



# California Regional Water Quality Control Board, San Diego Region

June 18, 2014

Mr. Mark Russell General Dynamics 2941 Fairview Park Drive, Suite 100 Falls Church, VA 22042 In reply refer to: T10000003487:bmcdaniel

Mr. Paul Manasjan San Diego County Regional Airport Authority 3225 North Harbor Drive San Diego, CA 92138

Ms. Karen Holman San Diego Unified Port District 3165 Pacific Highway San Diego, CA 92101

Subject: Investigative Order No. R9-2014-0007, An Order Directing General Dynamics, the San Diego County Regional Airport Authority and the San Diego Unified Port District to Submit Technical Reports Pertaining to an Investigation of Sediment Chemistry in the Laurel Hawthorn Central Embayment in San Diego Bay, San Diego, California

Enclosed is a copy of Investigative Order No. R9-2014-0007, An Order Directing General Dynamics, the San Diego County Regional Airport Authority and the San Diego Unified Port District to Submit Technical Reports Pertaining to an Investigation of Sediment Chemistry in the Laurel Hawthorn Central Embayment in San Diego Bay, San Diego, California. The compliance dates for reports required by this order are **September 18, 2014** for the Sediment Assessment Work Plan and **April 17, 2015** for the Sediment Assessment Report.

In the subject line of any response, please include the reference number **T1000003487:bmcdaniel**. For questions or comments, please contact Brian McDaniel at (619) 521-5897 or by email at Brian.McDaniel@waterboards.ca.gov.

Respectfully,

o. Chon

Julie Chan, PG Supervising Engineering Geologist Groundwater Protection Branch

JAC:jpa:bkm

HENRY ABARBANEL, CHAIR | DAVID GIBSON, EXECUTIVE OFFICER 2375 Northside Drive, Suite 100, San Diego, CA 92108-2700 | (619) 516-1990 | www.waterboards.ca.gov/sandiego



cc (email copy only):

Ms. Anna Kathryn Benedict, <u>AnnaKathryn.Benedict@waterboards.ca.gov</u> Ms. Catherine T. Zeeman, USFWS, <u>Katie\_zeeman@fws.gov</u> Mr. William Paznokas, DFG, <u>wpaznokas@wildlife.ca.gov</u> Mr. Steve Bay, SCCWRP, <u>steveb@sccwrp.org</u> Ms. Ruth Kolb, City of San Diego, <u>Rkolb@sandiego.gov</u>

Tech Staf	f Info & Use
Geotracker ID	T1000003487

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

#### INVESTIGATIVE ORDER NO. R9-2014-0007

## AN ORDER DIRECTING GENERAL DYNAMICS, THE SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY AND THE SAN DIEGO UNIFIED PORT DISTRICT TO SUBMIT TECHNICAL REPORTS PERTAINING TO AN INVESTIGATION OF SEDIMENT CHEMISTRY IN THE LAUREL HAWTHORN CENTRAL EMBAYMENT IN SAN DIEGO BAY SAN DIEGO COUNTY, CALIFORNIA

The California Regional Water Quality Control Board, San Diego Region (hereinafter San Diego Water Board) finds that:

- Legal and Regulatory Authority: This Order conforms to and implements 1. policies and requirements of the Porter-Cologne Water Quality Control Act (Division 7, commencing with Water Code section 13000) including (1) sections 13267 and 13304; (2) applicable State and federal regulations; (3) all applicable provisions of statewide Water Quality Control Plans adopted by the State Water Resources Control Board (State Water Board) and the Water Quality Control Plan for the San Diego Basin (Basin Plan) adopted by the San Diego Water Board including beneficial uses, water guality objectives, and implementation plans; (4) State Water Board policies and regulations, including State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California, Resolution No. 88-63, Sources of Drinking Water, Resolution No. 92-49, Policies and Procedures for Investigation, and Cleanup and Abatement of Discharges under Water Code Section 13304: the Water Quality Control Plan for Enclosed Bays and Estuaries - Part 1 Sediment Quality;<sup>1</sup> California Code of Regulations (CCR) Title 23, Chapter 16, Article 11; CCR Title 23, section 3890 et. seg., and (5) relevant standards, criteria, and advisories adopted by other State and federal agencies.
- 2. Geographic Extent of the Laurel/Hawthorn Embayment: The Laurel/Hawthorn Embayment of San Diego Bay is specifically defined in this order as the area bordered on the north by Laurel Street and on the south by West Hawthorn Street and the portion of San Diego Bay located south of Harbor Drive, immediately south of Solar Turbines (Solar), the San Diego International Airport (Airport Authority) Facility, and east of the U.S. Coast Guard Station. The approximate extent of the area into San Diego Bay is bounded by an imaginary line drawn between the southeast corner of the U.S. Coast Guard facility and the West Hawthorn Street pier (Figure 1).

<sup>&</sup>lt;sup>1</sup> http://www.waterboards.ca.gov/water\_issues/programs/bptcp/docs/sediment/sed\_qlty\_part1.pdf

3. Presence of Wastes in the Laurel Hawthorn Central Embayment: A 42-inch storm water conveyance system (SWCS) outfall discharges into the central portion of the Laurel/Hawthorn Embayment (Figure 2). Various pollutants likely were discharged from the 42-inch SWCS into the data gap area which is described as the Laurel Hawthorn Central Embayment (LHCE). The 42-inch SWCS is or has been owned by the City of San Diego during its existence. The 42-inch SWCS originates on City property and receives runoff from Pacific Highway, the former General Dynamics Lindbergh Field Plant, and portions of the San Diego International Airport. It may also receive runoff and/or stormwater from areas outside the study area set forth above. Data submitted by the Airport Authority demonstrated that sediments collected from two stations (at the 42-inch SWCS outfall and in the LHCE 22 feet from the 42-inch SWCS outfall) contained elevated levels of metals. PCBs and PAHs.<sup>2</sup> The highest reported sediment sample concentrations from the 42-inch SWCS is provided in Table 1. The horizontal extent of waste constituents in sediments in the LHCE has not been assessed.

An initial assessment of sediment chemistry is needed to determine the extent and magnitude of pollutants discharged into the LHCE (Figure 2) and to determine if additional assessment and/or cleanup are required.

Constituent	Units	ERLs	ERMs	Sample ID
		-		48CH-22-SD
Arsenic	mg/kg	8.2	70	22
Chromium	mg/kg	81	370	230
Copper	mg/kg	34	270	140
Lead	mg/kg	46.7	218	400
Mercury	mg/kg	0.15	0.71	0.03 J
Nickel	mg/kg	20.9	51.6	34
Silver	mg/kg	1	3.7	3.3 J
Zinc	mg/kg	150	410	910
Chlordane	µg/kg	0.5	6	< 57
Total PAH	µg/kg	4,022	44,792	1400
Total PCB	µg/kg	22.7	180	1100

#### Table 1 – Maximum Sediment Concentration Data Near the 42-inch SWCS

J = Estimated value; concentration detected between the method detection limit and the project quantitation limit; PCBs as Aroclor 1260.

**Bold** indicates concentrations above Effects Range-Low (ERL) or Effects Range-Median (ERM). Below ERL levels, adverse biological effects are rarely observed (10 percent of the time); Above ERM levels, adverse biological effects are frequently observed (more than 75 percent of the time).<sup>3</sup>

<sup>2</sup> Haley and Aldrich, Inc., Technical Report and Comments on Draft Investigative Order R9-2012-0009, Downtown Anchorage Vicinity, San Diego Bay, May 2012.

<sup>3</sup> National Oceanographic and Atmospheric Administration (NO/VA) Guidelness.

- 4. Potential Threat to Benthic Community: The sample concentrations in bold in Table 1 (above) have contaminant concentrations above the Effects Range-Low (ERLs) or Effects Range-Median (ERMs) for the listed contaminants. ERMs and ERLs are guidelines that have been used to evaluate the potential for adverse effects on the benthic community by a given chemical.<sup>4</sup> At concentrations below the ERL an adverse effect on the benthic community would be rarely observed. At concentrations greater than the ERL but below the ERM it is possible that adverse effects would occur. At concentrations in excess of the ERM adverse effects would frequently be observed. In general sediment concentrations above ERLs and ERMs have the potential to create or threaten to create a condition of pollution or nuisance in waters of the state.
- 5. Discharge of Wastes: The concentrations of wastes in sediments from the 42inch SWCS outfall are at levels that could potentially cause pollution, contamination, and nuisance as defined in Water Code section 13050. Furthermore, these wastes could impair the beneficial uses of San Diego Bay and adversely impact the target receptors listed in Table 2.<sup>5</sup> Consequently, the discharge of wastes has the potential to adversely affect public health and animal life, pollute bay sediments and cause a public nuisance particularly when discharged to areas with high public exposure.

The source area of the contaminated sediments in the 42-inch SWCS is the property drained by the SWCS. The 42-inch outfall received runoff from portions of the San Diego International Airport and the former General Dynamics Lindbergh Field property. The Airport Authority currently leases their properties from the Port of San Diego. As described in the following findings, these current and former property owners are responsible for the discharges of contaminated sediment in the SWCS to San Diego Bay.

Beneficial Uses	Target Receptors
Estuarine Habitat	Aquatic Life - Benthic Community
Marine Habitat	Aquatic Life - Benthic Community
Rare, Threatened, or Endangered Species	Aquatic-Dependent Wildlife
Wildlife Habitat	Aquatic-Dependent Wildlife
Commercial and Sport Fishing	Human Health

#### Table 2 – Beneficial Uses and Target Receptors

<sup>&</sup>lt;sup>4</sup> Long, E.R., MacDonald, D.D., Smith, S.L., 1995, Incidence of Adverse Biological Effects Within Ranges of Chemical Concentration in Marine and Estuarine Sediments, Environmental Management Vol. 19, No. 1, pp. 81-97.

<sup>&</sup>lt;sup>5</sup> Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality, State Water Resources Control Plan, August 2009.

Beneficial Uses	Target Receptors
Shellfish Harvesting	Human Health

#### 6. Former General Dynamics Lindbergh Field Plant

a. **Historic Chemical Use:** General Dynamics owned and operated an aircraft manufacturing business at the former General Dynamics Lindbergh Field plant. Chemicals that were used in operations on this site are listed in Table 3.<sup>6</sup>

Operation	Contaminant
Parts Manufacturing, Aircraft Assembly;	Zinc, cadmium, chromium, lead, sodium nitrate, sodium chromate,
Spray painting, hydraulics laboratory, and radioactive chemical fume hood;	alkaline cleaners, chlorides, acids, chlorinated solvents, lubricants, petroleum hydrocarbons, coolants,
Steam boiler plant.	degreasers, etchants/plating chemicals, radioactive chemicals, transformers containing oils with PCBs, dye penetrants, paints, hydraulic fluids and oils, deoxidizers, adhesives, methylene dianiline (MDA), solvents, sealants, various hazardous waste, insulative coatings, surfactants, and processing chemicals.
Salvage and transportation office; Garage	Photographic and reprographic silver containing solutions, coolants, and waste oils.

#### Table 3 – Chemicals Used in Operations on Site.

b. Evidence that a Discharge of Waste has Occurred: PCBs, metals, and other wastes were discovered in soil at the former facility and were discharged into the SWCS as shown by storm drain sediment testing results. Once in the SWCS, these contaminated soils were likely discharged to San Diego Bay, specifically Convair Lagoon and the LHCE area. Sediment samples taken from seven catch basins in 1987 before the General Dynamics facility was demolished indicate that metals and PCBs were discharged to SWCS at the former General Dynamics site.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> General Dynamics Facilities Demolition Project, May 1996, Final Environmental Impact Report prepared for San Diego Unified Port District by Kenneth L. Anerecht.

<sup>&</sup>lt;sup>7</sup> Phase I Baseline Assessment, Part II, General Dynamics Convair. November 1994, Brown and Caldwell.

The highest concentrations detected for the sampled contaminants are indicated in Table 4.

Concentrations
51,000 µg/kg
2,800 mg/kg
830 mg/kg
1,900 mg/kg

#### Table 4 – Maximum Sediment Concentrations Detected.

#### 7. The San Diego County Regional Airport Authority Facility and San Diego Unified Port District

- Historic Chemical Use: The Airport Authority currently operates the San a. Diego International Airport also known as Lindbergh Field on property leased from the San Diego Unified Port District (Port of San Diego). The Port of San Diego owned and operated the airport from 1962 to 2002. Chemicals potentially associated with airport operations include aluminum, chromium, copper, lead, titanium, iron, zinc, and PAHs. Constituents used at this facility include petroleum products and degreasers. As a copermittee named in the Regional Storm Water NPDES Permit,<sup>8</sup> the Airport Authority has been responsible for managing storm water discharges from the former General Dynamics Lindbergh Plant since 2003. The Port of San Diego was responsible for managing storm water discharges from the former General Dynamics Lindbergh Plant from about 1997 to 2003. Jet fuel (PAHs) and brake pad residuals (metals) from the airport, PCB and metals from the former General Dynamics site are some of the likely sources of wastes discharged from the Airport site to the LHCE.
- b. Evidence that a Discharge of Waste has Occurred: PCBs and metals discharged onto the ground during normal operations and site demolition activities at the former General Dynamics Lindbergh Field plant site would be discharged into the SWCS and likely discharged to the LHCE area. Data recently submitted by the Airport Authority to the San Diego Water Board demonstrated that sediment collected from within the 42-inch SWCS outfall, which receives runoff from the airport and portions of the former General Dynamics facility, contained elevated metals and PCBs. As the data postdates the Airport's operational control of the airport, the Airport and the Port of San Diego are suspected of having discharged or

<sup>&</sup>lt;sup>8</sup> Order No. R9-2013-0001, San Diego Municipal Storm Water Permit.

are discharging wastes to the LHCE area in San Diego Bay that could affect water quality in the bay. Table 5 lists the maximum detections of PCBs and metals in the sediments at the 42-inch SWCS and in bay sediments from just outside the SWCS in the LHCE portion of the bay.<sup>9</sup>

Contaminant	Concentrations	
Arsenic	22 mg/kg	
Chromium	230 mg/kg	
Copper	140 mg/kg	
Lead	400 mg/kg	
Nickel	34 mg/kg	
Zinc	910 mg/kg	
Total PCBs	1100 µg/kg	

# Table 5 – Maximum Sediment Concentrations Detected Near the 42-inch SWCS Outfall.

- 8. Persons Responsible for the Discharge of Waste: General Dynamics, the Port of San Diego, and the Airport Authority (Dischargers) are responsible for discharges of wastes to sediment in the LHCE area. As described in Findings 6 and 7, various waste constituents originated at facilities owned and/or operated by these parties and were transported to the LHCE area where they cause, or threaten to cause a condition of pollution or nuisance. Through the course of the investigation, additional information may become available that identifies additional potential dischargers or warrants naming additional persons as dischargers. The San Diego Water Board reserves and retains the right to name additional persons.
- 9. Water Quality Standards: These facilities are located within the Lindbergh Hydrologic Subarea (908.21) in the San Diego Mesa Hydrologic Area (908.20) of the Pueblo San Diego Hydrologic Unit (908.00). San Diego Bay, however, has the following beneficial uses that apply to the LHCE area. These uses could be impacted by contaminants discharged from the facilities to bay sediments:<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Haley & Aldrich, Inc., May 2012, Technical Report and Comments on Draft Investigative Order R9-2012-009, Downtown Anchorage Vicinity, San Diego Bay.

<sup>&</sup>lt;sup>10</sup> Water Quality Control Plan for the San Diego Basin, 2012, Table 2-3.

#### a. Human Health

- i. Commercial and Sport Fishing
- ii. Shellfish Harvesting

#### b. Aquatic Life - Benthic Community

- i. Estuarine Habitat
- ii. Marine Habitat

#### c. Aquatic-Dependent Wildlife

- i. Wildlife Habitat
- ii. Rare, Threatened, or Endangered Species
- 10. Condition of Pollution: The concentrations of contaminants near the 42-inch SWSC outfall in the LHCE area sediment are at levels that may have an impact on human health, wildlife and the benthic community. The elevated concentrations may not be protective for human health, wildlife and the benthic community thus creating a condition of pollution and nuisance in waters of the State.
- 11. Basis for Requiring Reports: Water Code section 13267 provides that the San Diego Water Board may require dischargers, past dischargers, or suspected dischargers to furnish those technical or monitoring reports as the San Diego Water Board may specify, provided that the burden, including costs, of these reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. Coordination of the sediment investigation(s) with the three Dischargers is expected to provide a more comprehensive evaluation and be cost-effective for all parties.
- 12. Need for and Benefit of Technical Reports: Technical reports are needed to provide information to the San Diego Water Board regarding the nature and extent of the discharges. The San Diego Water Board intends to use this information to determine if additional assessment and/or cleanup and abatement activities are warranted at the site. Specifically, the reports will enable the San Diego Water Board to ascertain the extent and chemical concentrations of waste constituents in sediment that may pose a threat to the benthic community, human health, and/or wildlife in the LHCE area. Based on the nature and possible consequences of the discharges (as described in the Findings above) the burden of providing the required reports, including the costs, bears a reasonable relationship to the need for the reports, and the benefits to be obtained from the reports.

- 13. California Environmental Quality Act Compliance: This action is exempt from the provisions of the California Environmental Quality Act (CEQA) in accordance with section 15061(b)(3) of Chapter 3, Title 14 of the California Code of Regulations because it can be seen with certainty that there is no possibility that the activity in question will have a significant effect on the environment. CEQA will be complied with as necessary when and if remedial actions are proposed.
- 14. Qualified Professionals: The Discharger's reliance on qualified professionals promotes proper planning, implementation, and long-term cost-effectiveness of investigations. Professionals should be qualified, licensed where applicable, and competent and proficient in the fields pertinent to the required activities. California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of licensed professionals.
- 15. **Cost Recovery**: Pursuant to Water Code section 13304(c), and consistent with other statutory and regulatory requirements, including but not limited to Water Code section 13365, the San Diego Water Board is entitled to, and will seek reimbursement for, all reasonable costs actually incurred by the San Diego Water Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order.

**IT IS HEREBY ORDERED** that, pursuant to Water Code sections 13267 and 13304, that General Dynamics, the Port of San Diego, and the Airport Authority (collectively Dischargers) must comply with the following directives:

- SEDIMENT CHEMISTRY ASSESSMENT WORK PLAN: Submit a sediment chemistry assessment work plan (Work Plan) for the sediment chemistry within the LHCE data gap area described in Finding 3 and shown in Figure 2. The Work Plan must be received by the San Diego Water Board no later than 5:00 p.m. on September 18, 2014. The Work Plan must be sufficient to delineate the extent of sediment contamination within the LHCE and contain the following information:
  - a. **Historic Chemical Use at the Dischargers' Facilities:** The Work Plan must provide a list of all chemicals used at the Dischargers' facilities.
  - b. **Storm Water Conveyance Map:** The Work Plan must include a map showing the location of all current and historic storm water conveyance features including inlets and discharge points from the facilities. This map should also include former utilities and floor drain locations if they are, or were connected to the SWCS.
  - c. **Sampling and Analysis Plan:** The Work Plan must include a Sampling and Analysis Plan that describes the proposed sampling methodologies, chemical analyses methods, and sampling locations. Sampling shall not proceed without concurrence of the San Diego Water Board. Contingencies for collection of additional samples should be proposed in the Work Plan. All samples shall be tested for analytes needed to characterize sediment contamination exposure and effect as identified in Attachment A of the Bays and Estuaries Plan.<sup>11</sup> In addition, aluminum, iron, and pyrethroids analyses must be included.
- SEDIMENT CHEMISTRY ASSESSMENT REPORT: Prepare a Sediment Chemistry Assessment Report (Report) describing the results from implementing the Work Plan. The Report must be received by the San Diego Water Eoard no later than 5:00 p.m. on April 17, 2015 and must contain the following information:
  - a. **Delineation of Contamination:** An adequate characterization of the horizontal extent of any wastes discharged to bay sediments within the LHCE.
  - b. **Field Methodologies:** A description of the field methodologies used for bay sediment sampling, and any other sample related activities.

<sup>&</sup>lt;sup>11</sup> Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality, State water Resources Control Plan, Attachment A, August 2009.

- c. **Chemical Analyses:** The Report shall include the results of all analyses performed including laboratory analytical methods and grain size analysis for percent fines in the bay sediments.
- d. **Sample Locations and Number:** A description of the locations, type, and number of samples identified and a map showing sample locations. All sampling data must be presented in tabular format including the sample result, location, depth, sampling method, and analyses.
- e. The Laurel Hawthorn Central Embayment Area Conceptual Model: A Site Conceptual Model (SCM) that provides a written or pictorial representation of the release scenario and the likely distribution of waste within the sediment chemistry data gap area, as well as potential pathways and receptors. The SCM must identify and describe the types of wastes present including their horizontal distribution. The SCM must include data interpretations, a discussion of the level of uncertainty of conclusions, and outline any data gaps remaining in the conceptual model.
- f. **Conclusions and Recommendations:** The Report must include conclusions based on the results of the sediment sampling and provide recommendations for additional work, if needed.
- 3. **COMPLIANCE DATES:** For easy reference, the compliance dates for the reports required by this order are repeated below.

Directive	Requirement	Due Date
1	Sediment Assessment Work Plan	September 18, 2014
2	Sediment Assessment Report	April 17, 2015

An extension of due date(s) may be granted by the San Diego Water Board for good cause.

4. PENALTY OF PERJURY STATEMENT: All reports must be signed by the Discharger's corporate officer or its duly authorized representative, and must include the following statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

 DOCUMENT SUBMITTALS: The Dischargers must submit all documents required under this Order in a searchable, electronic portable document format (PDF) to:

Executive Officer California Regional Water Quality Control Board, San Diego Region 2375 Northside Drive, Suite 100 San Diego, California 92108-2700 Attn: Brian McDaniel

Larger documents shall be divided into separate files at logical places in the report to keep the file sizes under 150 megabytes. The Dischargers shall continue to provide a paper transmittal letter, a paper copy of all figures larger than 8.5 inches by 14 inches (legal size), and an electronic copy (on a CD or other appropriate media) of all reports to the San Diego Water Board. All correspondence and documents submitted to the San Diego Water Board shall include the reference code "<u>T1000003487</u>:BMcDaniel" in the header or subject line, where "<u>T1000003487</u>:BMcDaniel" is the Geotracker Site ID and the first initial and last name of the San Diego Water Board project manager.

6. ELECTRONIC DATA SUBMITTALS: The Electronic Reporting Regulations require electronic submission of any report or data required by a regulatory agency from a cleanup site after July 1, 2005.<sup>12</sup> All information submitted to the San Diego Water Board in compliance with this Order is required to be submitted electronically via the Internet into the Geotracker database <u>http://geotracker.waterboards.ca.gov/</u> (Geotracker Site ID. T1000003487). The electronic data must be uploaded on or prior to the regulatory due dates set forth in the Order or addenda thereto. To comply with these requirements, the Dischargers must upload to the Geotracker database the following minimum information:

<sup>&</sup>lt;sup>12</sup> Chapter 30, Division 3 of Title 23 & and Division 3 of Title 27, CCR.

- a. Laboratory Analytical Data: Analytical data (including geochemical data) for all bay sediment and water samples in Electronic Data File (EDF) format.
- b. Site Map: The site map shall be provided on an 8 1/2 x 11 inch or larger sheet and include notes, legends, north arrow, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, the Dischargers may provide the required information on multiple site maps. The site map shall display sampling locations for all sediment samples. The site map is a stand-alone document that may be submitted in various electronic formats.<sup>13</sup> An updated LHCE site map may be submitted at any time.
- c. **Electronic Report:** A complete copy (in searchable PDF format) of all work plans, assessment, cleanup, and monitoring reports including the signed transmittal letters, professional certifications, and all data presented in the reports.
- 7. **VIOLATION REPORTS:** If the Dischargers violate any requirement of this Order, then the Dischargers must notify the San Diego Water Board office by telephone as soon as practicable once the Dischargers have knowledge of the violation. The San Diego Water Board may, depending on violation severity, require the Dischargers to submit a separate technical report on the violation within five working days of telephone notification.
- 8. **OTHER REPORTS:** The Dischargers must notify the San Diego Water Board in writing prior to any Discharger's facilities' activities that have the potential to cause further migration of pollutants.

# 9. **PROVISIONS**

a. **Waste Management:** The Dischargers shall properly manage, store, treat, and dispose of contaminated sediments in accordance with applicable federal, State and local laws and regulations. The storage, handling, treatment, or disposal of sediment associated with this assessment must not create conditions of nuisance as defined in Water Code section 13050(m).

<sup>&</sup>lt;sup>13</sup> Formats include .gif, .jpeg, .jpg, tiff, .tif, .pdf.

- b. **Contractor/Consultant Qualifications:** All reports, plans and documents required under this Order must be prepared under the direction of appropriately qualified professionals. A statement of qualifications and license numbers, if applicable, of the responsible lead professional and all professionals making significant and/or substantive contributions must be included in the report submitted by the Dischargers. The lead professional performing engineering and geologic evaluations and judgments must sign and affix their professional geologist or civil engineering registration stamp to all technical reports, plans or documents submitted the San Diego Water Board.
- c. Laboratory Qualifications: All samples must be analyzed by California State-certified laboratories using methods approved by the USEPA for the type of analysis to be performed. All laboratories must maintain QA/QC records for San Diego Water Board review.
- Laboratory Analytical Reports: Any report presenting new analytical data is required to include the complete Laboratory Analytical Report(s). The Laboratory Analytical Report(s) must be signed by the laboratory director and contain:
  - i. Complete sample analytical reports.
  - ii. Complete laboratory QA/QC reports.
  - iii. A discussion of the sample and QA/QC data.
  - iv. A transmittal letter that indicates whether or not all the analytical work was supervised by the director of the laboratory, and contain the following statement, "All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health in accordance with current USEPA procedures."

#### NOTIFICATIONS

- a. **Cost Recovery:** Upon receipt of invoices, and in accordance with instruction therein, the Dischargers must reimburse the San Diego Water Board for all reasonable costs incurred by the San Diego Water Board to investigate discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order and consistent with the estimation of work.
- b. All Applicable Permits: This Order does not relieve the Dischargers of the responsibility of obtaining permits or other entitlements to perform necessary assessment activities. This includes, but is not limited to, actions that are subject to local, State, and/or federal discretionary review and permitting.

- c. **Enforcement Discretion:** The San Diego Water Board reserves its right to take any enforcement action authorized by law for violations of the terms and conditions of this Order.
- d. Enforcement Notification: Failure to comply with requirements of this Order may subject the Dischargers to enforcement action, including but not limited to administrative enforcement orders requiring the Dischargers to cease and desist from violations, imposition of administrative civil liability, pursuant to Water Code section 13268 in an amount not to exceed \$1,000 for each day in which the violation occurs, referral to the State Attorney General for injunctive relief, and referral to the District Attorney for criminal prosecution. The Dischargers are jointly and severally liable for the entire amount of the administrative civil liability. The San Diego Water Board reserves the right to seek administrative civil liability from any or all of the Dischargers.
- e. Requesting Administrative Review by the State Water Board: Any person affected by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with section 13320 of the Water Code and CCR Title 23 section 2050. The petition must be received by the State Water Board (Office of Chief Counsel, P.O. Box 100, Sacramento, California 95812) within **30 calendar days** of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.<sup>14</sup>

JEREMY HAAS Chief, Healthy Waters Branch

June 17 Date

<sup>&</sup>lt;sup>14</sup> Nothing in this Order prevents the Dischargers from later petitioning the State Water Resources Control Board to review other future San Diego Water Board orders regarding the Laurel/Hawthorn Embayment area, including but not limited to subsequent investigative orders and/or cleanup or abatement orders, if any. Upon such petition, the San Diego Water Board will not assert that the Dischargers have previously waived or forfeited their right to petition the San Diego Water Board's action or failure to act under Water Code section 13320. Further, upon such petition, the San Diego Water Board will not assert that the Dischargers are precluded from petitioning for review of future orders by any failure to petition for review of this Order.



Figure 1 – Laurel/Hawthorn Embayment (LHE) - The Laurel/Hawthorn Embayment is defined in this order as the area bordered on the north by Laurel Street and on the south by West Hawthorn Street and the portion of San Diego Bay located south of Harbor Drive, immediately south of Solar Turbines (Solar), the San Diego International Airport (Airport Authority) Facility, and east of the U.S. Coast Guard Station. The approximate extent of the area into San Diego Bay is bounded by an imaginary line drawn between the southeast corner of the U.S. Coast Guard facility and the West Hawthorn Street pier.

