

## CONSENT DECREE

WHEREAS, Baykeeper is a non-profit public benefit corporation dedicated to the preservation, protection, and defense of the environment, wildlife, and natural resources of the San Francisco Bay and other area waters;

WHEREAS, BAE Systems San Francisco Ship Repair Inc. (“BAE Systems”) operates a shipyard where ship cleaning, repair, and other industrial activities occur. BAE Systems’ facility is located at the Foot of 20<sup>th</sup> Street, San Francisco, CA 94107 (the “Facility”);

WHEREAS, stormwater discharges associated with industrial activity at the Facility are regulated pursuant to the National Pollutant Discharge Elimination System (“NPDES”) General Permit No. CAS000001 [State Water Resources Control Board], Water Quality Order No. 92-12-DWQ (as amended by Water Quality Order 97-03-DWQ), issued pursuant to Section 402 of the Federal Water Pollution Control Act, 33 U.S.C. §1342 (hereinafter “Industrial Stormwater Permit”). These industrial activities include, *inter alia*, structural repair of ships, sheet metal fabrication, surface preparation (abrasive blasting, hydroblasting, and pressure washing), painting, electrical component repair and replacement, machinery overhaul and repair, piping and boiler repair, bilge water treatment, lagging and insulation removal and installation, overhaul and rigging of shipboard components, and other industrial activities related to ship cleaning or repair;

WHEREAS, the Industrial Stormwater Permit includes the following requirements for all permittees, including BAE Systems: 1) develop and implement a storm water pollution prevention plan (“SWPPP”), 2) control pollutant discharges using best available technology economically achievable (“BAT”) and best conventional pollutant control technology (“BCT”) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality

standards, and 3) implement BAT and BCT through the development and application of Best Management Practices (“BMPs”), which must be included and updated in the SWPPP;

WHEREAS, discharges at the Facility are also regulated by the San Francisco Regional Water Quality Control Board’s (“Regional Board”) NPDES Permit No. CA0005321 [R2-2011-0017 and R2-2006-0014] (“Individual NPDES Permit”);

WHEREAS, on August 23, 2011, Baykeeper served BAE Systems, BAE Systems’ registered agent, the Administrator of EPA Region IX, the Executive Director of the State Water Resources Control Board (“State Board”), the Executive Officer of the Regional Board, the U.S. Attorney General, and the Administrator of the EPA with a notice of intent to file suit (“60-Day Notice”) under Sections 505(a)(1) and (f) of the Federal Water Pollution Control Act (“Clean Water Act” or “the Act”), 33 U.S.C. § 1365(b)(1)(A), alleging violations of the Act, the Industrial Stormwater Permit, and BAE Systems’ Individual NPDES Permit at the Facility;

WHEREAS, Baykeeper filed a complaint (“Complaint”) against BAE Systems in the United States District Court, Northern District Court of California on October 24, 2011 (Case No. 3:11-cv-05184-SI);

WHEREAS, Baykeeper contends in its 60-Day Notice and Complaint that, among other things, BAE Systems has repeatedly discharged polluted stormwater in violation of the Industrial Stormwater Permit and the Clean Water Act, discharged pollutants in violation of its Individual NPDES Permit, and discharged pollutants without a permit in violation of the Clean Water Act, and BAE Systems denies all allegations set forth in the 60-Day Notice and Complaint and contends that Baykeeper’s Complaint should be dismissed;

WHEREAS, the Parties, through their authorized representatives and without either adjudication of Baykeeper’s claims or admission by BAE Systems of any alleged violation or

other wrongdoing, choose to resolve in full Baykeeper's allegations in the 60-Day Notice and Complaint through settlement and avoid the cost and uncertainties of further litigation;

WHEREAS, the Parties agree that it is in their mutual interest to resolve this matter without further litigation;

NOW THEREFORE IT IS HEREBY STIPULATED BETWEEN THE SETTLING PARTIES, AND ORDERED AND DECREED BY THE COURT, AS FOLLOWS:

**I. COMMITMENTS OF BAE SYSTEMS**

1. In order to reduce or prevent pollutants associated with industrial activity from discharging via stormwater to the waters of the United States, and in order to eliminate direct discharges of pollutants to waters of the United States, BAE Systems shall implement appropriate structural and non-structural Best Management Practices ("BMPs") as required by the Industrial Stormwater Permit and its Individual NPDES Permit, as described more fully below.

2. **Site Maps:** BAE Systems shall inspect its Facility so as to complete site maps that comprehensively depict the flow of stormwater at the Facility ("Site Map"). The Site Map shall clearly denote the direction of stormwater flow. The Site Map shall clearly identify the property boundaries, known or suspected drop inlets, ground type (pervious or impervious), berms and the materials they are comprised of, any permanent structures and features, discharge points, and all other physical structures or items relevant under the Industrial Stormwater Permit and in this Consent Decree.

3. **Designated Discharge Points:** BAE Systems shall identify and number on the Site Map every location at which stormwater and non-stormwater is known to be discharged or which may potentially be discharged ("Designated Discharge Point or Area").

4. **Dust Generating Activities:** BAE Systems shall update the SWPPP to fully describe, and designate on the Site Map, all industrial activities that generate dust, particulates, or pollutants that may be deposited within the Facility's boundaries, including but not limited to: (a) structural repair of ships, (b) sheet metal fabrication, (c) surface preparation (abrasive blasting, hydroblasting, and pressure washing), (d) painting, (e) electrical component repair and replacement, (f) machinery overhaul and repair, (g) bilge water treatment, (h) lagging and insulation removal and installation, (i) overhaul and rigging of shipboard components, (k) other industrial activities related to ship cleaning or repair, and (l) storage areas. Describe the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within and outside the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle. BAE Systems shall denote all actions taken to control the deposition of dust and particulate matter at the Facility, including any sweeping activities, water spraying activities, and use of shrouding, berms, filtration devices or systems, or other such equipment.

5. **Designation and Protocol for All Sampling Locations:** BAE Systems shall update its SWPPP to fully describe the protocol for taking stormwater samples. The description shall be precise with respect to exactly where and when the samples are to be collected and shall further explain why the sample points are representative of off-site discharge. For instance, if the discharge point is a driveway, BAE Systems shall specify which side of the driveway the sample is collected and determine if additional collection points need to be added on the driveway to ensure that the sampling program characterizes all the monitored constituents in the Facility's stormwater runoff.

6. **Best Management Practices:** BAE Systems shall develop and implement BMPs necessary to comply with Effluent Limitation B(3) and Receiving Water Limitation C(2) of the Industrial Stormwater Permit, which requires that BMPs be developed and implemented to limit pollutant discharge to that attainable with BAT and BCT. Accordingly, BAE Systems shall implement the BMPs set forth in paragraphs 7-22 at the Facility.

7. **Storm Drain Inlet/Catch Basin Best Management Practices:**

a. Prior to October 1 of each year, BAE Systems shall inspect each storm drain inlet at the Facility. During this inspection, BAE Systems shall clean, as needed, each drain inlet in order to remove dust and solids that have entered the storm drain inlets.

b. Twice per month during the Wet Season (*i.e.*, from October 1 to May 31 of each year that this Consent Decree is in effect) (“Wet Season”), BAE Systems shall inspect all storm drain inlets or catch basins at the Facility to ensure that the storm drain inlets or catch basins are not in a condition that would materially impair their efficacy and clean out any sediment deposited into these storm drain inlets or catch basins. BAE Systems shall properly dispose of any dust, sediment, or other pollutants removed from storm drain inlets or catch basins.

c. At present, the wharf at BAE contains approximately 100 drains that discharge to the Bay. BAE shall undertake an evaluation of such drains to determine which drains are needed for continued discharge. Within thirty (30) days of the Effective Date, those drains that have been designated for sampling in accordance with the SWPPP shall be fitted with cloth filters. Within sixty (60) days of the Effective Date, all drains that have not been designated for discharge shall be sealed.

Additionally, all drains that discharge shall be fitted with cloth filters. Within one hundred twenty (120) days of the Effective Date, BAE Systems shall install and maintain drain filter units within storm drains that are designated for discharge to permit drainage of the wharf or any other storm drains that have not been sealed off and do not drain to the sanitary sewer. Filters should be sourced such that they target pollutant removal with particular focus on reducing heavy metals, including copper, zinc, nickel, and lead. Select drains may require modification to enable sampling of post-treatment stormwater associated with the wharf, the monitoring requirements for which are specified in Section V.

d. **Log of Storm Drain Inlet/Catch Basin Inspections, Maintenance and Cleaning:** BAE Systems shall prepare and maintain a log of the Storm Drain Inlet/Catch Basin Inspections, Maintenance and Cleaning described herein (“Maintenance Log”). The Maintenance Log shall indicate the staff who completed the maintenance activity and when it was completed. The Log shall be made available for inspection by Baykeeper at any site inspection or otherwise within two (2) business days advance request by Baykeeper.

8. **Block Stowage Area:** It shall be the commitment of BAE Systems to eliminate contaminated stormwater discharges from the block stowage area within ninety (90) days of the Effective Date. BAE Systems shall sweep the block stowage area and remove all trash or scrap material. BAE Systems may choose to (i) install stormwater collection facilities and treat stormwater prior to discharge to the Bay, (ii) permanently remove all sources of potential pollutants, or (iii) collect and discharge stormwater to the sanitary sewer.

9. **Facility Monitoring:** Prior to October 1 of each year, and weekly during the Wet Season, BAE Systems shall conduct inspections of those portions of the Facility from which stormwater discharges. Such inspections shall include driveways, storage areas, hazardous material areas, and all process areas. All Designated Discharge Locations shall also be inspected for accumulation of dust, sediment, sand, grit, oily substances, oily sheens upon any standing water, and other materials associated with operations at the Facility. If any of these materials are present, BAE Systems will clean the area.

10. **Site Sweeping:** After the Effective Date, BAE Systems shall sweep the paved areas of the entire Facility once per week. BAE Systems shall sweep the paved area on the wharf adjacent to the dry docks twice per week. BAE Systems shall keep a log or checklist, as appropriate, of the on-site sweeping activity performed at the Facility (“Sweeping Log”), and shall direct employees and/or contractors to accurately complete this Log. The Sweeping Log shall indicate the employee or contractor who conducted the sweeping, the location of the sweeping, and the dates the sweeping activities occurred. The Sweeping Log shall be made available for inspection by Baykeeper at any site inspection or otherwise within two (2) business day advance request by Baykeeper.

11. **Paving and Pavement Repair:** BAE Systems shall routinely inspect paved areas and implement repairs or replacement to damaged surface pavement on an as needed basis to prevent accumulation of pollutants.

12. **Hazardous Waste Materials Segregation and Handling:** After the Effective Date, to the extent not already implemented, BAE Systems shall implement a system: (1) for identifying any toxic and hazardous materials handled at the Facility and (2) for segregating such identified materials from other materials at the Facility and storing all such materials under cover

and on an impermeable surface, out of potential contact with stormwater or site flooding, with the exception of satellite accumulation stations, which may be located on a permeable surface so long as they are not located near a storm drain inlet or catch basin. The requirement that hazardous waste materials be stored “under cover” may be satisfied by storage in a covered drum or covered container. BAE shall update the SWPPPs for both of the Facility to reference any Hazardous Materials Management Plans.

13. **Abandoned or Inutile Equipment Storage and Removal:** After the Effective Date, BAE Systems shall either store under cover or remove from the Facility all abandoned or broken equipment, scrap metals, or other equipment no longer considered for future use that have the potential to serve as the source for pollutant loading.

14. **Vehicle and Equipment Management:** After the Effective Date, to the extent not already implemented, BAE Systems shall implement BMPs to reduce or minimize pollutant release from equipment such as forklifts, hydraulic lifts, dump trucks, and other heavy equipment that are parked or stored in areas of the Facility from which stormwater discharges. Such BMPs shall include placing drip pans under equipment stored or parked for a week or longer, weekly inspections for evidence of leaks from such equipment, and promptly (as soon as reasonably possible and in no case later than in advance of forecasted rainfall events) cleaning up of spills, drips, or leaks from such equipment. Any spilled substances and absorbent materials used in cleaning up spills shall be disposed of in accordance with all local, state, and federal laws and regulations.

15. **Vehicle and Equipment Maintenance:** After the Effective Date, to the extent not already implemented, BAE Systems shall not conduct routine (*i.e.*, non-emergency) vehicle or movable equipment maintenance or repair at the Facility in outdoor, uncovered areas from

which stormwater discharges during rainfall events. Whenever BAE Systems conducts such maintenance or repair activities in non-covered areas from which stormwater discharges from the Facility, BAE Systems shall inspect the area where the maintenance or repair occurred and clean-up waste products, including pollutant containing fluids, deposited or spilled on the ground as a result of the maintenance or repair.

16. **Fueling Activities:** After the Effective Date, to the extent not already implemented, except in unusual and unexpected circumstances where equipment located on a pervious surface has run out of fuel and requires refueling to be operational, BAE Systems shall conduct fueling activities at the Facility only on an impervious surface, in accordance with its SWPPP, and require that its fuel supplier or employees immediately clean-up, remove and dispose of any fuel spills in accordance with all applicable local, state, and federal laws and regulations.

17. **Vertical Shrouding:** Within sixty (60) days of the Effective Date, BAE Systems shall install new shrouding on both ends of the dry docks to seal these areas. This vertically hanging shrouding must be in place at both ends of each dry dock whenever a ship is present in the dry dock. The shrouding must reach both sides and the base of the dry dock and be free of: tears, gaps between the sheets and wing walls and dock basin, or holes except for the entrance for vehicles or wind loading criteria at or below which all particulate generating activity must have ceased. In order to minimize the opening in the shrouding, BAE Systems shall install a “door” or shrouding strips that can be pushed aside to enable vehicle access to the dry dock. While performing spraying, sanding, painting, or dust-generating operations in dry docks, shrouding shall be in place to minimize the loss of fugitive dust and associated pollutants. BAE Systems shall inspect all shrouding before each day that the dry docks are in use. BAE Systems

must maintain the shrouding and keep a log at the Facility of its daily inspections and maintenance.

18. **Dry Dock Pollution Control:** Within ninety (90) days of the Effective Date, to prevent the discharge of pollutants from the dry docks associated with pressure spraying, painting, and general operations and maintenance activities, additional BMPs shall be implemented. Such measures shall include the use of shrouds during dry abrasive blasting within three meters of the top of the wing wall, extending from the tops of the wing walls to the deck or upper sides of the vessel, to contain pollutants within the dry dock for on-site containment and disposal (“wing wall shrouds”). Other measures shall include self-contained hydroblasting machines and/or fog nozzles, when appropriate. Recommended guidance for installation of wing wall shrouds and other containment techniques may be found in the shipyard BMP Manual developed by Oregon’s Department of Environmental Quality.<sup>1</sup> The shroud should be large enough to adequately enclose or segregate the working area and be sufficiently supported to withstand anticipated wind stress. BAE Systems shall inspect all shrouding and other BMPs before each day that the dry docks are in use. BAE Systems must maintain the shrouding and keep a log at the Facility of its daily inspections and maintenance.

19. **Over Water Protection:** In the event vessel maintenance and operations activities occur directly over San Francisco Bay, additional over water protection shall be employed to prevent discharge of pollutants directly to the water surface. Whenever pollutants cannot be effectively contained within the dry dock, lighters (e.g. pontoons, small floating decks or barges) shall be used to protect the water surface beneath and adjacent to vessels that overhang floating dry docks. Lighters must be large enough to support workers and required

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<sup>1</sup> Oregon Department of Environmental Quality. 2000. *Best Management Practices for Oregon Shipyards*. Available at [www.deq.state.or.us](http://www.deq.state.or.us)

equipment, and shall be positioned adjacent to the operations area to provide a catch surface for paint, grit, oil, etc. During particulate generating activities, lighters shall be used in conjunction with shrouding to contain all pollutants for effective cleanup. Cleanup of the lighter shall occur daily, involving sweeping or vacuuming of spent material, followed by appropriate disposal.

20. **Dry Dock Track Out Prevention:** Within ninety (90) days of the Effective Date, BAE Systems shall modify existing tire wash facilities so that tracking from the dry dock is minimized and contaminated wash water is not discharged to San Francisco Bay. Currently, ramps between the dry docks and wharf are not liquid tight, which encourage the deposition of potentially contaminated wash water directly into the Bay. An appropriate stabilized exit shall be installed that achieves the dual objectives of removing contaminated wash water from vehicles and preventing discharge of such water directly into San Francisco Bay. This could be achieved by isolating tire wash activities on the dry dock and installing an impervious ramp equipped with rumble strips and a mechanism for directing wash water to the on-site treatment system, prior to discharge to the sanitary sewer.

21. **Training:** After the Effective Date, and annually thereafter, and within thirty (30) days of hiring of new employees, BAE Systems shall conduct training for all appropriate employees to explain the requirements of this Consent Decree, the Facility SWPPP, the Industrial Stormwater Permit, and BAE Systems' Individual NPDES Permit to the extent applicable to such employee. Training shall focus on the employee's role in implementing various Consent Decree measures including, for example, implementation of BMPs, sweeping, shroud maintenance, appropriate power spraying methods, or Facility inspections. Training shall be conducted bilingually (*i.e.*, Spanish/English or other pertinent language) to the extent that such employee is not reasonably able to comprehend training in English. BAE Systems shall

integrate any new training requirements resulting from this Consent Decree into the Facility's SWPPP. BAE Systems shall also update the SWPPP to identify the positions responsible for carrying out stormwater management, process water management, monitoring, sampling, and SWPPP implementation at the Facility.

22. **Maintenance of BMP Structural Controls:** After the Effective Date, BAE Systems shall maintain structural BMPs at the Facility in good operating condition during the Wet Season and shall promptly repair any damaged or degraded structural BMPs.

23. **Amendment of SWPPP:** Within sixty (60) days of the Effective Date, BAE Systems shall amend, and submit to Baykeeper, its SWPPP to incorporate the requirements and BMPs set forth in this Consent Decree pursuant to Paragraphs 7 through 22 above (*e.g.*, updated Site Map, designation of areas, protocol for stormwater sampling) and to incorporate any other requirements of the Industrial Stormwater Permit not already incorporated. Baykeeper shall have thirty (30) days from receipt of the amended SWPPP to propose changes to that SWPPP. Within thirty (30) days of notification by Baykeeper of proposed changes to the SWPPP and of the reasons for such changes, BAE Systems shall make all Baykeeper's changes to the amended SWPPP unless BAE Systems timely invokes Dispute Resolution. Compliance with the SWPPP, as amended in accordance with this paragraph provision, shall at all times be a requirement of this Consent Decree.

## V. SAMPLING, MONITORING, INSPECTION & REPORTING

24. **Sampling Program - Stormwater:** After the Effective Date, subject to the limitations set forth below, BAE Systems shall collect and analyze stormwater samples from each Designated Discharge Point at the Facility according to the following sampling schedule:

a. During the Wet Seasons of 2012-2013 and 2013-2014, BAE Systems shall collect and analyze samples from four (4) storm events, as qualified in the Industrial Stormwater Permit, except that BAE Systems can collect and analyze storm water discharges after the first hour of discharge during scheduled facility operating hours and samples can be collected on a day which has been preceded by one (1) day of measurable rain (i.e., 0.1 inches or more per day) and at least 24 hours has passed since any previous samples were taken, from each Designated Discharge Point at the Facility, unless a Designated Discharge Point does not discharge that often in a Wet Season, in which case, BAE Systems shall collect as many samples described above as possible. If three (3) consecutive samples from a Designated Discharge Point have constituent concentrations below the Target levels set forth in Exhibit 1 for all parameters sampled, BAE Systems need not conduct additional sampling in that Wet Season.

b. BAE Systems shall analyze each stormwater sample collected for the presence of each of the parameters listed on the Sampling Chart attached hereto as Exhibit 1. If BAE Systems obtains three consecutive samples from each of the Designated Discharge Points at the Facility which are below the Target Levels in Exhibit 1 for a given constituent, BAE Systems need not have its stormwater from the Facility analyzed for that particular constituent for the remainder of this Consent Decree. Should operations materially change at the Facility, BAE Systems shall conduct sampling for any additional toxic priority pollutants listed in 40 C.F.R. § 131.38 likely to be present in BAE Systems' stormwater discharges as a result of the changed operations.

c. Where BAE Systems discharges stormwater into a storm drain inlet or catch basin, BAE Systems may choose to collect a sample below any insert or treatment system.

25. **Certified Lab:** BAE Systems shall have all stormwater samples collected pursuant to this Consent Decree delivered to a California state certified environmental laboratory for analysis within the time needed for analysis within laboratory method allowable hold times. The laboratory shall thereafter conduct analysis sufficient to detect individual constituents at or below the levels set forth in the attached Exhibit 1.

26. **Sample Result Reporting:** After the Effective Date, BAE Systems shall provide complete results from BAE System' sampling and analysis to Baykeeper within seven (7) calendar days of receipt of the laboratory report from each sampling event.

27. **Baykeeper Monitoring:** After the Effective Date, BAE Systems will provide a schedule of planned ship activity to Baykeeper each month, including days when BAE Systems employees are planning to perform hydroblasting, pressure washing, and/or dry abrasive blasting. Ship repair schedules are proprietary and business sensitive. Baykeeper shall keep these schedules confidential and shall not disclose any of these schedules to any person or entity not participating in Baykeeper's monitoring described below. Baykeeper will periodically observe, by boat, BAE Systems' operations to visually determine if BAE Systems is discharging process wastewater in violation of its Individual NPDES Permit and/or the Clean Water Act. Certain contracts involving Vessels of the Armed Forces require Force Protection Barriers to establish a perimeter security boundary around those vessels. If such a security barrier or equivalent signage is in place, no small vessel traffic may enter within that area. Should Baykeeper observe any violation it will immediately inform BAE Systems of such activity by

calling Mr. Michael Cheng, BAE Systems SFSR Environmental Supervisor at (415) 735-8599, or Mr. Shaun Halvax, BAE Systems Ship Repair Environmental Manager (619) 572-6477. If no answer is received, a voice mail message shall be left identifying the date, time, and location of the alleged violation. Baykeeper shall provide documentation of any such violations to BAE Systems within two (2) business days of the observations. Within ten (10) days of Baykeeper's notification to BAE Systems of a discharge violation, BAE Systems must submit to Baykeeper a document which includes: 1) a description of the BMPs that BAE Systems will implement over the subsequent thirty (30) days to correct the discharge, or 2) an explanation of why BAE Systems disagrees that it has discharged process wastewater in violation of its Individual NPDES Permit and/or the Clean Water Act. Any further disagreement shall follow the dispute resolution provisions of paragraph 42, below.

28. **Action Plan:** By June 15 of each year after the Effective Date, BAE Systems shall prepare and send to Baykeeper an Action Plan if stormwater sample results during the previous Wet Season exceed EPA Benchmarks set forth in Exhibit 1.

29. **Contents of Action Plan:** If an Action Plan is required, it shall set forth: (1) a summary chart setting forth all sample results for the Facility from the previous Wet Season, including the constituent concentrations from Designated Discharge Point samples collected at the Facility exceeding EPA Benchmarks in Exhibit 1 ("Exceedances"), (2) the possible sources of such Exceedances, (3) recommended BMPs that attempt to reduce the level of pollutants associated with the Exceedances in future storm water discharges and that satisfy the goal of protecting adopted receiving water quality standards, taking into account factors specified in CWA section 304(b), 33 U.S.C. section 1314(b), including consideration of treatment

technology; and (4) a schedule to implement any new BMPs by the earliest practicable time, and before the next Wet Season, if possible.

30. Baykeeper shall have thirty (30) days from receipt to propose revisions to the Action Plan and explain in writing the basis for each such revision. Within thirty (30) days of receiving Baykeeper's revisions, BAE Systems shall adopt Baykeeper's requested revisions to the Action Plan unless BAE Systems timely invokes Dispute Resolution.

31. BAE Systems shall implement the Action Plan(s) adopted pursuant to this Consent Decree as an obligation of this Consent Decree.

32. Within thirty (30) days after BMPs recommended in an Action Plan pursuant to this Consent Decree are complete, BAE Systems shall amend its SWPPP to include all BMP Recommendations not otherwise already implemented and included in the SWPPP. Within thirty (30) days thereafter pursuant to this paragraph, BAE Systems shall provide Baykeeper with a copy of such revised SWPPP.

33. During each Wet Season, BAE Systems is under an ongoing obligation to evaluate the BMPs implemented at the Facility and discussed in current or previous Action Plans and continue to attempt to reduce the level of pollutants for the remainder of the Wet Season. BAE Systems shall use the results from subsequent stormwater samples as they become available to assist with its ongoing evaluation of the effectiveness of BMPs.

34. **End of Season Summary:** By June 15<sup>th</sup> of each year, BAE Systems shall provide Baykeeper an end of season summary report that includes (1) a summary chart with all the sample results from the previous Wet Season; and (2) identification of any new BMPs that BAE Systems has implemented or will implement not already discussed in prior summary reports or Action Plans.

## VII. EXCEEDANCES, SITE ACCESS, & REPORTING

35. **Stipulated Payments:** BAE Systems shall pay the following stipulated payments during the term of this Consent Decree.

- a. Industrial Stormwater Permit
  - i. One thousand dollars (\$1,000) for each failure to collect a required sample during the Wet Season.
  - ii. Beginning with the second stormwater sampling event of the 2012/2013 wet season, so long as at least two (2) qualifying events occur during the 2012/2013 wet season: Two hundred fifty dollars (\$250) each time that a parameter from a sampling event exceeds EPA Benchmarks (Exhibit 1), and an additional two hundred fifty dollars (\$250) each time that a parameter from a sampling event exceeds the Target Levels/Water Quality Standards (Exhibit 1).
- b. Individual NPDES Permit
  - i. One thousand five hundred dollars (\$1500) each time that Baykeeper observes, and provides to BAE Systems contemporaneous notification of observation and within two (2) business days, photographic or video documentation of, a discharge from BAE Systems' Facility in violation of the Individual NPDES Permit or the discharge of a pollutant without a permit in violation of the Clean Water Act, following the process provided in Paragraph 27 above;
- c. Five hundred dollars (\$500) per day for every business day (Monday through Friday, excluding state and federal holidays) past the due date that BAE

Systems fails to submit to Baykeeper any document, report or other communication required under the Consent Decree; and

d. Five hundred (\$500) per day for every business day (Monday through Friday, excluding state and federal holidays) past the due date that BAE Systems fails to submit any payments due under the terms of this Consent Decree.

e. All payments of stipulated payments described above shall be paid by June 30<sup>th</sup> of each year this Consent Decree is in effect to the Rose Foundation for the Environment, 6008 College Avenue, Oakland, CA 94618, Attn: Tim Little, with a copy of payment sent concurrently to Baykeeper. Stipulated payment funds will be used by the Rose Foundation to fund projects that benefit water quality in the San Francisco Bay watershed. The Rose Foundation will provide in writing to BAE Systems a description of how funds were used on a specific water quality project(s). In no case shall any of the funds be received by Baykeeper.

36. Stipulated payments shall begin to accrue one day after any passed deadline as provided in Paragraph 35, above, provided that, within ten (10) business days from the applicable deadline, BAE receives notice under Paragraph 62 of the missed deadline. If Baykeeper provides written notice to BAE more than ten (10) business days from the applicable missed deadline, stipulated payments shall begin to accrue ten (10) days prior to the date of Baykeeper's written notice.

37. **Reduction in Stipulated Payments:** BAE Systems shall be allowed a 50% reduction of any stipulated payments due in any given calendar year pursuant to the preceding paragraph if BAE Systems tenders the reduced payment to Baykeeper along with a certification signed under penalty of perjury stating that BAE Systems will, within one year, spend or be

under contract to spend the balance of the sum that would otherwise be due as a stipulated payment on alternative environmental enhancements. Alternative environmental enhancements shall include: (a) completing indoor or covered facilities at the Facility including the construction of canopies over processing, operation, or material storage areas; (b) the acquisition of an improved stormwater filtration system approved by Baykeeper (including any stormwater retention capacity integrated with the filtration system), or (c) construction and operation of the appurtenances needed to discharge stormwater runoff from the Facility to a publicly owned treatment works sanitary sewer system provided that BAE Systems includes as part of this sewer connection project the construction and operation of stormwater retention devices (such as retention ponds, basins, or tanks) to allow storage of stormwater for disposal after peak rainfall-related sewer collection system flows have subsided. BAE Systems must further submit within thirty (30) days of completing the foregoing alternative environmental enhancement project a subsequent notice to Baykeeper explaining how BAE Systems expended the funds and how this expenditure met the required terms. If BAE Systems fails to meet all conditions of this paragraph, then it must pay the balance of the stipulated payment sum not yet paid within twelve (12) months from the date the payment was originally due.

38. **Site Access:** During the term of this Consent Decree, BAE Systems shall permit representatives of Baykeeper to perform one (1) physical inspection per year of the Facility during operating hours, which may include sampling, and agreed-upon photographing and/or videotaping compliant with applicable Federal Rules of Civil Procedure. The scope of the inspection and agreed-upon photographing and/or videotaping may be limited or conditioned by BAE Systems to the extent necessary to protect BAE Systems' (and its customers' or third parties') business sensitive/proprietary information, security requirements, to comply with

International Traffic at Arms Regulations (ITAR), or to comply with prohibitions related to U.S. export control laws. Baykeeper shall provide BAE Systems notice at least two (2) business days in advance of such physical inspection, and BAE Systems shall have the right to deny access if circumstances would make the inspection unduly burdensome and pose significant interference with business operations. In such case, BAE Systems shall specify at least three (3) days within the next two (2) weeks upon which a Baykeeper inspection may proceed during normal business hours, and the Parties shall agree upon the inspection date. Baykeeper shall comply with all safety instructions provided to Baykeeper by BAE Systems staff during any site inspection. BAE Systems shall not use the period of Baykeeper advance notice pursuant to this paragraph to make any alterations to Facility conditions that BAE Systems would not otherwise have made but for receiving advance notice of Baykeeper's requested site access such that Baykeeper will be allowed to inspect and sample normally representative Facility conditions and any discharges.

39. **Reports:** During the term of this Consent Decree, BAE Systems shall provide Baykeeper with a copy of all documents submitted to the Regional Water Board or the State Water Board concerning the Facility and compliance with the Industrial Stormwater Permit and BAE Systems' Individual NPDES Permit. Such documents and reports shall be transmitted to Baykeeper via electronic mail, if feasible, or by U.S. Mail when electronic transmission is not feasible, at the time the documents are due to be submitted to the Regional Water Board or State Water Board.

### **VIII. MITIGATION, FEES, AND COSTS**

40. **Environmental Mitigation Funding:** As mitigation of the violations alleged in Baykeeper's Notice and Complaint, BAE Systems shall pay the sum of one hundred thirty thousand dollars (\$130,000) to Spaulding Wooden Boat Center ("Spaulding"), a nonprofit

organization located in Sausalito, California, for a Supplemental Environmental Project (Exhibit 2). BAE Systems shall pay the sum of sixty-five thousand dollars (\$65,000) to Spaulding within thirty (30) days of the Effective Date. BAE Systems shall pay the remaining sixty-five thousand dollars (\$65,000) to Spaulding within one (1) year of the Effective Date, for a total of one hundred thirty thousand dollars (\$130,000). Spaulding shall report to the U.S. Department of Justice and the Parties on how the funds were spent, as provided in Exhibit 2. Payments shall be made to Spaulding Wooden Boat Center, Foot of Gate Five Road, Sausalito, California 94965, with notice to Baykeeper. In the event that the SEP is completed under budget, the remainder of the sum of one hundred thirty thousand dollars (\$130,000) shall be paid to the Rose Foundation for the Environment, for projects that will benefit the environment of the San Francisco Bay watershed. The Rose Foundation shall report the grant funding made with the tendered funds to the U.S. Department of Justice, and the Parties, setting forth the recipient and purpose of the funds. Any such payment shall be made to the Rose Foundation for the Environment, 6008 College Avenue, Oakland, California 94618 within twenty-five months of the Effective Date.

41. **Reimbursement of Fees and Costs:** BAE Systems shall reimburse Baykeeper in the amount of thirty thousand dollars (\$30,000) to help defray Baykeeper's reasonable investigation, expert, and attorneys' fees and costs, and all other reasonable costs incurred as a result of investigating the activities at the Facility related to this Consent Decree, bringing these matters to BAE Systems' attention, and negotiating a resolution of this action in the public interest. BAE Systems shall tender payment to Baykeeper within thirty (30) days of the Effective Date.

42. **Compliance Monitoring Funds:** BAE Systems shall reimburse Baykeeper thirteen thousand three hundred and thirty three dollars (\$13,333) per year for each of the three

years of the Term of this Consent Decree, in the total amount of forty thousand dollars (\$40,000) for costs and fees associated with monitoring BAE Systems' compliance with this Consent Decree. Monitoring activities include site inspections, review of water quality sampling reports, review of annual summary reports, review of Action Plans and other documents submitted pursuant to this Consent Decree, discussion with representatives of BAE Systems concerning potential changes to compliance requirements, water quality sampling, informal dispute resolution, and other actions necessary to monitor and ensure BAE Systems' compliance with this Consent Decree. The first compliance monitoring fund payment of \$13,333 shall be made payable to Baykeeper within thirty (30) days after the Effective Date, the second compliance monitoring fund payment of \$13,333 shall be made payable to Baykeeper within 12 months from the Effective Date, and the third compliance monitoring fund payment of \$13,334 shall be made payable to Baykeeper within 24 months from the Effective Date.

43. **Dispute Resolution:** If a dispute under this Consent Decree arises, or either Party believes that a breach of this Consent Decree has occurred, the Parties shall schedule a meet and confer within ten (10) business days of receiving written notification from the other Party of a request for a meeting to determine whether a violation has occurred and to develop a mutually agreed upon plan, including implementation dates, to resolve the violation. If the Parties fail to meet and confer or the meet and confer does not resolve the issue, after at least seven (7) days have passed after the meet and confer occurred or should have occurred, either Party shall be entitled to all rights and remedies under the law, including bringing a motion before the United States District Court for the Northern District of California for the limited purposes of enforcement of the terms of this Consent Decree. The parties shall be entitled to seek fees and costs incurred in any such action pursuant to the provisions set forth in the Section

505(d) of the Clean Water Act, 33 U.S.C. §1365(d), and applicable case law interpreting such provision.

**IX. JURISDICTION AND STIPULATION TO DISMISS**

44. For the purposes of this Consent Decree, the Parties stipulate that the United States District Court of California, Northern District of California, has jurisdiction over the Parties and subject matter of this Action. The Parties stipulate that venue is appropriate in the Northern District of California and that BAE Systems will not raise in the future as part of enforcement of this Agreement whether Baykeeper has standing to bring the Complaint or any subsequent action pursuant to the Dispute Resolution procedures herein.

45. Within three (3) business days of receiving all of the Parties' signatures to this Consent Decree, Baykeeper shall submit this Consent Decree to the U.S. Department of Justice ("DOJ") for agency review consistent with 40 C.F.R. §135.5. The agency review period expires forty-five (45) calendar days after receipt by the DOJ. In the event DOJ comments negatively on the provisions of this Consent Decree, the Parties agree to meet and confer to attempt to resolve the issues raised by DOJ.

46. Within ten (10) calendar days of the expiration of DOJ's 45-day review period as provided above, the Parties will submit this Consent Decree to the District Court, along with a Stipulation and proposed Order that shall provide:

- a. For dismissal of the Complaint and all claims therein with prejudice pursuant to Federal Rule of Civil Procedure 41(a)(2);
- b. That the Court shall retain and have jurisdiction over the Parties with respect to resolving disputes arising under this Consent Decree; and

c. If any court of competent jurisdiction subsequently finds that the Court lacks jurisdiction to resolve any dispute that may arise under this Consent Decree and enforce this Consent Decree in accord with the Court's resolution of the dispute, the Parties stipulate that (1) they will jointly request the Court to set aside dismissal of the Complaint and to reinstate the Complaint for the sole purpose of providing the Court jurisdiction to resolve the dispute and enforce this Consent Decree accordingly and (2) should the Court decline to do so, this Consent Decree shall be deemed a binding contract enforceable as a contract by the California Superior Court for the County of San Francisco.

**X. WAIVER AND RELEASES**

**47. Baykeeper Waiver and Release of Noticed Parties and Covenant Not to Sue:**

Upon the Effective Date, Baykeeper, on its own behalf and on behalf of its officers, directors, employees, members, parents, subsidiaries, affiliates and each of their successors and assigns and its agents, attorneys, and other representatives covenants not to sue BAE Systems or its officers, directors, employees, members, parents, subsidiaries, affiliates, or their successors or assigns, or its agents, attorneys, or other representatives with respect to any stormwater or process-related discharges, as alleged in the 60-Day Notice and/or the Complaint, from the Facility that arose before or may arise during the term of this Consent Decree, and agrees not to provide any information obtained through this consent decree, that is not otherwise publically available, to any third party with the intent of facilitating a third party lawsuit against BAE Systems. However, any information obtained through this consent decree may be used in dispute resolution between the parties. Baykeeper, on its own behalf and on behalf of its officers, directors, employees, members, parents, subsidiaries, affiliates and each of their successors and

assigns, and its agents, attorneys, and other representatives, releases BAE Systems or its officers, directors, employees, members, parents, subsidiaries, affiliates, or their successors or assigns, or its agents, attorneys, and other representatives from and waives all claims raised, or could have been raised, for matters included in the 60-Day Notice and/or the Complaint, including all claims for fees (including fees of attorneys, experts, and others), costs, expenses, or any other sum incurred or claimed or which could have been claimed for matters included in the 60-Day Notice and/or the Complaint and their resolution via this Consent Decree.

48. **BAE Systems Waiver and Release of Baykeeper:** BAE Systems, on its own behalf and on behalf of its officers, directors, employees, members, parents, subsidiaries, affiliates, or their successors or assigns, or its agents, attorneys, and other representatives, releases Baykeeper and its officers, directors, employees, members, parents, subsidiaries, and affiliates, and each of their successors and assigns and its agents, attorneys and other representatives from, and waives all claims which arise from or pertain to the 60-Day Notice and/or the Complaint, including all claims for fees (including fees of attorneys, experts, and others), costs, expenses or any other sum incurred or claimed or which could have been claimed for matters included in the 60-Day Notice and/or the Complaint and its resolution via this Consent Decree.

49. **No Admission:** The Parties enter into this Consent Decree for the purpose of avoiding prolonged and costly litigation. Nothing in this Consent Decree shall be construed as, and BAE Systems expressly does not intend to imply, any admission as to any fact, finding, issue of law, or violation of law, nor shall compliance with this Consent Decree constitute or be construed as an admission by BAE Systems of any fact, finding, conclusion, issue of law, or

violation of law. However, this paragraph shall not diminish or otherwise affect the obligation, responsibilities, and duties of the Parties under this Consent Decree.

## **XI. MISCELLANEOUS PROVISIONS**

50. **Effective Date:** The Effective Date of this Consent Decree shall be the last day for the U.S. Department of Justice to provide comment on the lodged Settlement Agreement, i.e., the 45th day following the U.S. Department of Justice's receipt of the lodged Settlement Agreement.

51. **Term of Consent Decree:** The Consent Decree shall continue in effect from the Effective Date until September 1, 2014.

52. **Execution in Counterparts:** The Consent Decree may be executed in one or more counterparts which, taken together, shall be deemed to constitute one and the same document.

53. **Construction:** The language in all parts of this Consent Decree, unless otherwise stated, shall be construed according to its plain and ordinary meaning.

54. **Authority to Sign:** The undersigned are authorized to execute this Consent Decree on behalf of their respective parties and have read, understood and agreed to all of the terms and conditions of this Consent Decree.

55. **Integrated Consent Decree:** All agreements, covenants, representations and warranties, express or implied, oral or written, of the Parties concerning the subject matter of this Consent Decree are contained herein.

56. **Severability:** In the event that any of the provisions of this Consent Decree are held by a court to be unenforceable, the validity of the enforceable provisions shall not be adversely affected.

57. **Choice of Law:** This Consent Decree shall be governed by the laws of the United States, and where applicable, the laws of the State of California.

58. **Full Settlement:** This Consent Decree constitutes a full and final settlement of this matter. It is expressly understood and agreed that the Consent Decree has been freely and voluntarily entered into by the Parties with and upon advice of counsel.

59. **Negotiated Agreement:** The Parties have negotiated this Consent Decree, and agree that it shall not be construed against the party preparing it, but shall be construed as if the Parties jointly prepared this Consent Decree, and any uncertainty and ambiguity shall not be interpreted against any one party.

60. **Modification of the Agreement:** This Consent Decree, and any provisions herein, may not be changed, waived, discharged or terminated unless by a written instrument, signed by the Parties.

61. **Assignment:** Subject only to the express restrictions contained in this Consent Decree, all of the rights, duties and obligations contained in this Consent Decree shall inure to the benefit of and be binding upon the Parties, and their successors and assigns.

62. **Mailing of Documents to Baykeeper/Notices/Correspondence:** Any notices or documents required or provided for by this Consent Decree or related thereto that are to be provided to Baykeeper pursuant to this Consent Decree shall be, to the extent feasible, sent via electronic mail transmission to the e-mail addresses listed below or, if electronic transmission is not feasible, via U.S. Mail or hand delivery to the following addresses:

Baykeeper:

Andrea Kopecky  
San Francisco Baykeeper  
785 Market Street, Suite 850  
San Francisco, CA 94103

E-mail: andrea@baykeeper.org

Unless requested otherwise by BAE Systems, any notices or documents required or provided for by this Consent Decree or related thereto that are to be provided to BAE Systems pursuant to this Consent Decree may be provided by electronic mail transmission to the e-mail addresses listed below, or alternatively may be sent by U.S. Mail to the addresses below:

BAE Systems:

Raymond A. Parra  
Legal Department  
BAE Systems Ship Repair Inc.  
P.O. Box 13308  
San Diego, CA 92170-3308  
E-mail: raymond.parra@baesystems.com

With copies sent to:

Shaun Halvax  
Environmental Manager  
BAE Systems Ship Repair Inc.  
P.O. Box 13308  
San Diego, CA 92170-3308  
E-mail: sandor.halvax@baesystems.com

63. **Facsimile Signatures:** The Parties' signatures to this Consent Decree transmitted by facsimile or electronic mail transmission shall be deemed binding.

64. **Impossibility of Performance:** No Party shall be considered to be in default in the performance of any of its obligations under this Consent Decree when performance becomes impossible, despite the timely good faith efforts of the Party, due to circumstances beyond the Party's control, including without limitation any act of God, war, fire, earthquake, flood, and restraint by court order or public authority. "Circumstances beyond the Party's control" shall not include normal inclement weather, economic hardship or inability to pay. Any Party seeking to rely upon this paragraph shall have the burden of establishing that it could not reasonably have

been expected to avoid, and which by exercise of due diligence has been unable to overcome, the impossibility of performance.

65. If for any reason the DOJ or the District Court should decline to approve this Consent Decree in the form presented, the Parties shall use their best efforts to work together to modify the Consent Decree within thirty (30) days so that it is acceptable to the DOJ or the District Court. If the Parties are unable to modify this Consent Decree in a mutually acceptable manner that is also acceptable to the District Court, this Consent Decree shall immediately be null and void as well as inadmissible as a settlement communication under Federal Rule of Evidence 408.

66. The settling Parties hereto enter into this Consent Decree, Order and Final Judgment and submit it to the Court for its approval and entry as a final judgment.

BAYKEEPER

Date: October 31, 2011



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Jason Flanders  
Staff Attorney, San Francisco Baykeeper

BAE Systems San Francisco Ship Repair Inc.

Date: NOVEMBER 7, 2011



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//// GENERAL MANAGER  
//// BAE SYSTEMS SAN FRANCISCO SHIP REPAIR

APPROVED AND SO ORDERED, this 6th day of January 20, 2012

UNITED STATES DISTRICT JUDGE

A handwritten signature in blue ink that reads "Susan Blanton". The signature is written in a cursive style with a large initial "S".

**EXHIBIT I**

**Target and Benchmark Levels for Stormwater Sampling**

Constituent	Target Levels (Water Quality Standards)	Target Reference	EPA Benchmark Values	EPA Analysis Method or Minimum Detection Limit
Total Suspended Solids	100 mg/L	<i>EPA Stormwater Benchmark</i>	100 mg/L	Method 160.2
Oil and Grease	15 mg/L	<i>EPA Stormwater Benchmark</i>	15 mg/L	Method 418.1 or Method 1664
pH	6.5 to 8.5	<i>SF-RWQCB Basin Plan, all surface waters</i>	6.0-9.0	Method 9040b
Copper	0.0094 mg/L	<i>SF-RWQCB, Table 3.3, Basin Plan, Marine Water Quality Objectives</i>	0.0636 mg/L	0.003 mg/L
Iron	1.0 mg/L	<i>EPA Stormwater Benchmark</i>	1.0 mg/L	0.1 mg/L
Lead	0.22 mg/L	<i>SF-RWQCB, Table 3.3, Basin Plan, Marine Water Quality Objectives</i>	0.0816 mg/L	0.001 mg/L
Nickel	0.074 mg/L	<i>SF-RWQCB, Table 3.3, Basin Plan, Marine Water Quality Objectives</i>	1.417 mg/L	0.005 mg/L
Zinc	0.09 mg/L	<i>SF-RWQCB, Table 3.3, Basin Plan, Marine Water Quality Objectives</i>	0.117 mg/L	0.01 mg/L

# EXHIBIT 2

October 24, 2011

## **Proposed Conceptual Plan for BAE Supplemental Environmental Project (SEP): Boatyard Best Management Practices (BMP) Showcase Project at Spaulding Wooden Boat Center**

Pursuant to the Consent Decree between BAE Systems San Francisco Ship Repair Inc. (BAE Systems) BAE Systems shall pay the sum of one hundred thirty thousand dollars (\$130,000) to fund an environmental project to benefit the San Francisco Bay watershed.<sup>1</sup> BAE Systems has agreed to fund an enhanced stormwater pollution prevention program at the Spaulding Wooden Boat Center, aimed towards education of the San Francisco Bay commercial and recreational boating community.

### **Introduction**

Throughout the San Francisco Estuary boat construction and maintenance activities occur at a number of facilities with a high potential for stormwater contamination causing pollution of waters of the United States. Scientists and regulators have long known that boatyards serve as a source of multiple priority pollutants. Of primary concern are the heavy metals associated with bottom paint removal and application - namely copper and zinc. Despite the fact that a number of boatyards have filed a notice of intent to comply with the Statewide General National Pollutant Discharge Elimination System (NPDES) Permit for the Discharge of Storm Water Associated with Industrial Activities (Industrial General Permit) many boatyards are out of compliance with relevant stormwater regulations.

Spaulding Wooden Boat Center, located in Sausalito, CA, is a nonprofit educational and boat building and repair organization dedicated to preserving, sharing, and celebrating the area's rich history of traditional wooden boatbuilding. The facility is uniquely positioned to provide a stormwater pollution educational program given its physical location along San Francisco Bay, legacy within the Bay Area boating community and an existing educational program aimed towards youth and established boaters. Goals of the program include development of a 'beyond compliance' manual for the facility operations, including an alternate site layout and installation of structural and non-structural BMPs aimed at eliminating the discharge of contaminants to receiving waters.<sup>2</sup> Visiting boaters, boatyards and

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<sup>1</sup> The consent decree agreed to by and between San Francisco Baykeeper and BAE Systems states: "As mitigation of the violations alleged in Baykeeper's Notice and Complaint, BAE Systems shall pay the sum of one hundred thirty thousand dollars (\$130,000) to Spaulding Wooden Boat Center ("Spaulding"), a nonprofit organization located in Sausalito, California, for a Supplemental Environmental Project (Exhibit 2). BAE Systems shall pay the sum of sixty-five thousand dollars (\$65,000) to Spaulding within thirty (30) days of the Effective Date. BAE Systems shall pay the remaining sixty-five thousand dollars (\$65,000) to Spaulding within one (1) year of the Effective Date, for a total of one hundred thirty thousand dollars (\$130,000). Spaulding shall report to the U.S. Department of Justice and the Parties on how the funds were spent, as provided in Exhibit 2. Payments shall be made to Spaulding Wooden Boat Center, Foot of Gate Five Road, Sausalito, California 94965, with notice to Baykeeper."

<sup>2</sup> Note, Spaulding believes that its site currently meets all relevant regulatory standards, and has received no notices of violation from any state or federal agency to the contrary. However, the 'beyond compliance' approach

interested parties will be encouraged to visit the Wooden Boat Center and learn about their innovative stormwater compliance solutions. This project would provide regulators, businesses and the community with a resource for discovering cost-effective options for preventing discharge of contaminated stormwater, just as the California State Water Resources Control Board and US EPA are developing more stringent guidelines for stormwater dischargers. Since San Francisco Bay is well known for its boating heritage and will soon host a series of America's Cup events this project has a high potential to provide water quality benefits to San Francisco Bay at the project site and beyond.

## Scope of Project

This Environmental Project shall be comprised of five tasks:

1. Feasibility study and revision of Spaulding Wooden Boat Center's existing SWPPP<sup>3</sup> to identify an appropriate site layout, develop a staff education program and identify BMPs designed to prevent direct discharge of contaminants and filter process water prior to discharge to the municipal sewer system. Program should be developed that promotes a beyond-compliance approach with proven applicability to other boatyards facing similar constraints.
2. Construction of structural improvements to the pier and drainage system. The proposed filtration system shall drain to the municipal separate sewage system, pursuant to relevant pre-treatment requirements.
3. Purchase and deploy advanced pollution containment and pre-treatment filtration system.
4. Develop and deploy a community outreach and education program serving to highlight the harm posed by bottom paint and other contaminants, relevant requirements under existing and proposed stormwater requirements, and the innovative solutions developed to comply with the Statewide Industrial Permit. Printed materials shall be developed, along with web-based information and interpretive panels for installation at the site.
5. Provide funding for an education program, which will support weekly tours of the facility and specialized tours of their stormwater containment and treatment system.

## Proposed BMPs

### Containment

Currently, facility operations are generally split between two areas of the Wooden Boat Center's pier: (1) near the terminus of the pier boats are cleaned and wet-sanded, and (2) in an area adjacent to the Center's offices and enclosed carpentry area boats are maintained and painted. It is proposed that near the terminus of the pier, where cleaning and wet-sanding occurs, a [secondary containment berm](#) shall be deployed to capture all process water and stormwater for subsequent reclamation and pre-treatment.<sup>4</sup> This area shall be designated as a cleaning and sanding station and shall be equipped with modern dry vacuum sanding equipment, such as the [Hutchins Model 3950 VA Super Sander III](#).<sup>5</sup> During any sanding operations where dust and contaminants cannot effectively be captured within the

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described herein is in no way intended to bind Spaulding Boatworks to any higher regulatory standard, for purposes of state or federal enforcement, than otherwise required by law.

<sup>3</sup> Storm Water Pollution Prevention Plan. See California General Permit No. CAS000001, Water Quality Order No. 92-12-DWQ, as amended by Order No. 97-03-DWQ, section A.8.

<sup>4</sup> <http://www.secondary-spill-containment.com/spillcontainmentberm.html>

<sup>5</sup> <http://www.hutchinsmfg.com/content/3950.html>

containment berm the boat shall be equipped with a containment system, such as the [Bad Dust® Positive Containment System](#).<sup>6</sup> This system has been used elsewhere, proving to be a cost-effective technique for containing pollutants associated with boat hull sanding.

In other areas of the Wooden Boat Center, where painting and other maintenance operations take place, alternatives must be explored for limiting the direct or indirect discharge of oil and grease, paint and other contaminant sources to San Francisco Bay. It is possible that semi-stationary secondary containment berms could be installed to provide year-round capture of contaminants. During the wet season, potentially contaminated stormwater could be routed to a pre-treatment system. Deciding factors include structural constraints, cost and workflow considerations.

#### Pre-Treatment Filtration

As described above, process water and some stormwater is now captured at the Wooden Boat Center through a settling and drying system, followed by proper disposal of residual solid waste. This is a constraint to operations and likely restricts the volume of water the facility is capable of treating. A properly installed pre-treatment filtration system shall be installed to increase treatment capacity and efficiency at the Center. Such systems are generally lacking at the vast majority of Bay Area boat yards and are necessary to meet pre-treatment discharge limitations. To enable discharge of treated process water, a filtration unit, such as that developed by [Clean Marine Solutions](#), shall be installed.<sup>7</sup> Establishing drainage to the municipal sewer will require permitting steps and drainage must be installed, which represents a significant fraction of the cost associated with Task 2, as listed below.

### **Education Program**

The overall goal of this environmental program is to provide an educational resource to regional boatyard operators and to boat owners wishing to seek out environmentally conscious boat service providers. Spaulding Wooden Boat Center provides an ideal resource for carrying out this objective, since a part of the non-profit's mission is to educate the public on boat building practices, which increasingly includes consideration of environmental impacts associated with boatyard operations and maintenance. Under this program, the Wooden Boat Center shall develop stormwater pollution management materials catered for the boatyard industry, in cooperation with Baykeeper, which shall be featured on their website and included in tours offered on a weekly basis. Additional funding has been allocated to provide for additional part-time staff to help develop and promote the enhanced BMP educational program.

### **Estimated Cost**

Estimated costs listed below are indicative costs associated with planning and deployment of the stormwater pollution prevention plan, as well as funding of a two-year education program aimed at developing material and providing tours of the facility. Costs associated with tasks 2 and 3 are the least defined and subject to revision. However, estimated costs are believed to represent an upper bound for the tasks involved. In the event that funds allocated for tasks 2 and 3 are found to be in excess of the

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<sup>6</sup> <http://www.baddust.com/index.htm>

<sup>7</sup> <http://cleanmarinesolutions.com/faq/>

amount required, the balance shall be held by the Center and applied as necessary towards the implementation of task 5. All funds remaining unspent at the end of the two-year project period shall be provided to the Rose Foundation, as described, below.

**Feasibility Study and Funding**

Spaulding Wooden Boat Center believes the project proposed herein to be feasible and of great benefit to the boat yard community in the region. Nevertheless, Spaulding Wooden Boat Center accepts this proposal subject to the performance of a feasibility study conducted by Spaulding Wooden Boat Center in its sole discretion. If Spaulding Wooden Boat Center concludes after the feasibility study that the project is not feasible according to terms expressed in the proposal, funds received pursuant to this project will be transferred to the Rose Foundation, less the \$10,000 (or portion thereof utilized for the study).

Description	Approximate Cost
Task 1: Feasibility Study, and SWPPP revision and submission to Regional Water Quality Control Board	\$10,000
Task 2: Structural improvements to the facility and relevant permitting (i.e. plumbing to municipal separate sewer system.	\$40,000
Task 3: Purchase and deployment of pollution containment and filtration system	\$50,000
Task 4: Outreach and education	\$25,000
Task 5: Development and printing of educational materials	\$5,000
<b>Total</b>	<b>\$130,000</b>

In the event that the SEP is completed under budget, the remainder of the sum of one hundred thirty thousand dollars (\$130,000) shall be paid to the Rose Foundation for the Environment for projects that will benefit the environment of the San Francisco Bay watershed. Any such payment shall be made to the Rose Foundation for the Environment, 6008 College Avenue, Oakland, California 94618 within twenty-five months of the initial SEP disbursement by BAE to Spaulding.

**Timeline**

Pursuant to the Consent Decree between Baykeeper and BAE Systems, payment for the environmental project(s) shall be split between two annual payments. This arrangement will generally allow for the completion of tasks 1 and 2 within one year of the Effective Date. The remainder of the project shall be funded in the subsequent year. Effort shall be made to complete structural improvements and install pollution containment and filtration systems prior to the end of the 2012/2013 wet season.

**Reporting**

Spaulding shall provide quarterly reporting to BAE and Baykeeper as follows, which reports shall include cost receipts for tasks 1 through 5, described above:

6 month report on Task 1

Provide feasibility study and revised SWPPP identifying planned structural renovations.

12 month report on Tasks 1, 2 and 3

Document structural renovations completed pursuant to revised SWPPP.  
Provide copies of new educational materials.

18 month report on Tasks 3, 4 and 5

Provide updates on educational materials and staff outreach and education.  
Discuss planning for and/or installation of filtration system.

24 month report

Provide a final summary, evaluation, and cost accounting for all tasks completed.

BAYKEEPER

Date: October 31, 2011

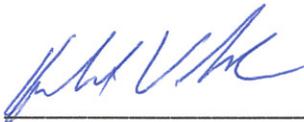


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Jason Flanders  
Staff Attorney, San Francisco Baykeeper

BAE

Date: Nov 11, 2011



SPAULDING

Date: October 24, 2011



Andrea Rey, Associate Director