between the water column concentration of mercury and the
 fish tissue concentration of mercury.

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Q. You said the sampling was near fishing piers.Do you recall which fishing piers in specific?

A. 24th Street Marine Terminal, Mission Bay. Actually, one of the stations was in Mission Bay. Shelter Island, there's a pier. I believe we might have been by the one just north of Coronado Bridge just north of the BAE site. Glorietta Harbor, I think, was another station in Coronado. There might have been one or two others.

Q. I want to make sure I understand your testimony. There may have been a draft report prepared, but you're not sure?

A. I saw an internal draft. I never saw one that was -- I don't recall seeing one that was actually released.

20 Q. That may be; you're just not sure?

A. Correct, yeah. It might be available.

22 Q. Do you recall if there was a name given to that 23 study?

A. I'm pretty sure "mercury" would be in the title.Q. How did you refer to it internally when you were

Page 60

1 working on it?

2

A. The mercury sampling.

So we were discussing matters you've been 3 0. involved with, with the Regional Board investigation of 4 5 sediment quality in San Diego Bay. You mentioned Shelter Island boat harbor TMDL, the commercial basin 6 matter, this mercury sampling project or study we just 7 talked about. Are there any others that come to mind? 8 9 Α. Yes. I worked on the mouth of Chollas Creek TMDL, Grape Street TMDL that became -- they changed the 10 name of that to -- because it's right at the foot of 11 Grape Street. I forget what they call that TMDL. 12 Broadway/B Street piers TMDL, mid-pier Naval station 13 TMDL, subbase TMDL. All those are San Diego Bay 14 15 contaminated sediment TMDLs. Continental 16 Maritime/Coronado Bridge TMDL is another site right 17 underneath the Coronado Bridge immediately north-northwest of BAE. 18 I want to go back for a minute. You mentioned 19 0. 20 the mouth of Chollas Creek TMDL. Are you currently 21 working on that project? 22 Α. No. 23 How long did you work on that project for? Q. 24 Probably two years. Α. 25 When did you stop working on that, if you Ο.

1 recall?

2 A. When they moved me from the TMDL unit to the 3 central groundwater unit.

4 Q. When was that?

5 A. Four years ago, five years ago, plus or minus.

Q. You stopped working on the mouth of Chollas TMDL7 because you were assigned to a new unit?

8 A. Yes.

9 Q. Do you recall when the Regional Board first 10 began working on developing a TMDL for the mouth of 11 Chollas Creek?

12 A. No.

Q. And if you could give me a summary of your roleon the mouth of Chollas Creek TMDL.

A. I was in a position to supervise staff that did the detailed work on it. But it involved meetings with SPAWAR experts; for example, Bart Chadwick, SCCWRP experts, Steve Bay. And actually, they helped design the type of measurements we want to sample, the triad measurements.

And then I think -- then we contracted for some sampling there -- I think it might have been through SCCWRP and then through another subcontractor -- to go actually collect sediment and the other samples needed to do a triad analysis. And we had a series of meetings

Page 62 including the stakeholders, the environmental groups. 1 2 I'm pretty sure the Navy was there, the City of San Diego. And developing the sampling program and then 3 the methodology to interpret the results. 4 And you mentioned you supervised some staff. 5 Ο. Who were those staff members? 6 I'm pretty sure it was Lisa Honma and 7 Α. Alan Monji. 8 Was there a member of Regional Board staff 9 Ο. supervising your activities on that TMDL? 10 Α. It was probably David Barker at the time, I'm 11 12 pretty sure. Anybody else that might have been supervising 13 0. 14 you? 15 Α. No. I think it was David Barker that I was 16 reporting to for the TMDL work. Were you involved as part of your duties in the 17 Ο. Regional Board with the Chollas Creek TMDL for metals? 18 Probably more precise, the TMDL for dissolved copper lead 19 20 and zinc. You're talking not about the San Diego Bay TMDL; 21 Α. 22 you're talking about upstream in the creek itself? 23 Correct. Ο. 24 Α. No. Were you involved in the Chollas Creek TMDL for 25 0.

1 diazinon?

2 A. No.

Q. Are you a member of any environmental4 organization currently?

A. I think when I went to the AEHS conference last year, they give you a free year -- or a year membership that's included in your enrollment. So that might have recently expired, or it might still be current.

9 Q. Setting that aside, I'll be more precise.
10 Any environmental advocacy organization?
11 A. No.

12 Q. You're not a member of Coastkeeper?

13 A. No.

14 Q. You haven't been a member of Coastkeeper in the 15 past?

16 A. No.

17 Q. You're not a member of Environmental Health 18 Coalition?

19 A. No.

Q. And you haven't been a member of EnvironmentalHealth Coalition in the past?

22 A. No.

Q. I know you said you've been working on this matter since, I believe, 2002 or 2003. Is that correct? A. Yes.

Do you recall when you were formally appointed 1 Ο. for the first time to the cleanup team? 2 About 2002, 2003. 3 Α. So the cleanup team had been established when 4 Ο. you began working on this matter? 5 I don't recall that they called it the cleanup 6 Α. 7 team. It was kind of a slow evolution of, you know, the project building up, getting steam. So there wasn't --8 9 we don't do, in my mind, formal designation of anything. Okay. So maybe it hadn't been labeled, quote, 10 Ο. the cleanup team at that point. But you were working 11 12 since 2002 or 2003 when you began this matter with the same group of people -- maybe not the same individuals, 13 they may have changed -- but on a unit or group that is 14 15 now referred to as the cleanup team? 16 Α. Yes. 17 And you've been on the cleanup team or working 0. in that capacity since 2002 or 2003? 18 Yes. 19 Α. 20 Do you recall why you were chosen to work on Q. this matter? 21 Partly because it involved, you know -- defined 22 Α. a budget. To have staff work on a project, you need to 23 find where the funds are, where the PYs are, person 24 25 years, staff funds. And so I was in the TMDL unit, and

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1 this was a candidate probably at the time and became a
2 303(d) listed site which requires development of a TMDL.
3 Therefore, it was logical to grab people out of the TMDL
4 unit and put this on their plate, or add this to their
5 plate.
6 Q. Did any one specific individual ask you to work

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7 on the project or assign you to the project?

8 A. Most likely, it was David Barker came and asked 9 for my assistance on the project.

Q. Aside from your membership in the TMDL unit that you just described, were there any other special qualifications or experience that you had that you think led to your appointment to the cleanup team or to your work on this project?

A. Besides my above-average intelligence and25 years of work experience?

Q. I assumed that was part of it. But I just wanted to see if there was anything in particular that you were aware of that led to that.

20 MR. CARRIGAN: You can answer if you understand 21 the question.

22 THE WITNESS: I think I answered it.

23 BY MR. CARLIN:

24 Q. Your good looks?

25 A. My 25 years of work experience on a variety of

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1 projects.

Q. I understand you have experience in the area that we've gone through. I just wanted to see if there was any other special expertise that you thought may have resulted in your work on the project. That's all I was getting at.

7 And while you've worked on this matter, has your 8 role changed over time on the matter, or would you say 9 you've had the same primary responsibilities and duties 10 during the course of the project?

11 A. Everything's changed. My role's changed. 12 Everyone's role has changed. The project has gone 13 through an evolution with, what are we at, eight, nine, 14 ten years. There's been considerable changes with both 15 individuals' roles, my role, and what the project's 16 doing, you know, what phase we're in.

17 Q. Can you describe for me how your role's changed 18 over time?

A. Well, to answer that, maybe I'll describe just real general how the project's changed. Initially, it was hope the discharger or dischargers will voluntarily go out and clean up the site versus decide what regulatory tools we want to use to encourage them to undertake such a cleanup, to issuing investigative orders. And that's about when I came in, when the

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1 investigative orders were being worked on.

And then reviewing the reports that come in, in 2 response to those investigative orders, 13267 requests 3 for technical reports. And then evaluating -- well, 4 5 maybe I just said that, evaluating those reports and then making comments on those, arranging for stakeholder 6 meetings. Would you like me to go on in the evolution? 7 Yeah. And what you're describing is, you know, 8 Q. 9 different steps, the process. And I understand that as there's been different steps in the process, you've been 10 required to do different types of things, and presumably 11 so have the other members of the cleanup team. And I 12 just wanted to get a sense, I suppose, of whether or not 13 you felt your level of responsibility on the cleanup team 14 15 had changed or the overall nature of your responsibility 16 had changed from 2002/2003 to the present. And what drives changes in large long-term 17 Α.

A. And what drives changes in large long-term projects is, you know, the project needs. So things would wax and wane. If we sent investigative order and they've got three months to give us a report, we're going doing other things, and so my role on this project is minimized, and my role on my other dozen or two projects is maximized. And then its waxing and waning, obviously, determines the changes in my role.

25

Overall, though, I guess from the 30,000-foot

view, it's been very similar. There's -- we have a hierarchy of a branch chief, David Barker, who's been on this project probably the longest. So we look to him generally as the project manager. But we don't necessarily even make that formal designation.

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And then I'm one of the next tiers down, among others, at times. And then there's staff below me. So there's generally three tiers on this project, on most our big projects, or even the small projects, of a branch chief; a senior person, myself; and then the staff. But all lot of that's -- there's a lot of blurring of the lines.

I want to talk a little bit about preparation of 13 Ο. the DTR. We talked a little bit about this before. And 14feel free to consult the table of contents in the DTR to 15 answer the question. And I know you said that to a large 16 17 extent -- I don't want to misstate your testimony -- but preparation of the DTR is a collaborative process. 18 Ιs that your testimony? 19

20 A. Very much so.

Q. And with that in mind, I understand that. But would you consider yourself to have been the primary author of any of the chapters in the DTR?

24 A. No.

25 Q. Not a single chapter?

Page 69 Primary author of the whole chapter, no. 1 Α. 2 0. Would you consider yourself to have had a lead responsibility for the development and preparation of any 3 of the chapters in the DTR? 4 5 Not using those terms, no. Α. Are there other terms that you think would help 6 Ο. 7 answer the question? Α. You want me to reword the guestion? I think you 8 9 need to reword the question. I'm asking the question, but I didn't know 10 0. No. if you had -- well, I'm thinking if I could ask it in a 11 way to get the terms that you need. 12 It's a collaborative process. We talked about 13 I understand that. Are there any particular 14 that. 15 chapters for which one member of the cleanup team is 16 assigned responsibility for the development of that 17 chapter? Not any one member. Again, to be -- by the 18 Α. definition of "collaborative," there were multiple people 19 20 involved in every chapter. And then there's even, you 21 know, some people developed the data. Some people, maybe the same people write it up. And then maybe another 22 person reviews it and rewrites it, and maybe a fourth 23 person reviews it and rewrites it some more. 24 25 So your testimony is every chapter is a 0.

Page 70 collaborative process, and for no chapter is a particular 1 2 member of the cleanup team given the lead responsibility. That would be my way to describe it. 3 Α. And has that process been carried throughout the 0. 4 5 prior iterations of the DTR as well? I thought we were just talking about this. 6 Α. Which iteration are we talking about? 7 Well, this is the most recent iteration. As I 8 0. 9 said when we began, unless I indicate otherwise, we can go back to some of the prior iterations. And by my 10 recollection, the first iteration was released in April 11 of 2005. Does that ring a bell? 12 13 Α. That rings a bell. And so for that iteration of the DTR, would you 14 Ο. 15 also say that the same collaborative approach would have 16 been used? Or could you, for example, tell me that you may have had a lead role with respect to chapters in the 17 DTR for that version of the DTR? 18 I couldn't accurately answer that without 19 Α. 20 looking at the 2005 version of the DTR. 0. You can't recall whether or not you used the 21 22 same process? 23 Α. Oh, we used the collaborative process. But there may be a chapter or two in there that I might take 24 more ownership of as being the primary author if I could 25

Page 71 recall how that differed from this version. But I don't 1 have that good a memory from 2005. 2 We can come back to 2005 DTR. Let's focus in 3 Ο. now on the most recent iteration that we have in front of 4 And I want to ask you to describe your involvement 5 us. with respect to a variety of subject matters covered in 6 7 the DTR. Is that okay? Α. Yes. 8 9 0. Okay. 10 First, did you have any involvement with 11 determining who would be listed as the responsible 12 parties? 13 Α. Some. Can you give me a description of that 14 Ο. involvement? 15 I know I helped direct some research on 16 Α. violations from, like, for example, any violations by 17 NASSCO or BAE or formerly from Southwest Marine. 18 19 Ο. So you assisted with the research, historical research, of violations? 20 Α. 21 Yes. 22 And do you recall any other cleanup team members Q. working with you in that capacity? 23 24 Α. I know Ben Tobler helped with that quite a bit, 25 and perhaps Cynthia Gorham-Test.

Page 72 You mentioned NASSCO and BAE in your prior 1 0. 2 answer. Did you have any involvement in developing any of the factual or historical allegations against the City 3 of San Diego? 4 5 Probably to some degree. I can't remember any Α. specific aspects of the City of San Diego section. Some 6 of that research was done prior to 2005, certainly. 7 You think some of that research would have been Ο. 8 done prior to your involvement on this matter? 9 MS. REYNA: Objection. Calls for speculation. 10 11 THE WITNESS: Possibly. 12 BY MR. CARLIN: You're just not sure one way or the other? 13 0. 14 Α. Right. 15 Did you have any involvement in developing the Q. 16 factual allegations against Star & Crescent? 17 Α. A little bit. Who did you work with in that respect? 18 Ο. 19 I worked with David Barker, I think, Α. 20 Cris Carrigan. I'm not sure who else, if anyone. How about any work on the development of factual 21 Q. 22 or historical allegations against Campbell? 23 I remember doing a little bit of work on that. Α. 24 Again, the same question, do you recall who you Q. 25 worked with in that capacity?

Page 73 I don't recall. Probably, again, talked to 1 Α. 2 David Barker about some idea. The collaborative process, bouncing ideas and questions off the other team members. 3 You don't remember any staff members that may 4 Ο. have been working at your direction? 5 6 Might have been Ben Tobler, because he was Α. working with me in that time frame, I know. 7 8 Did you have any involvement in developing the Q. 9 factual or historical allegations against Chevron? 10 Α. Yes. 11 Would Mr. Tobler have been working with you in 0. that capacity? 12 13 Α. To some degree. Do you recall any other staff that were 14 Q. 15 involved? David Barker and John Richards, the former 16 Α. 17 attorney for the Water Board. Did you have any involvement in developing the 18 0. factual or historical allegations against BP? 19 20 Α. Yes. Same question. Who were you involved with, if 21 0. 22 anyone was involved with you, in developing those allegations? 23 Most likely David Barker and John Richards. 24 Α. 25 Were you involved in developing the factual or 0.

Page 74 1 historical allegations against SDG&E? 2 Α. Yes. 3 Ο. And again, same question, what, if any, members of staff were involved with that process? 4 Ben Tobler, most likely, David Barker. 5 Α. And were you involved in developing the factual 6 0. 7 or historical allegations against the Navy? Α. Yes. 8 9 Same question, who was involved working with 0. you, if anybody? 10 I remember clearly working with David Barker on 11 Α. that. 12 13 Ο. Does anybody else come to mind? Not sure. Some degree perhaps Lisa Honma or 14 Α. others that were working on Chollas Creek discharges. 15 16 Q. Finally, did you have any development in 17 developing the factual or historical allegations against 18 the Port District? Α. Yes. 19 20 And the same question, who, if anyone, do you 0. 21 recall was involved with you in that process? Cris Carrigan, David Barker, at least. 22 Α. 23 So I've gone through, in my count, all the Q. parties. Is it fair to say you had involvement in 24 25 developing the allegations against all of the parties

Page 75 1 named in the CAO? 2 MS. REYNA: Objection. Misstates his testimony. 3 MR. CARLIN: You can answer the question. 4 THE WITNESS: Can we get her to read back my 5 testimony? I don't know how this works. If it's misstated, I want to catch where it's misstated. 6 BY MR. CARLIN: 7 As I said earlier, lawyers make objections for 8 0. 9 the record. You're entitled to answer and, in fact, required to answer unless instructed otherwise. 10 I just went through a variety of parties. I 11 want to get a sense if you were involved in the process 12 13 of deciding who should or should not be naming who was in the CAO. 14 As far as I recall, I was involved at least to a 15 Α. 16 minor degree in all of those. 17 MR. CARLIN: I think it would be a good time for 18 a break. Is that okay with you? 19 THE WITNESS: Good idea. 20 MR. CARLIN: Okay. Let's go off the record. 21 (A recess was taken.) BY MR. CARLIN: 22 23 We're back on the record. Are you ready to Ο. continue? 24 25 Α. Yes.

Before we went to break, we were talking about 1 Q. 2 areas of the CAO/DTR which you may have been involved I wanted to ask you if you had any involvement in 3 with. drafting any of the analysis in the DTR with respect to 4 5 Chollas Creek. Α. Could you be more specific? 6 The DTR discusses Chollas Creek. It also Ο. 7 discusses the potential for Chollas Creek to contribute 8 9 contamination to the Shipyard Sediment Site. I didn't participate much on that aspect of the 10 Α. DTR. 11 Can you describe the extent of your involvement? 12 Q. I read the sections. 13 Α. You didn't contribute to the sections? 14 Ο. 15 Α. I don't recall contributing. 16 0. Do you recall editing those sections? 17 Α. I don't recall editing those sections. So you don't recall any participation in the 18 0. development of any of the conclusions or findings 19 20 regarding the potential for Chollas Creek to impact the site? 21 MR. CARRIGAN: Assumes facts not in evidence. 22 Calls for speculation. Lacks foundation. You can answer 23 if you understand the question. 24 25 THE WITNESS: I may have participated in the

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1 collaborative process we discussed when we worked on 2 those sections. BY MR. CARLIN: 3 But you would not describe yourself as having a 4 Ο. primary role in any of that analysis? 5 Α. No. 6 I'd like to move on for a minute to talk about 7 0. the cleanup team's designation of persons most 8 knowledgeable to testify on various subject matters in 9 this proceeding as authorized by the presiding officer's 10 discovery plan, provisions of the California Civil 11 12 Procedure Code. 13 NASSCO and BAE have made a request to the 14 cleanup team to designate persons most knowledgeable to testify on a variety of subject matters. First, I wanted 15 16 to ask you if you're aware that such a request has been made. 17 18 Α. Yes. And to your knowledge have you been designated 19 Q. as the person most knowledgeable to testify on any 20 subject? 21 22 My understanding is I have not. Α. And I appreciate that testimony. I just want to 23 Q. go through each of the categories and just confirm that 24 it is your understanding that you are not so designated 25

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Page 78 1 with respect to that topic. Okay? 2 Α. Yes. Mr. Carlisle, have you been designated as the 3 Ο. cleanup team's person most knowledgeable with respect to 4 the sediment or site investigation? 5 6 Α. No. 7 Same question with respect to background or 0. 8 reference condition. 9 Α. No. Same question with respect to bioavailability 10 Ο. and bioaccumulation. 11 12 Α. No. Same question with respect to aquatic life 13 0. impairment. 14 15 Α. No. Have you been designated as the cleanup team's 16 Q. person most knowledgeable to testify on aquatic-dependent 17 life impairment? 18 19 Α. No. 20 Same we with respect to human health impairment. Q. 21 Α. No. 22 Q. Same question with respect to technological 23 feasibility. 24 Α. No. 25 Q. Same question with respect to economic

1 feasibility. 2 Α. No. Have you been designated to testify with regard 3 Ο. to alternative cleanup levels? 4 No. 5 Α. Same question with respect to alternative 6 Q. 7 remedies? Α. No. 8 Same question with respect to other sediment 9 0. remediations both in San Diego and throughout California. 10 11 Α. No. 12 Q. Same question with respect to the remedial 13 footprint. Α. 14 No. Same question with respect to remedial 15 Q. monitoring. 16 17 Α. No. Finally, same question with respect to the 18 0. 19 shipyard administrative record. 20 Α. No. 21 Q. Thank you. 22 I'd like to go ahead now and talk a little bit about the development of the administrative record in 23 this proceeding. And to clarify, it's my understanding 24 25 that there's an initial administrative record containing

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Page 80 materials up to 2008, and there was also a supplemental 1 2 administrative record with materials from 2008 to the 3 present. Is that consistent with your understanding? Α. 4 Yes. Okay. So these first questions I'm going to 5 Ο. ask, I'm going to ask with respect to the initial 6 administrative record up to 2008. Okay? 7 Α. Yes. 8 9 With respect to that administrative record, have Q. you had involvement in the maintenance or development of 10 the administrative record? 11 Α. 12 Yes. 13 Ο. Can you describe that involvement for me? I recall I got started when we were trying to 14 Α. identify and fund a contractor, so early on in the 15 16 process. And then I helped -- we, I helped a group of people try to identify, you know, what files to start 17 making available, the process to make them available to 18 be digitized. 19 20 Ο. I want to ask one question. When you say the 21 contractor, that's a contractor to digitize the 22 administrative record? 23 Α. Right. And if you can give me an estimate of the time 24 Q. 25 frame when you began to discuss that with the contractor.

Page 81 I don't recall what years that was. May have 1 Α. been started in '04/'05. I'm not -- when did the 2 administrative record come out? 3 Well, I was talking about when you first started 4 Ο. 5 working on it with the contractors, trying to get a sense of the time. 6 I think it was about two years before we made 7 Α. the hard drive available, plus or minus a year. 8 9 In connection with your work on the record, were Ο. you involved in any decisions to determine what materials 10 should be included in the record? 11 12 I was partly involved. Α. 13 Q. Can you describe your involvement in that 14 process? Well, the orders, or the decision we made, 15 Α. 16 David Barker and myself and I'm not sure who else, was everything, no stone unturned. We wanted to put 17 everything in the record. It's been a strong desire of 18 us to have everything in our file room electronic. This 19 was a great opportunity to at least start with a piece of 20 our files, an important piece. 21 When you say, "everything," that was everything 22 Ο. in your file for the project; is that a fair description? 23 Our files were organized by sites, regulated 24 Α. And BAE/Southwest Marine is a regulated site. 25 Ιt sites.

Page 82 occupies several rows in our hard-file room, and same 1 2 with NASSCO. So that's what we identified initially. And you intended to make sure all that material 3 Ο. was in the administrative record? 4 Correct. 5 Α. You said you worked with Mr. Barker on the 6 0. 7 administrative record. Α. Yes. 8 9 0. Anyone else that you worked with on that process? 10 I'm sure there were quite a few people involved. 11 Α. I can't remember off the top of my head what staff people 12 were involved with some of the physical labor, so to 13 speak, pulling out dozens of feet, essentially, of, you 14 15 know, expanding folders. 16 0. Let me narrow my question a bit. Was Mr. Barker involved in determining what 17 materials should or should not be included in the record? 18 19 I'm having trouble with the way the question is Α. Because we put everything in the record we could 20 worded. possibly find that involved the shipyards, and 21 subsequently in the adjacent potential responsible 22 parties. 23 Let me ask it this way: Did Mr. Barker issue a 24 0. directive that you should include everything into the 25

Page 83 administrative record as you've described it? 1 I wouldn't call it a directive. But that was my 2 Α. understanding of the instructions. 3 And those are Mr. Barker's instructions? Ο. 4 5 Α. Yes. As part of the development of the record, did 0. 6 you ever search for any emails that you thought should be 7 included in the record? 8 9 Α. Yes. And what did you do? How did you go about that 10 Ο. 11 process? 12 Α. I looked at all the emails associated with the project, and especially ones that had information like 13 14 attachments, documents. And those were all added. 15 Q. You looked at your own email inbox? 16 Α. Yes. Did you do anything broader than searching your 17 0. own email? 18 Well, we asked everybody that might have had 19 Α. emails on the project to do the same thing. 20 21 Did you conduct any broader search yourself, Ο. 22 maybe the Regional Board server? 23 Α. Yes. I would look in the shared drives on the server and the local drives on my computer for all 24 25 documents related to the project.

And then you made a determination whether or not 1 0. certain emails should be included in the record? 2 Correct. And in general, the determination was Α. 3 yes, everything, everything that had substantive content. 4 Was there any particular ground or basis you may 5 Ο. have used to exclude any material from the record? 6 Correct. If I got an email that said, "Thanks," 7 Α. one word. An underlying email that it was thanking, 8 might have had an attachment, that email went in the 9 record. The subsequent one-word "thanks" email would not 10 get in the record. 11 12 Q. So you used your judgment to determine if an email was -- you thought was relevant; is that a fair 13 14 characterization? MR. CARRIGAN: Misstates witness's testimony. 15 THE WITNESS: I wouldn't use the term 16 "relevant." If it had any useful information or any 17 information at all that might -- anyone might think is 18 useful. Again, our marching orders were to get 19 everything we could get our hands on in the record. And 20 21 I just recall, to add to my previous answer, besides 22 David Barker, I believe John Richards or whatever legal 23 counsel we had at the time was involved in confirming with us that the goal is to get everything we could 24 25 possibly find into the record.

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Page 85 MR. CARRIGAN: I'm going to caution you not to 1 2 discuss legal advice that was given to you by Mr. Richards. If you have factual information, that's 3 4 fine. But please don't disclose attorney-client communications. Thank you. 5 BY MR. CARLIN: 6 You mentioned a minute ago that others were also 7 0. directed to search their email inboxes for information 8 9 that may be appropriate to include in the administrative record; is that right? 10 11 Α. Yes. Do you recall which individuals were given that 12 Ο. 13 direction? Probably everyone that was working on the team. 14 Α. Lisa Honma, Ben Tobler, Alan Monji, Tom Alo. 15 16 Ο. Do you think it would have been everybody that was working on the cleanup team? 17 18 Α. Yes. Have you personally taken steps to ensure that 19 0. 20 any reference material that you may have used in 21 connection with your work on the DTR and CAO made its way 22 into the administrative record? 23 Α. Yes. That was something you intended to do? 24 Q. 25 I did it, definitely. Α.

Page 86 1 Q. Was that part of the direction you were given as 2 part of the work on the cleanup team? Α. Yes. 3 Ο. I want to move on to the supplemental 4 administrative record that we mentioned earlier 5 6 containing, generally speaking, documents from 2008 to the present. And my understanding is that was made 7 available on the Regional Board's website in November of 8 2010. Were you involved in the process of developing 9 that supplemental record? 10 Α. Yes. 11 And again, can you describe for me the process 12 0. of your involvement with that supplemental record? 13 Well, similar process. Anything we had 14 Α. associated with the shipyard site that we knew wasn't on 15 the first record, the hard drive, we call it, we --16 matter of fact, immediately after, there was a cutoff of, 17 okay, we've got to finalize this hard drive. 18 19 And then if we got some additional documents, we flagged them for when we wanted to, you know -- to use in 20 21 the time -- when the time came to prepare the supplemental record. So everyone was on notice to get 22 ready for, you know, any new stuff or stuff that didn't 23 24 get in the first record, to flag it and have it available 25 for the second record, or the supplement.

Q. Would you say that the process for determining materials to include in the supplemental record was the same as for the initial record but simply intended to capture documents that you received later or that came into existence later?

6

A. That's one aspect of it.

Okay. And if there's other aspects --7 Ο. The other aspect was, as I recall -- I think Α. 8 9 the -- the search for broader additional party data, information involving additional PRPs, designated parties 10 was -- were included. But I'm not sure exactly -- I 11 wasn't as involved with the supplemental record as I was 12 13 with the initial record.

14 Q. Do you know who else was involved in the 15 supplemental record?

A. I'm pretty sure it was Vicente Rodriguez,
David Barker. And I don't know offhand who else.
Probably other members of the team.

I mean, as I said, I was involved because I was, you know, under the understanding like I think everyone else on the team that, okay, if it didn't get in the first record, you know, flag it, and we'll get it in the second.

Q. And I wanted to attempt to confirm that the process you used to search for would include materials in

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the supplemental records was the same as for the original 1 2 record with the intent to capture information that needed to be in the supplemental record, whether because simply 3 a function of time or maybe there's new allegations or 4 5 different allegations in the newest version of the DTR 6 that needed backup information in the record. I think that's a fair statement. 7 Α. And so in connection with the supplemental 8 0. record preparation, did you conduct a search of your 9 email as well? 10 Α. Yes. 11 12 And was it your understanding that the other 0. 13 cleanup team members at that time were also given that direction? 14 Α. 15Yes. 16 Are you familiar with the advisory team in this 0. proceeding? 17 Α. Yes. 18 What's your understanding of the advisory team's 19 Ο. 20 purpose? To advise the board. 21 Α. 2.2 Do you know who the current members of the Q. advisory team are? 23 24 Α. Yes, to some degree. 25 Could you name them for me? 0.

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Page 89 Katherine Hagen, Frank Melbourne. Used to be 1 Α. 2 John Robertus; now it might be Jimmy Smith. Have you had any communications with 3 Ο. Frank Melbourne regarding the substance of the CAO or 4 5 DTR? 6 Α. No. 7 Same question with respect to Jimmy Smith. 0. No, I've not had conversations with Jimmy Smith 8 Α. 9 on the substance. Same question with respect to Ms. Hagen. 10 0. 11 Α. No. Have you had any substantive communications with 12 Q. any current board member, that's a board member of the 13 Regional Board, regarding the substance of the CAO or 14 15 DTR? 16 Α. No. 17 Same question with respect to a former member of 0. the Regional Board. 18 19 Α. No. MR. CARLIN: Okay. I appreciate your time. 20 Ι have no further questions right now. I would reserve my 21 right to ask follow-up questions after the other counsel 22 have gone through their questioning. 23 24 THE WITNESS: Thank you. 25 \* \* \*

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1	EXAMINATION
2	BY MR. BROWN:
3	Q. Mr. Carlisle, we've met many times before. My
4	name is Bill Brown. I'm the attorney handling this
5	matter for the Port of San Diego. And I anticipate my
6	questioning will probably take about an hour or so. So
7	if you want to take a break before we get started, that's
8	fine. But if you want to take a break in another
9	45 minutes, we can break it up. I think we've just had a
10	break recently, so we'll go ahead and just start.
11	When did you first starking working on the TMDL
12	and the DTR for the sediment site?
13	A. Approximately, 2002 or 2003.
14	Q. Did you work on the draft dated August 24th,
15	2007?
16	A. Yes.
17	Q. There was testimony, and I may be
18	mischaracterizing this, but somebody said in a prior
19	deposition that you were involved extensively in the
20	prior drafts. Were you more involved in the prior drafts
21	than you were in this draft, or about the same?
22	A. What's your definition of "about the same," plus
23	or minus 25 percent?
24	Q. That would be fine.
25	A. Yes.

Page 91 1 And why were you more involved in the prior Q. 2 drafts than you were in this one? Α. I think I just said about the same. 3 Ο. So you're saying it's about the same. Okay. 4 Were you involved in the sections that decided 5 6 to name the Port as in the current TCAO? Α. Yes. 7 And what was your involvement? 8 0. I participated in the collaborative process as 9 Α. the allegations were developed. 10 And what new information did you gather that 11 0. assisted you in naming the Port on the current draft 12 13 although it was not named in the prior drafts? The the MS4 system information. 14 Α. And what did you do to gather information on the 15 Ο. 16 MS4 system? MR. CARRIGAN: Assumes facts not in evidence. 17 Misstates testimony. You can answer. 18 19 THE WITNESS: I didn't gather the information 20 myself. BY MR. CARLIN: 21 22 Who did gather it for you? Ο. 23 MR. CARRIGAN: Calls for speculation. Lacks 24 foundation. If you know, you can answer. 25 THE WITNESS: I assume David Barker asked people

working on the MS4 program to help gather information.
 BY MR. BROWN:

Q. All right. Were you involved in drafting Section 11 of the DTR that addresses the issue about the Port's involvement with the DTR?

6 A. Could you be more specific?

Q. Yes. If you want to switch to the exhibit, that
might be helpful. I think it's called Master Exhibit 2.
And it's Section 11.

10 A. And what's the question?

Q. Let's look at Section 11.3.1. At page 11.5, the last paragraph states, "The Port district operates the following MS4 storm drains which convey urban runoff from sources, areas upgrading of the Shipyard Sediment Site property and discharged directly or indirectly in San Diego Bay within the NASSCO and BAE leasehold."

17 Then the next page starts out with a bullet 18 point, Storm Drain SW4. It says, "The storm drain 19 outfall identified as SW4 in the shipyard report." And 20 it sites Exponent 2003.

Were you involved in gathering this information?A. No.

23 Q. Who did, do you know?

24 A. No.

25 Q. Is it unusual for you to cite the report of

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Page 93 another party in a case to make allegations against 1 another party? 2 Α. No. 3 Did you check the Exponent report to see if it 4 0. 5 was accurate as to whether or not the Port operated the storm drain? 6 7 Α. I didn't make this allegation. Were you involved in it? 8 Ο. 9 Not that I recall. Α. Do you know who did make this allegation? 10 Ο. 11 It was a collaborative effort, as far as I Α. No. 12 know. Would it be unusual for you to accept as truth 13 0. 14 at the Water Board the allegations of another party as the base of a charging allegation against a different 15 16 party? 17 MR. CARRIGAN: Incomplete hypothetical. Calls for speculation. Lacks foundation. 18 19 THE WITNESS: Could you repeat the question? MR. BROWN: I'll have the court reporter repeat 20 it. 21 22 (The record was read as follows: 23 "Q. Would it be unusual for you to accept as truth at the Water Board the allegations of 24 25 another party as the base of a charging

	Page 94
1	allegation against a different party?")
2	MR. CARRIGAN: Renew the objections.
3	MR. CARLIN: Join.
4	THE WITNESS: To me it sounds like a legal
5	interpretation question that I don't feel qualified to
6	answer.
7	BY MR. BROWN:
8	Q. Okay. That's fair enough.
9	As you sit here today, do you know whether the
10	Port operates SW4?
11	A. What's the definition of "operating SW4"? I
12	thought SW4 is a hole in the end of a pipe.
13	Q. Do you know if the Port owns SW4?
14	A. Personally, no.
15	Q. Do you know what the Water Board is attempting
16	to say when it says that the Port operates SW4?
17	MR. CARRIGAN: Calls for a legal conclusion.
18	Document speaks for itself.
19	THE WITNESS: I don't have anything to add to
20	that.
21	BY MR. BROWN:
22	Q. Do you know who was responsible for checking the
23	facts in this section?
24	A. No.
25	Q. Do you know what the word "operates" means as it

Page 95 1 was used in this document? MR. CARRIGAN: Document speaks for itself. 2 Calls for a legal conclusion. 3 THE WITNESS: No. 4 BY MR. BROWN: 5 6 What is your understanding of the word Ο. "operate"? 7 I'll define it fairly generally. And it seems 8 Α. to me if you've got a storm drain system that takes 9 runoff from property controlled or owned by you, you're 10 11 operating it. 12 Q. Do you know if SW4 discharges to property that's 13 owned or controlled by the Port of San Diego? 14 MR. CARRIGAN: Vaque. THE WITNESS: That's my understanding. 15 BY MR. BROWN: 16 And what's the basis for your understanding? 17 0. That the Port owns the tidelands property which 18 Α. 19 includes the NASSCO and BAE leases. Do you know if those properties discharge into 20 Q. SW4? 21 That's my understanding. 22 Α. 23 MR. CARRIGAN: Vague and overbroad. Make sure 24 you give me a second. 25 THE WITNESS: That's my understanding.

1 BY MR. BROWN:

Q. Do you know if an exclusive easement has been
given to the City of San Diego for the operation of those
storm drains?
MR. CARRIGAN: Incomplete hypothetical. Assumes

6 facts not in evidence. Calls for speculation.

MS. REYNA: Calls for a legal conclusion. THE WITNESS: My understanding is that there's storm drains and there's storm drains, the piping. And there's laterals. And some may be the city. Some may be the Port's, is my understanding. It's a complex

12 situation.

13 BY MR. BROWN:

14 Q. Do you know of any laterals that connect to SW4 15 on Port property?

16 A. No.

17 Q. Were you involved in responding to the discovery 18 in this case?

19 A. Yes.

Q. I'll mark as Exhibit 1002 a copy of the requestfor admissions in this case.

22 (Exhibit 1002 was marked.)

23 MR. CARRIGAN: Do you have a copy for me, 24 Counsel?

25 MR. BROWN: Yes, I do.

He

MR. CARRIGAN: Thank you. BY MR. BROWN: Ο. Do you know who was responsible for gathering the facts that went into these answers? I recall it was a collaborative effort. Α. Could you read, it begins on page 9, Request for 0. Admission No. 5 and response to Request No. 5. Α. Okay. Does this refresh your recollection that the 0. Port does not own SW4? MR. CARRIGAN: Again, calls for speculation. is not the party who verified these responses. MR. BROWN: I'm just trying to get his personal knowledge. If he's going to say he wasn't the person who did this, that's fine. But I have to find out who came up with this. THE WITNESS: Yeah. I'm not the person that did that. BY MR. BROWN: Do you know where SW4 drains into? Q. Approximately. Α. Q. Do you know where it's located? I think I do. Α. Ο. Okay. And where is it located?

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25 In Figure 11-1, it's located on, looks like, Α.

1 BAE's leasehold.

Do you know, has anyone checked to see if 2 Q. 3 there's any storm drains at BAE's leasehold that feed into SW4? 4 5 MR. CARRIGAN: Calls for speculation. 6 MR. BROWN: If you know. THE WITNESS: I don't know. 7 BY MR. BROWN: 8 9 Did you personally check? 0. 10 Α. No. Did you consult with BAE at any time? 11 0. I think the cleanup team consulted with BAE and 12 Α. 13 asked them for all the outfalls, and they provided that information. 14 Do you know who at the cleanup team provided 15 0. 16 that information? 17 It may have been -- no, I don't. Α. 18 Who do you think it might have been? Q. I was going to start to say it might have 19 Α. 20 been --21 MR. CARRIGAN: Hold on. Calls for speculation. 22 I don't want you to guess. 23 MR. BROWN: I don't want you to guess. 24 MR. CARRIGAN: Okay. 25 MR. BROWN: I'm trying to limit the --

MR. CARRIGAN: If you know or if you have an
 answer, you can give it.

3 BY MR. BROWN:

Q. Mr. Carlisle, there's a difference between a guess and an informed opinion or an estimate. The corny routine that lawyers always do to explain this is if I asked you what is the length of this table, you would say, "I don't know. I didn't measure it." But you would have an opinion that it's, you know, a certain length.

10 If I asked you what was the size of the table in 11 it Mr. Richardson's office, presumably you haven't been 12 there before, so then you would just be guessing. And 13 that is sort of the difference.

14 What I'm trying to say is more in the area of an 15 informed opinion, would you have any idea who checked the 16 facts to see if SW4 has any outfalls coming from BAE 17 property?

18 A. No.

Q. Then I had another question for you about SW9.Do you know where it drains into?

21 A. Approximately, yes.

22 Q. And where does it drain into?

A. At the southern end, it looks like, of theNASSCO leasehold.

25 Q. Yes. And are you aware of whether that drains

into the area called the TMDL area in this case? 1 2 MR. CARRIGAN: Incomplete hypothetical. THE WITNESS: It appears that it might. 3 BY MR. BROWN: 4 And I'm not trying to be unclear about this. 5 Ο. We're trying to figure out why SW9 is related to this 6 7 site because it appears that SW9 drains into the area that's addressed by the TMDL cleanup in this case. Does 8 9 that appear accurate to you? 10 Α. No. And why does it not appear accurate? 11 0. 12 Α. They're not mutually exclusive. Do you know whether the area in the vicinity of 13 0. SW9 outfall is one of the polygons that is targeted for 14 15 cleanup in this matter? 16 Α. I'd have to refer to the report to be a hundred 17 percent certain. Okay. Can you take a second and do that? 18 Ο. It's my understanding that it's targeted for 19 Α. remediation, not via the dredging via this action but via 20 21 another mechanism; i.e., the TMDL implementation. Right. So my question is why is it included in 22 Ο. 23 this report if it's not related to this action? 24 MR. CARRIGAN: Vaque. 25 THE WITNESS: They're not mutually exclusive.

1 The report thoroughly evaluated the Shipyard Sediment 2 Site which, as I said earlier, went beyond just the 3 simple leasehold boundaries. And just by the fact it 4 overlaps with another potential regulatory action via 5 implementation of the TMDL doesn't mean it can't be part 6 of this action.

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7 BY MR. BROWN:

Q. Is it currently planned that you're going to9 address this area through this action?

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MR. CARRIGAN: Vague.

11 THE WITNESS: I believe it is planned to be 12 addressed via this action, depending upon how you define 13 "addressed."

14 BY MR. BROWN:

15 Q. Well, it's not one of the polygons that's 16 targeted for cleanup; is that accurate?

MR. CARRIGAN: Are you talking about NA-22? MR. BROWN: I'd have to pull out the chart. And we can do that, and I encourage you to do it. What I'm trying to say, and I just wanted you to see if it's accurate or not. It appears that SW9 drains into an area that is labeled as the TMDL area, which means it will not be dredged or remediated in this action.

24MR. CARRIGAN: Do you mean Polygon NA-22?25MR. BROWN: Yes.

Page 102 THE WITNESS: Could you repeat the question now? 1 MR. BROWN: Well, now we've got Mr. Carrigan and 2 I both asking questions at the same time. 3 MR. CARRIGAN: I'm just trying to get a question 4 5 that makes sense because I have too many pronouns to really understand the question you're getting at, Bill. 6 7 I'm sorry. 8 MR. BROWN: That's okay. 9 MR. CARRIGAN: Okay. MR. BROWN: I'm open to advice. We just want to 10 get the information. 11 12 BY MR. BROWN: 13 Is it your understanding that SW9 drains into 0. 14 the area known as NA-22? 15 Α. Yes. And will NA-22 be addressed in this action? 16 Q. What do you mean by "this action"? 17 Α. Will it be determined who is responsible for 18 0. 19 cleanup in this action? For example, will the cleanup of 20 Area NA-22 be addressed in the Cleanup and Abatement 21 Order that we're discussing today? 22 Perhaps tangentially. Α. Why is SW9, then, listed as a basis for the 23 Q. Port's responsibility? 24 25 Because -- just because there's an outfall, it Α.

1 doesn't mean that outfall contaminated only a small area
2 immediately adjacent to that outfall due to sediment
3 transport considerations.

Q. And that's an area worthwhile of exploring.
I understand that you have a degree of fate and
transport. And as you eloquently said before, all
geology involves that to some extent. Are you going to
give an expert opinion in this matter on fate and
transport of chemicals as it relates to this cleanup and
abatement order?

11 A. Possibly.

Q. Do you have an opinion as to whether the chemicals that are coming out of SW9, if there are chemicals coming out of SW9, are affecting the area that will be addressed in this cleanup and abatement order?

16 A. Yes.

17 Q. And what is your opinion?

18 A. They do.

19 Q. They do. And how do they do that?

20 A. By tidal movement, mass transport via storm flow 21 events, other currents, the sun, the moon.

Q. Mr. Carlisle, was Chollas Creek originally part
 of the cleanup and abatement order for this site?
 MR. CARRIGAN: Vague.

25 THE WITNESS: Could you provide more specificity

to the question? 1

2 BY MR. BROWN:

Well, I'll come back to it in a bit. But let's 3 Ο. go at it a different way. 4 Do you believe that Chollas Creek is feeding 5 contamination into the areas that are going to be cleaned 6 up in this site? 7 Α. 8 Yes. And are you the primary person who would give an 9 Q. opinion on that in this case? 10 I don't know. 11 Α. 12 MR. CARRIGAN: He's not designated as our PMK. 13 MR. BROWN: All right. BY MR. BROWN: 1415 Have you consulted with anybody on this issue? Ο. 16 Α. Yes. 17 And who did you consult with, aside from your Ο. attorneys? If it's attorney-client, I don't want to 18 19 know. Ken Schiff, I believe, Ken Schiff. Chuck Katz 20 Α. with SPAWAR published a paper on the transport of 21 22 sediments during storm events out of Chollas Creek. 23 And do you believe that his conclusion was that Q. Chollas Creek was leading to contamination in the areas 24 25 that are the subject of this cleanup and abatement order?

Page 105 I believe that his work, his studies, his 1 Α. 2 reports would allow someone to apply those conclusions -to come to that conclusion. 3 Do you know which Chemicals of Concern are 4 Ο. coming out of SW9 that are being transported into the 5 shipyards area or the area that's going to be addressed 6 by this cleanup and abasement order? 7 Off the top of my head, I couldn't name a 8 Α. 9 specific list. 10 Did you review computer modeling? Ο. I reviewed technical reports. I'm not sure if 11 Α. they used computer modeling or not. 12 Between the time of December 22nd, 2009, and 13 Ο. September 15th, are you aware of any circumstances that 14 15 changed that caused the Port to no longer be named 16 secondarily liable in the report? 17 Α. Yes. And what were the circumstances that changed? 18 Ο. The termination of the assistance the Port was 19 Α. 20 providing to the cleanup team and the parties. 21 And is that mentioned anywhere in the draft CAO 0. 22 or the Draft Technical Report? I think it is. 23 Α. 24 MR. CARRIGAN: Document speaks for itself. 25

Page 106 BY MR. BROWN: 1 2 Could you point to me where it is? 0. Section 11. Α. 3 Anywhere specifically in Section 11 it 4 Q. 5 mentions --MR. CARRIGAN: Document speaks for itself. 6 7 MR. BROWN: It does speak for itself. But I'm entitled to ask him where he finds that. 8 MR. CARRIGAN: I'll just assert my objections 9 for the record. 10 11 THE WITNESS: Could you repeat the question so I 12 make sure I look for the exact information you're looking 13 for? 14 BY MR. BROWN: Yes. I'm trying to find anywhere in the draft 15 0. CAO or the Draft Technical Report that lists lack of 16 17 assistance as a basis for the change. MR. CARRIGAN: Renew my objections in case 18 they're not on the record. 19 THE WITNESS: I don't see it offhand in here. 20 BY MR. BROWN: 21 Q. Do you know why it is not -- and I'll make this 22 23 representation to you. And if I'm wrong, I'll -- you know, I don't know how I can do it. 24 25 But I can tell you after having poured through

this, there are no allegations in either the DTR or the 1 CAO that the Port withdrew assistance. If that is a 2 basis as to why the Port's being now named as primarily 3 liable, do you know why it was omitted from the CAO or 4 5 the DTR? MR. CARRIGAN: Calls for a legal conclusion. 6 THE WITNESS: I don't know. 7 BY MR. BROWN: 8 In addition to allegations about the storm water 9 Ο. through SW4 and SW9, aside from that issue, do you know 10 why else the Port is named as a primary discharger in the 11 12 new draft? 13 Α. Yes. 14 Ο. Why? From the tenant's discharges and their ability 15 Α. to control tenant's discharges through the terms of their 16 lease. 17 There's also an allegation that the the tenants 18 Ο. 19 are perhaps financially unable to fund the cleanup. Were you involved in any of that investigation? 20 21 MR. CARRIGAN: Misstates the document. MR. BROWN: Well, we can go straight to the 22 23 document. 24 THE WITNESS: I wasn't involved in that. 25

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1 BY MR. BROWN:

2 Q. Do you have any knowledge about the financial 3 abilities of the tenants?

4 A. No.

5 Q. Were you ever consulted on that?

6 A. No.

7

Q. All right.

8 In what ways has the Port removed its assistance 9 to the Water Board?

Well, we were no longer able to access their 10 Α. technical experts, in-house and external consultant. 11 They apparently didn't provide financial assistance to 12 hire the CEQA contractor for the EIR. Dwayne Bennett 13 even said he wouldn't even ask the board, wouldn't even 14 bring it to the board to ask them for assistance. I was 15 16 in on a meeting at that point. So it just went from 17 wonderful assistance to zero.

Q. Do you know who told you that you could not use the technical experts that the Port had or have contact with them to assist in your report?

21 A. I don't recall.

Q. Who told you that the Port would not assist in
funding of the CEQA --

A. Dwayne Bennett.

25 Q. Do you recall why he said he would not assist in

1 doing that? 2 MR. CARRIGAN: Calls for speculation. MR. BROWN: I'm asking if you recall why. 3 THE WITNESS: I don't recall. 4 5 BY MR. BROWN: 6 Ο. Are you aware of any other instances where a party who was not a discharger agreed to pay for 7 financial assistance? 8 MR. CARRIGAN: Incomplete hypothetical. 9 THE WITNESS: Financial assistance, do you mean 10 where a landowner assisted with the cleanup financially? 11 MR. BROWN: No, where somebody who is not named 12 as a discharger on a cleanup and abatement order agreed 13 to pay for part of the CEQA costs applying to that 14 cleanup and abatement order. 15 16 MR. CARRIGAN: Same objection. THE WITNESS: I haven't prepared CEQA in any of 17 the cleanup and abatement orders. 18 19 BY MR. BROWN: Do you know how much the cleanup team asked the 20 Q. Port to contribute towards the CEQA cleanup? 21 22 No. Α. 23 Do you know the dollar amount? Q. 24 Α. No. 25 Does \$200,000 ring a bell? Q.

Page 110 That order of magnitude rings a bell. 1 Α. 2 Q. How much was the total cost of the CEOA 3 document, do you know? The contract right now has been funded. 4 Α. Ι believe their contract is approximately \$450,000. But 5 that's not the entire CEQA complete document. 6 Do you know what portion of the CEQA, on a 7 Q. percentage basis, the Port was asked to fund? 8 9 Α. No. Do you have an estimate? 10 0. 11 Α. No. 12 Was it in the neighborhood of 40 percent? Q. I don't know. 13 Α. Do you know if the Port objected on the grounds 14Ο. 15 that the amount that was asked was too high? 16 Α. No. 17 MR. CARRIGAN: Asked and answered. Calls for 18 speculation. BY MR. BROWN: 19 20 Ο. All right. What other grounds other than 21 failing to pay for the CEQA document and withdrawing 22 technical support did the Port withdraw its assistance? 23 Α. Withdrawing from the mediation. And did any other parties withdraw from the 24 0. 25 mediation?

Page 111 The environmental groups. 1 Α. And what were their grounds for withdrawing from 2 0. the mediation? 3 MR. CARRIGAN: Calls for speculation. Lacks 4 5 foundation. BY MR. BROWN: 6 Were you there when they articulated it? 7 Ο. They felt like they were marginalized in the 8 Α. 9 process. Did they have any other complaints? 10 0. I didn't hear of any. 11 Α. 12 Do you recall them complaining about a lack of Q. transparency? 13 14Α. I think that is consistent with the answer I 15 previously gave. Do you know what grounds the Port -- well, I 16 0. don't think they're exactly the same. So let me ask you 17 that. 18 How is lack of transparency the same as being 19 20 marginalized? 21 The Port, as I recall, was in every mediation Α. 22 They were invited, able to attend -meeting. 23 MR. CARRIGAN: I'm going to have to stop. I can't let you testify about mediation, what transpired at 24 the mediation, who attended the meetings or any of that. 25

Page 112 That's all privileged. So I recognize that the question 1 did not necessarily infringe upon that topic. 2 MR. BROWN: I actually didn't ask about the 3 I asked about the environmental groups. Port. 4 5 MR. CARRIGAN: Yeah. MR. BROWN: But it's, you know, just a dialogue, 6 7 and it's easy to pick up the wrong question. MR. CARRIGAN: So I'm just instructing the 8 9 witness not to answer that question unless reframed in a way that avoids the mediation. And I think -- go ahead. 10 BY MR. BROWN: 11 Yeah. I'm not trying to get into the mediation, 12 Ο. Mr. Carlisle. 13 14 You stated two grounds why the environmental 15 groups withdrew from mediation. One was they were being marginalized, in their estimate, and the other one is 16 complaints about lack of transparency. And you indicated 17 that they were the same thing. And I'm trying to figure 18 out in your mind, are they identical, or did they 19 20 overlap? 21 Α. T think --22 MR. CARRIGAN: I'm going to renew my objections 23 that it calls for speculation and lacks foundation. Go 24 ahead. 25

Page 113 BY MR. BROWN: 1 2 What was your understanding of that? Ο. Actually, my understanding was based on what I Α. 3 saw and heard in the mediation. So I --4 Well, then don't -- do you recall them making 5 0. any public comments at the Water Board hearings or 6 7 elsewhere as to why they were withdrawing from the mediation? 8 Α. Yes. 9 10 And what did they say at that time? Ο. 11 Α. I would summarize it as the fact that they were 12 marginalized. Did they, during those statements, talk about 13 Ο. lack of transparency in the process? 1415 I'm not sure if they used that word. Α. MR. CARRIGAN: Let me just say you have to pause 16 for a second to allow me to interpose objections when 17 counsel's asking you about the motives of other parties 18 19 in particular. Go ahead. BY MR. BROWN: 20 I was asking you if you recalled what 21 0. Yeah. they complained about lack of transparency. 22 I don't recall what words they used. 23 Α. 24 Did they complain about the mediation process in Q. 25 regards other than the fact that they were marginalized?

Page 114 Isn't that a guestion about the mediation that's 1 Α. confidential? 2 I'm trying to get to what they stated in public 3 0. about withdrawing from the mediation. 4 Show me the transcript from the board meeting. 5 Α. I can read it. 6 I guess the subject matter I'm trying to get at, 7 Ο. Mr. Carlisle, is did the Port give the same reasons for 8 withdrawing from the mediation publicly that the 9 environmental groups gave? 10 11 MR. CARRIGAN: Calls for speculation. Lacks 12 foundation. I believe there's a document provided by the Port that is best evidence on the topic. 13 14 THE WITNESS: I don't know enough about those 15 details to answer intelligently. BY MR. BROWN: 16 All right. Let's see here. 17 0. Were you involved in determining whether the 18 Port had any violations at the site? 19 Α. No. 20 Do you know whether the Port had been notified 21 0. of any violations at the site, of its own violations or 22 23 violations of the tenants? 24 Α. Yes. 25 O. And when was that?

A. In 1972, the San Diego Regional Water Quality Control Board issued a report that investigated all the shipyards, ship-building activities around San Diego Bay. And it pointed out that ten to -- 5 to 10 percent, roughly, of all the sandblast waste was dumped -- was released into the bay. And that report was sent to the Port.

8

Q. Did the Port respond?

9 A. I don't know.

Q. Do you know what instances there were of what the Port did to not regulate its clients? Can you point to any specific instances where the Port was informed of violations at the shipyard where the Port failed to respond?

15 I didn't see a response to that report in the Α. 16 record. I didn't see response, similarly, to a 2000 letter written from the Regional Board to either BAE or 17 NASSCO or both, separate letters, commenting on a monitor 18 report, MPDS monitor report, that said the tenant's in 19 20 violation. And again, David Merk with the Port was 21 copied on those letters stating the tenants were in violation. I didn't see any responses from the Port in 22 23 the record.

Q. Is it your opinion that the Port failed to enforce regulations against its tenants?

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1 Α. Yes. 2 Q. And what's the basis of your opinion? That the tenants were discharging in violation 3 Α. of their MPDS permit. And I didn't see in the record any 4 5 actions to stop that on behalf of the Port. 6 0. Would they have come to you with those actions, 7 or would they have gone to the tenants? MR. CARRIGAN: Vaque. Incomplete hypothetical. 8 Assumes facts not in evidence. 9 MR. BROWN: If you know. 10 THE WITNESS: I don't know. 11 BY MR. BROWN: 12 And, Mr. Carlisle, I wasn't representing the 13 0. board at that time, and I'm trying to find out historical 14 information. I'm trying to gather what you know, not to 15 argue with you. I'm trying to honestly find out what the 16 Water Board believes the Port should have done. 17 What do you think the Port should have done at 18 19 that time? 20 MR. CARRIGAN: Incomplete hypothetical. THE WITNESS: Enforce the terms of the lease. 21 Stop the discharges. We've been trying to clean up 22 23 San Diego Bay since we stopped putting sewage in the bay 24 straight from the ships. 25

1 BY MR. BROWN:

Do you know if those discharges ceased? 2 0. 3 MR. CARRIGAN: Vaque. THE WITNESS: Over what time period? 4 5 MR. BROWN: During the 2000s. MR. CARRIGAN: Renewed. 6 7 THE WITNESS: They probably were reduced. But I don't know. 8 9 BY MR. BROWN: Do you know if the tenants took any actions to 10 Ο. stop the discharge into the storm drains at that time? 11 It didn't look like it, according to what I've 12 Α. seen in the record in early 2000. 13 Do you know whether the shipyards removed their 14 0. 15 drains that connected to the municipal storm drains? 16 Α. I don't know. Did anybody at the Water Board do any checks to 17 0. determine if that had happened? 18 MR. CARRIGAN: Calls for speculation. 19 Lacks 20 foundation. THE WITNESS: That's not the area I work in at 21 22 the Water Board. BY MR. BROWN: 23 Who would have checked those facts in 24 Ο. 25 preparation for the DTR?

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Page 118 MR. CARRIGAN: Incomplete hypothetical. 1 Assumes 2 facts not in evidence. 3 THE WITNESS: I don't know. BY MR. BROWN: 4 Do you know if best management practices at the 5 Ο. shipyards changed in the last dozen years? 6 7 Α. I hope so. Did you do any checking to see whether they had 8 0. 9 changed? Personally, no. That's not my assignment. 10 Α. I'm sorry to interrupt you. Do you know if 11 0. anybody at the Water Board did? 12 I don't personally have knowledge of that. 13 Ι Α. would assume so. 14 15 Do you know if the Port was involved in Ο. 16 discussing with the shipyards whether they should change 17 their best management practices? 18 Α. I don't know. Do you know how much money the Port has spent on 19 0. 20 cleanups in San Diego Bay in the last dozen years? 21 Α. No. 22 Were you involved in the Campbell Shipyard case? Q. 23 Partially. Α. 24 Do you know if the Port spent money to address Q. 25 those cleanups?

		Page	119
1	A. I don't k	now for certain. I assume they did.	
2	Q. Were you	ever made aware of what the Port's role	
3	was in cleaning up	the Campbell Shipyard case?	
4	A. Yes.		
5	Q. And what	was it?	
6	A. I heard t	they took ownership of that.	
7	Q. Do you kn	now what they funded?	
8	A. I have no	o idea. I didn't know, you know, where	
.9	the money came fro	om at all.	
10	Q. Do you kr	now who instigated the mediation in this	
11	case, the current	case?	
12	A. I thought	t it was the Regional Board, David King.	
13	Q. Do you kr	now whether the Port went to the	
14	Regional Board and	d requested that mediation be	
15	instigated?		
16	A. No.		
17	Q. Do you kr	now if the Port provided funding for the	
18	mediation?		
19	A. No.		
20	Q. Do you kr	now if the Port provided insurance money	
21	to make the mediat	tions go forward?	
22	A. No.		
23	Q. Do you kr	now if the Port contributed to technical	
24	data that was used	d during the mediation?	
25	MR. CARRI	IGAN: I'm going to stop and instruct	

Page 120 you not to answer questions about the mediation. 1 So you 2 are instructed not to answer that question. BY MR. BROWN: 3 Do you know if the Port did other mediations 4 0. regarding other shipyard cleanups in San Diego Bay? 5 Α. No. 6 Do you know whether the Port was involved in the 7 0. cleanup of the TDY site? 8 I think it's highly likely they were involved. 9 Α. Do you know if they paid for that? 10 0. I have no idea. 11 Α. Do you know if they used insurance money to pay 12 Q. for that? 13 14 Α. I don't know. 15 MR. CARRIGAN: Asked and answered. 16 BY MR. BROWN: 17 Do you know if the Port gathered insurance money 0. for all the parties, did an insurance investigation to 18 locate insurance for all the parties that are currently 19 20 involved in this cleanup? Α. 21 No. Do you know whether the Port contributed to the 22 0. actual discharge of waste at the Shipyard Sediment Site? 23 24 MR. CARRIGAN: Vaque. Calls for a legal 25 conclusion.

1	THE WITNESS: Yes.
2	BY MR. BROWN:
3	Q. And how did they do that?
4	A. By not
5	MR. CARRIGAN: Same objections.
6	THE WITNESS: By not enforcing the terms of
7	their leases that would allow them to encourage their
8	tenants to stop discharging.
.9	BY MR. BROWN:
10	Q. Are you aware of any current discharges that are
11	going on at the sites?
12	A. Yes.
13	Q. And what are those?
14	A. Storm water, air deposition, fugitive emissions.
15	Q. Do you know what steps the Port can take to stop
16	that?
17	MR. CARRIGAN: Calls for speculation.
18	Incomplete hypothetical. Lacks foundation.
19	THE WITNESS: If I was the consultant for the
20	shipyards, in lieu of the Port I would go in there and do
21	a site inspection, and I would have them cinch down their
22	BMPs.
23	BY MR. BROWN:
24	Q. Do you know if there was BMP litigation
25	regarding these sites?

Page 122 1 Α. No. 2 0. Do you know if the parties settled and did institute the BMPs? 3 MR. CARRIGAN: Asked and answered. Doesn't know 4 5 about litigation. BY MR. BROWN: 6 7 Are you aware of any BMPs that you could 0. currently point to that should be implemented that are 8 9 not being implemented? 10 Α. Yes. What are those? 11 Ο. 12 NASSCO likes to say that they collect a hundred Α. percent of their storm water. And that's correct; as far 13 as it goes, it's been phased in. First it was their 14 15 working areas. Then it was expanded to some of the other 16 nonactive working areas. But it's my understanding the 17 parking lots still drain unabated during storm events 18 into San Diego Bay. And how did you come to that understanding? 19 Ο. 20 Α. I read the document submitted by NASSCO. And did you personally go and observe that? 21 Ο. 22 Α. No. 23 Do you know if there are contaminants from that Q. parking lot area that are causing contamination to 24 25 San Diego Bay?

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1 A. Yes.

2 Q. How do you know that?

A. All urban runoff from parking lots has4 contamination.

5 Q. How do you know that?

A. Because cars lose material from their brake
pads, their engine oil, transmission oil, potentially.
Tires wear off. All actively used roadways have some
level of contamination.

10 Q. And so what is the BMP that NASSCO should be 11 implementing to stop that from happening?

A. That's not my area of expertise. Would you likesome suggestions?

Q. Here in a deposition we're allowed to go -A. Catch all the storm water, treat it, and
discharge it.

Q. Are you aware of any recent cases that discussed what the legal standard is for determining what is evidence of a party causing storm water discharges? MR. CARRIGAN: I'm going to object to the extent this infringes on attorney-client privilege. If you're aware of a case or analysis of a case that was not discussed with you by me, then you can answer.

24 THE WITNESS: No.

25

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1 BY MR. BROWN: 2 Ο. Are you aware of a recent case involving Los Angeles County where Los Angeles County was sued by 3 the National Resources Defense Council for contributing 4 to urban runoff? 5 MR. CARRIGAN: Same objection. 6 THE WITNESS: No. 7 BY MR. BROWN: 8 9 Q. Were you ever provided a copy of the opinion? MR. CARRIGAN: Same objection. 10 MR. BROWN: I'm asking him for public record. 11 I'm not asking what you told him. 12 MR. CARRIGAN: Then if he knows outside the 13 scope of what I told him, he can answer. He is not to 14 15 discuss things that were told to him by me in confidence. 16 And your questions clearly --MR. BROWN: If they do --17 18 MR. CARRIGAN: Okay. MR. BROWN: As a forewarning again and again, I 19 20 don't want to know anything any of your attorneys have 21 told you. 22 THE WITNESS: No. BY MR. BROWN: 23 Have you done any testing of the outfalls that 24 0. you believe led to contamination of the site, the 25

Page 125 Water Board, not you personally but the Water Board? 1 The Water Board actually collecting the sample 2 Α. and doing the analysis, or the Water Board getting a 3 report from someone else collecting the sample and doing 4 5 the analysis? 6 0. Either one. 7 Α. Yes. And what were those? Ο. 8 Could you repeat the question about testing of 9 Α. 10 what and where? 11 Q. Were there any testing of the outfalls? For example, was there any testing at the mouth of SW4 or 12 13 SW9? Well, all the Exponent reports, some of the 14 Α. 15 samples are near those outfalls. Were they actually at the mouth of the outfall, 16 Q. or were they nearby? 17 MR. CARRIGAN: Vaque. 18 19 THE WITNESS: That's too vague to answer. What's nearby versus at? 20 21 BY MR. BROWN: All right. I'll accept that you can't make the 22 Q. distinction. 23 24 Are you aware of any other drains that the Port 25 owns or operates other than SW4 or SW9?

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1	A. Throughout San Diego Bay?
2	Q. In the vicinity of the shipyards.
3	A. No.
4	Q. At Section 11.6.4, it states that "No monitoring
5	data is available for these outfalls. But it is highly
6	probable that historical and current discharges from this
7	outfall have discharged heavy metals and organics to
8	San Diego Bay at the Shipyard Sediment Site."
. 9	Can you look at that part?
10	A. 11.6.4?
11	Q. Yes, and 11.6.5.
12	A. And what was the question?
13	Q. I want you to first take a look at that.
14	MR. CARRIGAN: I believe he began to read here
15	at "Although no monitoring data is available." Is that
16	correct, Counsel?
17	MR. BROWN: Yeah.
18	MR. CARRIGAN: That's where he started reading.
19	But you can read the section for context.
20	THE WITNESS: Okay.
21	BY MR. BROWN:
22	Q. Is there other data other than monitoring data?
23	MR. CARRIGAN: I think that's asked and
24	answered.
25	MR. BROWN: And he may have. But I want to make

Page 127 1 sure I'm getting the best testimony on it. THE WITNESS: Other data elsewhere in the MS4 2 system upstream of this? 3 MR. BROWN: No. Any other data that pertains to 4 5 this site. 6 THE WITNESS: Well, other data upstream in the 7 MS4 system would pertain to the site, I would think. BY MR. BROWN: 8 Does the Port have any responsibility for the 9 Q. upstream of the MS4 system as it applies to SW4 and SW9? 10 MR. CARRIGAN: Calls for a legal conclusion. 11 12 MR. BROWN: If you know. 13 THE WITNESS: I think the answer is yes. BY MR. BROWN: 14 And what's the basis for your opinion? 15 Ο. 16 Α. Conveying contaminants into waters of the State. And how is the Port conveying that? 17 Q. Well, somebody puts it in upstream of you, and 18 Α. 19 you help carry it further downstream and discharge it. 20 That's my rough understanding of --How does the Port help carry it downstream? 21 0. 22 And I'll be specific, Mr. Carlisle. I think that you saw the request for admission. It says that the 23 Port doesn't own these storm drains, your own request for 24 25 admissions signed by the Water Board. So if the Port

Page 128 doesn't own the storm drain, how does it assist in having 1 2 those contaminants delivered to the bay? 3 MR. CARRIGAN: Argumentative. MR. BROWN: I'm just trying to get your opinion. 4 5 I'm not trying to be argumentative. I'm trying to get to the bottom of the issue. 6 THE WITNESS: Well, I think it's getting --7 that's beyond my expertise because it's getting down to 8 legal interpretation and legal documents, interpreting 9 the Water Code. 10 BY MR. BROWN: 11 Does the Water Board have any future plans for 12 Q. 13 monitoring these outflows? MR. CARRIGAN: Calls for speculation. 14 15 THE WITNESS: And again, I'm a little hung up on 16 how vague that is worded. Monitoring of an outfall can 17 include upstream, instream, downstream, further out in 18 the water body. BY MR. BROWN: 19 20 How about at the discharge point? Q. 21 Α. Not that I know of. 22 MR. CARRIGAN: Calls for speculation. THE WITNESS: Not that I know of. 23 BY MR. BROWN: 24 Apart from the discharges of its tenants, is the 25 Ο.

Page 129 1 Port actively discharging contamination into the bay in 2 any way --MR. CARRIGAN: Vague. 3 BY MR. BROWN: 4 -- at these sites? 5 Ο. 6 MR. CARRIGAN: I'm sorry, Bill, to interrupt. 7 Vaque. THE WITNESS: Well, based on their status as a 8 co-permittee, I think the answer is yes. 9 BY MR. BROWN: 10 Now, as a co-permittee, they are a co-permittee 11 0. for any drains within the jurisdiction of that district; 12 13 is that correct? 14MR. CARRIGAN: Vague. The permit speaks for itself. 15 16 BY MR. BROWN: Do you know if SW4 and SW9 are part of what the 17 Ο. Port's permits apply to? 18 I don't know. 19 Α. Are you aware of any drains that the Port's 20 Q. permit applies to that do drain into the area that's 21 22 affected by the shipyards? 23 Α. How did you word that again? MR. BROWN: I'll let the court reporter read it 24 25 back.

Page 130 1 (The record was read as follows: 2 "Q. Are you aware of any drains that the Port's 3 permit applies to that do drain into the area that's affected by the shipyards?") 4 THE WITNESS: It's my understanding the permit 5 applies to some of the material that might be discharged 6 7 out SW4 and SW9 because it's through your leaseholds. BY MR. BROWN: 8 I'm trying to get to a different question, 9 Ο. Mr. Carlisle. 10 Do you know if MS4 applies to SW4 and SW9? 11 Is the Port -- does their permit apply to those drains? 12 13 MR. CARRIGAN: Vague. Compound. Permit speaks for itself. 14 THE WITNESS: My understanding is SW4 and SW9 15 16 are part of the MS4 system in which the Port is part of the co-permittee. 17 18 BY MR. BROWN: 19 Ο. Let me go at it another way. 20 If the City of San Diego owns an MS4 permit but a storm drain neither flows through -- well, never mind. 21 22 That's too complicated. 23 If the Port does not own the SW4 and the SW9, does the MS4 still apply? Does the Port's permit still 24 25 apply to those drains?

Page 131 MR. CARRIGAN: Calls for a legal conclusion. 1 2 Permit speaks for itself. MR. BROWN: Do you know? 3 THE WITNESS: I would assume so. 4 MR. CARRIGAN: Same objections. 5 6 BY MR. BROWN: 7 In your mind is there a difference between Q. owning a storm drain and operating a storm drain? 8 9 MR. CARRIGAN: Calls for a legal conclusion. MR. BROWN: If you know. 10 THE WITNESS: I'm not qualified to make that 11 12 distinction. BY MR. BROWN: 13 Since the timing of the -- of this report, are 14 0. 15 you aware of any additional facts that have occurred that 16 has indicated the Port should be primarily liable? In other words, since the last TCAO draft and as 17 we sit here today, have new facts arisen? 18 MR. CARRIGAN: Vague. Asked and answered. 19 20 THE WITNESS: Yes. BY MR. BROWN: 21 And what are those? 22 0. 23 I think that's what we covered that you pointed Α. out wasn't in here. But then we started getting into 24 maybe some mediation confidential stuff. 25

I'm trying to get at something slightly 1 0. No. different. So let me get the time frames down better. 2 Since the time of this draft CAO, which is 3 September 2010, has there been other conduct by the Port 4 5 which warrants them being named as a discharger? MR. CARRIGAN: Asked and answered. Do you mean 6 7 in addition to what we've already discussed? BY MR. BROWN: 8 Well, I think we discussed the time frame 9 Ο. between the prior draft and the current draft. And I'm 10 trying to figure out if there's additional items that 11 12 have occurred since the last draft. Does that make 13 sense? 14 Ά. I'm confused. Because this draft, as you 15 pointed out, doesn't appear to have the lack of 16 cooperation with the Port. Do you know whether those items occurred prior 17 0. to or after September 2009? 18 Without detailed notes and timelines, I'm not 19 Α. that good with remembering dates. As you recall, I was 20 49 years old a half hour ago, and now I'm 59. 21 Well, I'm going to be 75 before I'm finished. 22 Ο. 23 Let me just collect one thing --. MR. CARRIGAN: Hour and a half on the record. 24 25 So when you're ready.

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Page 133 MR. BROWN: I just want to correct for the 1 2 record, my last question wasn't meant to refer to September 2009. It was September 2010. But let's take a 3 break. And I hope to wrap this up, you know, my 4 questioning before 5:00 today. I don't know if other 5 parties will have questions or not. 6 MR. CARRIGAN: That will be good, because I'm 7 going to have to let the witness go at 5:00. 8 And to that end, I was wondering if anyone would 9 object to starting early tomorrow with the hope that we'd 10 have a chance to finish. Could we start at 8:00? I 11 mean, I don't want to go too early. But anyone object to 12 starting at 8:00? 13 MR. BROWN: We can discuss -- let's go off the 14 15 record. 16 MR. CARRIGAN: Let's go off the record. (A recess was taken.) 17 BY MR. BROWN: 18 I have really probably only a couple areas of 19 Ο. questions for you. First one is other than the meeting 20 you talked about where Mr. Bennett told you that he 21 wouldn't pay for the CEQA part of the case, do you recall 22 any other meetings with Port representatives where the 23 Port refused to provide assistance in some fashion 24 25 outside of mediation?

	Page 13	4
1	A. No.	
2	Q. And then my second-to-last question is, is the	
3	Water Board, to your understanding, still in mediation?	
4	A. Yes.	
5	Q. Do you recall a directive by Chairman King to	
6	withdraw from mediation in public?	
7	MR. CARRIGAN: Misstates the document. Document	
8	speaks for itself.	
9	BY MR. BROWN:	
10	Q. Were you at a Water Board hearing where Mr. King	
11	instructed the Water Board to terminate mediation?	
12	MR. CARRIGAN: Calls for a legal conclusion.	
13	And there is a document that sets forth an order on this	
14	topic that is binding on the board.	
15	BY MR. BROWN:	
16	Q. Do you recall Mr. King giving that directive?	
17	MR. CARRIGAN: Misstates the directive given.	
18	MR. BROWN: He can say I misstated it, but he	
19	can testify for himself.	
20	THE WITNESS: I'm familiar with the document.	
21	BY MR. BROWN:	
22	Q. Were you at a Water Board hearing where Mr. King	
23	instructed the Water Board not to participate in	
24	mediation?	
25	MR. CARRIGAN: Misstates Mr. King's statement.	

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1	MR. BROWN: He can say that for you.
2	MR. CARRIGAN: No. You're stating facts that
3	are not in the record. It's not.
4	MR. BROWN: I asked if he went to the
5	Water Board hearing where that was said. You can either
6	say yes, no, I misstated it. I'm entitled to your
7	testimony not, Mr. Carrigan's.
8	THE WITNESS: I can't answer the question as
9	you've worded it.
10	MR. BROWN: Can you repeat the question?
11	(The record was read as follows:
12	"Q. Were you at a Water Board hearing where Mr.
13	King instructed the Water Board not to
14	participate in mediation?")
15	THE WITNESS: I was at a Water Board hearing
16	where Mr. King said something, but it wasn't that,
17	relative to the mediation.
18	BY MR. BROWN:
19	Q. What did he say, to your recollection?
20	A. It's in the document, the written document that
21	Mr. King. But my understanding of it was he stopped one
22	aspect of the mediation. But he said like the supervised
23	or under the control of Mr. King, but you're welcome to
24	go ahead and keep going.
25	Q. Did that apply to everybody or only certain

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1 parties? 2 Α. I don't know. Q. Okay. All right. 3 Have you actively participated in mediation 4 since that time? 5 What was the date of that? 6 Α. Well, let's say have you participated in 7 0. mediation since July 2010. 8 9 Α. I don't think so. When was the last time you participated in 10 Ο. mediation? 11 I don't recall the exact date. 12 Α. Q. Did you attend any mediations, you personally? 13 Ever? 14 Α. MR. CARRIGAN: I think that's --15 16 MR. BROWN: Since that date. THE WITNESS: Again, I'm not real good on 17 timelines. I've got two dozens other projects I work on. 18 BY MR. BROWN: 19 And just one last question. 20 Q. When is the last time you recall attending 21 mediation? 22 Α. I don't recall. 23 MR. BROWN: All right. I don't have any further 24 25 questions.

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1	* * *	
2	EXAMINATION	
3	BY MS. VARCO:	
4	Q. Good afternoon, Mr. Carlisle. I'm	
5	Suzanne Varco of Opper & Varco, and I am the attorney who	
6	represents Star & Crescent Boat Company. I think I just	
7	have a few questions, and we'll get you out of here	
8	pretty quick.	
9	The first question I have is, have you	
10	personally reviewed any documents which relate to the	
11	corporate history of Star & Crescent Boat Company?	
12	A. Yes.	
13	Q. Are you aware that there are three separate	
14	entities that utilize the same name, Star & Crescent Boat	
15	Company, or that have utilized the same name?	
16	A. Yes.	
17	Q. With respect to the Star & Crescent Boat Company	
18	that was incorporated in roughly the 1920s and dissolved	
19	in 1957, are you aware of that Star & Crescent Boat	
20	Company?	
21	A. Yes.	
22	Q. And have you reviewed any corporate documents	
23	relating to that particular Star & Crescent Boat Company?	
24	A. No.	
25	Q. And with respect to the Star & Crescent Boat	

Page 138 Company that operated as a division of the San Diego 1 2 Marine Construction Company, are you aware of that separate entity named Star & Crescent Boat Company? 3 Α. I'm aware of that entity. 4 5 And have you reviewed any corporate documents Ο. with respect to that particular entity called Star & 6 7 Crescent Boat Company? And which entity was that? 8 Α. 9 Ο. The one that operated as a division of San Diego 10 Marine Construction Company. And their name was? 11 Α. 12 Q. Star & Crescent Boat Company. I don't know. 13 Α. With respect to Star & Crescent Boat Company 14 Q. 15 that operated as a division of Star & Crescent Investment Company, are you aware of that entity called Star & 16 17 Crescent Boat Company? Α. 18 Yes. And have you reviewed any historic corporate 19 Q. 20 documents related to that entity that operated as a division of Star & Crescent Investment Company? 21 22 I'm struggling over the definition of a Α. 23 corporate document. I saw a legal document that I believe was responsive to your question. 24 25 Okay. And can I ask you what that document was? Q.

1 Α. It was something to do with discovery or a court 2 case or somebody acquiring the assets of somebody. I'm 3 not an attorney. Ο. Do you recall whether it was a court case or 4 5 whether it was a document that may have been kept as part 6 of the corporate records of that entity? I don't think it was corporate records. 7 Α. And do you recall what the contents of that 8 Ο. 9 document was? My vague recollection, it was something to do 10 Α. with acquiring all the stock or buying, merging stock 11 12 trade, something like that. 13 And do you know if that document is contained Q. within the documents in the administrative record that 14 was maintained or created by the Water Board? 15 I'm guessing it isn't, at least in the original 16 Α. administrative record. 17 18 Do you know how you came to see that document? 0. 19 Α. It was shown to me by my attorney. 20 Did you retain a copy of that document in Q. your --21 22 Α. No. 23 -- office files that you described earlier to Q. 24 counsel? 25 Α. No.

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Q. Did you retain an electronic copy of that
 document in any location?

A. No.

3

8

Q. Other than your vague recollection that it might have had something to do with a stock trade, if I've stated your testimony correctly, do you have any either recollection regarding the contents of that document?

A. No.

9 Q. Are you aware of an entity by the name of Star & 10 Crescent Boat Company that was incorporated in the state 11 of California in 1976?

12 A. Yes.

Q. And with respect to that Star & Crescent Boat Company, have you had the opportunity to review any historical corporate documents relating to that entity? A. Well, at this time I don't recall if the one document I saw applies to this question or the previous question.

19 Q. Fair enough.

A. A lot of things are named Star & Crescent, andI'm very confused about that.

Q. And I can understand that. So with respect to the one document that you've seen, let me rephrase my question.

25 You described earlier in your testimony one

Page 141 document that you had seen that related, possibly, to a 1 2 stock trade. Is that the only document that you've seen 3 that relates to any of the Star & Crescent named entities? 4 Yes, except for what we have in the DTR and the 5 Α. 6 CAO. With respect to the DTR and the CAO, do you know 7 Q. if there were particular documents that were relied upon 8 in preparing those allegations that named Star & Crescent 9 Boat Company as a responsible party? 10 MR. CARRIGAN: If you know independent of advice 11 12 that I gave you. 13 MS. VARCO: Yes. THE WITNESS: I believe at one point, maybe even 14 years ago, I saw a response from either Campbell or some 15 16 Marine Construction Company trying to straighten us out 17 on the sequence of tenants prior to BAE and 18 Southwest Marine on that tenancy. BY MS. VARCO: 19 20 And would that document have been included as Q. 21 part of the administrative record or the supplemental 22 administrative record that was prepared by the Water 23 Board? Α. Yes. 24 And do you recall particularly which entity 25 Q.

Page 142 might have provided that document to the Water Board? 1 2 Α. I think it came from Campbell. And do you know the approximate date that the 3 Ο. Water Board received that document from Campbell? 4 Probably more than three years ago, maybe five 5 Α. years ago. 6 7 And do you remember the contents of that 0. particular document? 8 It said we have no records of ever running 9 Α. Yes. or operating building activities at the BAE leasehold. 10 Other than that, do you remember anything else 11 Ο. 12 with respect to the contents of that document? No. 13 Α. 14 The Tentative Cleanup and Abatement Order states 0. 15 at paragraph No. 1 that Star & Crescent Boat Company 16 caused or permitted the discharge of waste to the 17 Shipyard Sediment Site. And I'm paraphrasing. Do you know who authored that particular 18 statement? 19 20 Α. Paragraph 1? 21 Ο. Mm-hmm. 22 Of section --Α. 23 Sorry. Of the --Q. 24 There's a lot of paragraph 1's. Α. Sorry. Of the Tentative Cleanup and Abatement 25 Q.

Page 143 I'm looking particularly at the paragraph 1 Order. numbered one on the second page titled "Waste Discharge." 2 The question is, do you know who authored that 3 paragraph? 4 Α. 5 No. Do you know if there were documents supplied to 6 Ο. 7 the Water Board that formed the basis of the allegation against Star & Crescent in that paragraph? 8 9 I don't know. Α. I'll have you look, while we are on the 10 Ο. 11 Tentative Cleanup and Abatement Order, at paragraph 12 No. 5, which is specific to Star & Crescent Boat Company. And that particular paragraph states -- and again, I'll 13 paraphrase -- that Star & Crescent Boat Company caused or 14 permitted the discharge of waste to be deposited where 15 they may be discharged into the San Diego Bay. 16 Do you know who authored that paragraph of the 17 Cleanup and Abatement Order? 18 19 Α. No. 20 And do you know if there were particular Ο. 21 documents that were relied upon by the Water Board in 22 forming that allegation against Star & Crescent Boat 23 Company? No. 24 Α. 25 Again, in that paragraph No. 5 that we're Ο.

Page 144 looking at, it states that Star & Crescent Boat Company 1 2 is the corporate successor of and responsible for the 3 conditions of pollution and uses caused or permitted by 4 San Diego Marine Construction Company. I'll ask you the same question: Do you know who 5 authored that statement of paragraph 5? 6 7 A. No. And again, do you know if there were any 8 0. 9 documents presented to the Water Board that formed the basis of that allegation? 10 11 Α. No. Other than the corporate successorship that's 12 Q. 13 alleged here in paragraph 5, are you personally aware of any other basis on which Star & Crescent Boat Company 14 would be liable for the cleanup of this site, the 15 16 Shipyard Sediment Site? 17 I'm a little confused by the wording of the Α. 18 question. 19 Sorry. I can try and rephrase it. 0. 20 In this particular paragraph, it states that 21 Star & Crescent Boat Company was the successor, corporate 22 successor, to San Diego Marine Construction Company and, 23 on that basis as a corporate successor, was responsible for the conditions of the pollution and nuisance. 24 25 And what I'm asking is other than that basis,

Page 145 the corporate successorship of Star & Crescent, is there 1 2 an independent basis that you're aware of for which 3 Star & Crescent would be a responsible party for the contamination? 4 Are you asking besides the fact that their 5 Α. predecessors discharged waste into San Diego Bay? 6 Correct. That's exactly what I'm asking. 0. 7 Α. No. 8 9 In this paragraph 5, it also mentions that Q. Star & Crescent Investment Company transferred all of its 10 assets and liabilities to Star & Crescent, meaning, 11 presumably, the boat company. 12 13 Other than the one document that you've described that may have discussed a stock trade, are you 14 aware of any documents that were relied upon by the 15 16 Water Board in stating that fact in the Tentative Cleanup 17 and Abatement Order? 18 Α. No. You may have already answered this. But just 19 0. 20 for clarification, have you seen any documents which purport to evidence the transfer of all assets and 21 liabilities from Star & Crescent Investment Company to 22 23 Star & Crescent Boat Company? 24 Α. No. 25 You testified with Mr. Carlin earlier, I Ο.

Page 146 believe, and correct me if I'm wrong, that you helped in 1 2 developing the allegations against Star & Crescent Boat Company for the Tentative Cleanup and Abatement Order as 3 well as the DTR. Is that correct? 4 5 Α. To a minor degree. And that's the basis of my question. To what 6 Ο. extent did you help in making those determinations or 7 decisions? 8 9 Α. Proofreading, in this case. 10 0. Okay. 11 Not much more than that on this entity. Α. Did you participate in any meetings or 12 Q. discussions with staff in your office regarding whether 13 or not to name Star & Crescent as a responsible party in 14 15 the Cleanup and Abatement Order? 16 Α. No. 17 MS. VARCO: I don't have anything further. MR. CARRIGAN: Okay. I'm going to have to 18 excuse the witness for today. 19 It's okay, Counsel. 20 Tomorrow MR. CARLIN: 21 morning at 8:00 a.m.? 22 MR. CARRIGAN: Yeah. We'll see you all then. 23 (Whereupon the deposition was adjourned at 5:01 p.m.) 24 25 \* \* \*

	Page 147
1	I declare under penalty of perjury under the laws of the
2	State of California that the foregoing is true and
3	correct; that I have read my deposition and have made the
4	necessary corrections, additions or changes to my answers
5	I deem necessary.
6	
7	Executed on thisday of,
8	2011.
9	
10	CRAIG CARLISLE
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1	I, Anne M. Zarkos, a Certified Shorthand
2	Reporter of the State of California, do hereby certify:
3	That the foregoing proceedings were taken
4	before me at the time and place herein set forth; that
5	any witnesses in the foregoing proceedings, prior to
6	testifying, were duly sworn; that a record of the
7	proceedings was made by me using machine shorthand which
8	was thereafter transcribed under my direction; that the
.9	foregoing transcript is a true record of the testimony
10	given.
11	Further, that if the foregoing pertains to the
12	original transcript of a deposition in a Federal case,
13	before completion of the proceedings, review of the
14	<pre>transcript [ ] was [ ] was not requested.</pre>
15	IN WITNESS WHEREOF, I have this date subscribed
16	my name.
17	
18	Dated thisday of, 2011,
19	at San Diego, California.
20	Anne M. Zarkos, RPR, CRR
21	CSR No. 13095
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1	LATHAN & WATCHIGLED				
	Robert M. Howard (SB No. 145870)				
2	Kelly E. Richardson (SB No. 210511) Jeffrey P. Carlin (SB No. 227539)				
3	Ryan R. Waterman (SB No. 229485) Jennifer P. Casler-Goncalves (SB No. 259438)				
4	600 West Broadway, Suite 1800 San Diego, California 92101-3375	EEXHIBIT NO. 1000			
5	Telephone: (619) 236-1234 Facsimile: (619) 696-7419				
6.	Attorneys for Designated Party				
7	National Steel and Shipbuilding Company				
, 1. 1. 1. − 1. − 1. <b>8</b> 17	CALIFORNIA REGIONAL WATER	R QUALITY CONTROL BOARD			
9	Carl and San Diego	REGION			
10	IN THE MATTER OF:	e de la constance antequeración de			
949-04 <b>1</b> 1-	The states of the second s	NASSCO'S SECOND AMENDED NOTICE OF VIDEOTAPED			
12	TENTATIVE CLEANUP AND ABATEMENT ORDER NO. R9-2011-0001	DEPOSITION OF CRAIG CARLISLE			
	tor 1880 monthly started address the second of	Date: February 9 & 10, 2011 Time: 9:00 a.m.			
. 14		Place: Latham & Watkins LLP 600 West Broadway, Suite 1800			
15	and a set of the set of	San Diego, CA 92101			
e 10- o <b>16</b> -	Record of the second	the sector of			
17	TO ALL PARTIES AND THEJR COUNSEL OF	RECORD:			
18	NOTICE IS HEREBY GIVEN that, pursua	ant to the Presiding Officer's Order Issuing			
19	Final Discovery Plan dated February 18, 2010, and the Presiding Officer's October 27, 2010				
<b>20</b> :	Discovery Order that National Steel and Shipbuild	ling Company ("NASSCO") will take the			
21	deposition of Craig Carlisle ("Deponent") on Febr	uary 9 and 10, 2011, at 9:00 a.m. This			
22	deposition will take place at the law offices of Latham & Watkins LLP, 600 West Broadway,				
-23	Suite 1800, San Diego, California, 92101, upon oral examination before a Certified Shorthand				
24. <sup>-</sup>	Reporter duly authorized to administer oaths, and will continue from day to day, Saturdays,				
25	Sundays and holidays excepted, until completed.				
26	PLEASE TAKE FURTHER NOTICE that the deposition may also be videotaped,				
i	stenographically recorded; and recorded through such means as to provide the instant display of				
27	the testimony. NASSCO reserves the right to use any videotaped portion of the deposition				

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CRAIG CARLISLE

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testimony at a hearing in this matter. 1 2 **DOCUMENTS AND ITEMS TO BE PRODUCED** Craig Carlisle is required to produce the following items: 3 DEFINITIONS 4 The following definitions shall apply to each category of documents set forth below: 5 "ADVISORY TEAM" shall mean and refer to the Advisory Team of the 6 1. California Regional Water Quality Control Board, San Diego Region ("Regional Board"), 7 specially formed in response to and for purposes of advising the Regional Board in connection 8 with its consideration of the TENTATIVE ORDER, and its agents, employees, attorneys, 9 investigators, consultants, affiliates, or anyone acting on its behalf. 10 "COMMUNICATIONS" shall mean and refer to the written or verbal exchange 11 - 2, 12 of information by any means, including, without limitation, telephone, telecopy, facsimile, or 13 other electronic medium (including e-mail), letter, memorandum, notes or other writing method, meeting, discussion, conversation or other form of verbal expression. 14 "DOCUMENT(S)" shall mean and refer to any and all written, printed, 15 3. 16 typewritten, photographic, graphic, or recorded materials (by tape, video or otherwise), however produced or reproduced, including data stored in a computer, data stored on removable magnetic 17 and optical media (e.g., magnetic tape, floppy disks, and recordable optical disks), e-mail, and 18 19 voice mail, which relate or pertain in any way to the subject matter to which the Interrogatory 20 refers. "DOCUMENT(S)" shall further include, without limitation, all preliminary, intermediate and final drafts or versions of any DOCUMENT, as well as any notes, comments, and marginalia 21 appearing on any DOCUMENT, and shall not be limited in any way with respect to the process 22 23 by which any DOCUMENT was created, generated, or reproduced, or with respect to the 24 medium in which the document is embodied. DOCUMENT(S) shall include all "writing" and 25 tangible forms of expression falling within the scope of California Evidence Code § 250, within YOUR custody, possession or control. 26 27 "ENVIRONMENTAL GROUPS" shall mean and refer to any and all non-profit 28 and/or advocacy organizations focused on environmental causes and issues, including but not SD\722137.3 SECOND AMENDED NOTICE OF DEPOSITION OF 1

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CRAIG CARLISLE

limited to Designated Parties San Diego Coastkeeper (formerly San Diego Baykeeper) and Environmental Health Coalition,

"PERSON(S)" shall mean and refer to any natural person, proprietorship, public or private corporation, limited or general partnership, trust, joint venture, firm, association, organization, board, authority, governmental entity, or any other entity, including a representative of such PERSON(S). Contract the state 6

7 6. "RELATING TO" shall mean and refer to relating to, pertaining to, referring to, 8 evidencing, in connection with, reflecting, respecting, concerning, based upon, stating, showing, establishing, supporting, bolstering, contradicting, refuting, diminishing, constituting, describing, 9 10 recording, noting, embodying, memorializing, containing, mentioning, studying, analyzing, 11 discussing, specifying, identifying, or in any other way bearing on the matter addressed in the 12 request, in whole of in part. in the terms of the second second

13 14 TENTATIVE ORDER and TECHNICAL REPORT.

\*TECHNICAL REPORT" shall mean and refer to the Draft Technical Report for 15 the TENTATIVE ORDER, publically released on December 22, 2009, publicly released on 16 17 December 22, 2009, including but not limited to the prior drafts released publicly on August 24, 18 

19 9. "TENTATIVE ORDER" shall mean and refer to Tentative Cleanup and Abatement Order R9-2010-0002, publically released on December 22, 2009, including but not .20 21 limited to the prior drafts released publicly on April 29, 2005, August 24, 2007, and April 4, 2008. 22

10. "YOU" or "YOUR" shall mean the Deponent, including without limitation 23 YOUR employer or prior employer and its agents; employees, representatives, attorneys, 24 25 accountants, investigators, and insurance companies, and their employees, and anyone else acting on your behalf). With respect to YOUR DOCUMENTS, it includes any DOCUMENTS 26 in YOUR possession, custody or control. 27

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"PERSON" shall mean any entity or natural person. 11.

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SECOND AMENDED NOTICE OF DEPOSITION OF CRAIG CARLISLE

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