

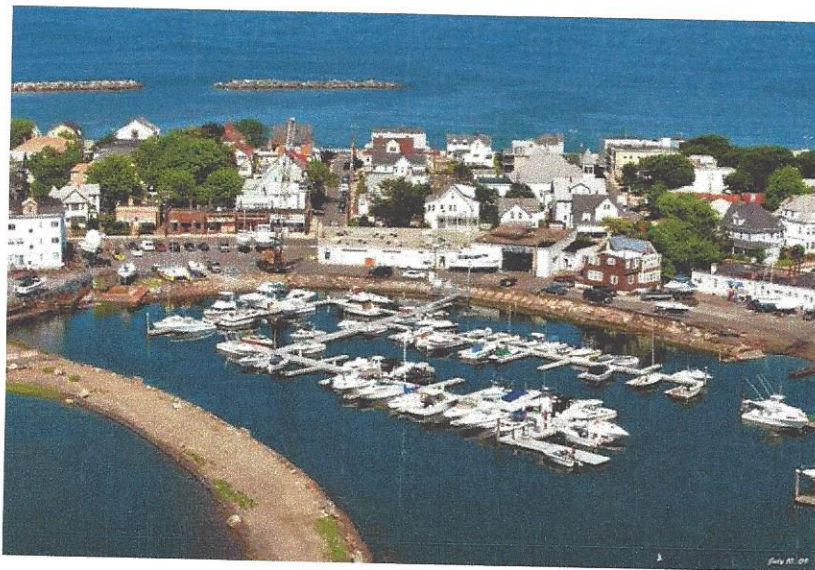
# National Pollution Discharge Elimination Systems (NPDES)

## Stormwater Pollution Prevention Plan

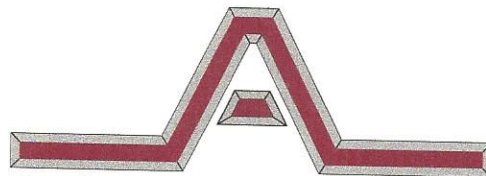
for



Crystal cove Marina  
529 Shirley Street  
Winthrop, MA 02152



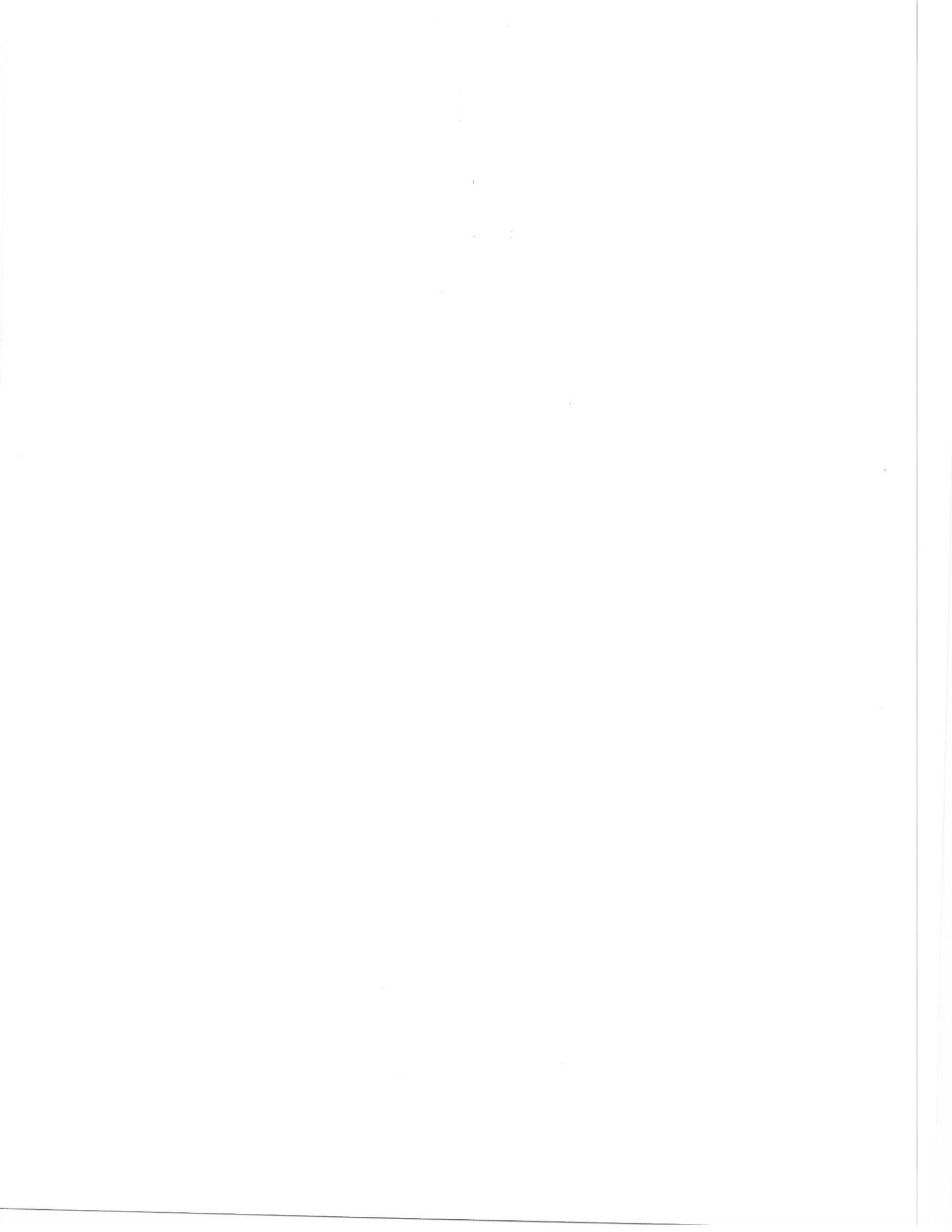
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**August 26, 2015**



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## Certification

Certification by Responsible Company Official: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system design to assure that qualified personnel properly gathered and evaluated the information. Based on my inquiry of the person or persons who manage the systems 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.

Name: Daniel Curtin Title: President

Signature: 

Date: August 26, 2015

# ***1. Pollution Prevention Team***

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The Pollution Prevention Team for this facility are all qualified employees of the Crystal Cove Marina. The Pollution Prevention Team is outlined in **Attachment 1**. The Pollution Prevention Team responsibilities include:

- Assisting the marina management in the implementation, maintenance, and modification of this SWPPP.
- Holding regular meetings to review the overall operation of the BMPs.
- Sampling, inspections, operation and maintenance.
- Emergency situations.
- Training of team members in the operation, maintenance, and inspections of BMPs.

## ***2. Facility Assessment***

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### **2.1 Facility Description**

The Crystal Cove Marina is located on Boston Harbor at 529 Shirley Street in Winthrop, Massachusetts. The facility provides boating access and storage for pleasure boats as well as boat repair services. The site's SIC code is "Marinas" (Standard Industrial Code No. 4493). Activities conducted at the facility include:

#### Marina Services

- Boat hauling (crane)
- Seasonal dock space
- Seasonal boat ramp (trailer access)
- Fuel dock
- Summer dry storage
- Winder dry storage
- Winter Wet storage
- Trailer Storage
- Mast Storage

#### Incidental Repair Services

- Pressure washing
- Bottom and top side painting
- Engine, prop, shaft, and rudder repair
- Engine tune-up and oil changes

- Fuel and lubrication repair and replacement
- Buffing and waxing
- Fiberglass repairs
- Shrink wrapping
- Marine sanitation device (MSD) repair and replacement
- Spring preparation
- Fall winterization
- Other activities necessary to maintain or repair a vessel

The Crystal Cove Marina site is located at 497-595 Shirley Street in the Winthrop. The site is approximately 276,000 square feet (sq. ft.) or 6.3 acres, including land and water sheet. The lot area above the mean high water line is approximately 118,500 sq. ft. There is an active marina and various commercial buildings on the parcel. The area of the site which contributes storm water to the adjacent shore line is comprised of approximately 1.7 acres. This area is comprised primarily of bituminous concrete pavement while the remainder of the upland portion of the property is comprised of existing buildings. All storm water generated by the subject property discharges toward Boston Harbor via sheet flow. There is no point source storm water discharge generated by this site. The paved yard area has the capacity to store up to 135 vessels at any given time. Approximately 150 vessels are hauled out of the water per year and about 135 vessels are pressure washed each year. All pressure washing is done at the on-site boat facility equipped with a complete wash recovery system. While there is activity at the marina year-round, the majority of the work takes place in the spring, summer and fall.

The subject property is comprised of a long narrow lot of land bordered by Shirley Street to the east and Boston Harbor to the west. Developed commercial and residential properties are located to the north and south. The marina contains approximately 70 boat slips and a gas dock. The site is occupied by six (buildings). Only one of the buildings is related to the marina, while the remaining five (5) are a mix of commercial and residential. The building that is part of the marina is utilized for marina business operations, interior storage and incidental repairs.

The area behind the buildings is utilized for access to the marina, parking, hauling and boat storage. This area is relatively flat and comprised primarily of bituminous concrete pavement. While the grade is relatively flat, this area is pitched toward Boston Harbor, where storm water currently sheet flows toward the down gradient shoreline. There are no existing storm water controls (catch basins, drop inlets, etc.) located on the subject property. However, a portion of the Town of Winthrop's drainage system passes through the subject property and discharges into the marina. The discharge is a point source discharge consisting of two 12"inch outfall pipes. These pipes connect to a long series of catch basins and drain man holes which are located in Shirley Street. The site is **not** tributary to this system as storm water sheet flows from the subject property toward the harbor and does not enter the municipal closed drainage system which passes through the site. As a result any potential for pollution from this municipal outfall would be a result of the Town's Municipal Drainage system and **not** associated with the subject property.

## 2.2 Identification of Industrial Activity Areas

The areas where industrial activities are conducted are limited to the paved areas behind the existing buildings and at the north end of the site and in the garage area of 529 Shirley Street. The activities in these areas are limited to power washing boats, bottom painting, fiberglass repairs and engine repairs, which cannot be accommodated in the garage space. Power washing is limited to the newly installed boat wash and water recovery system such that no particulates or debris that result from power washing activities can migrate toward the Harbor. All exterior sanding is performed with dustless sanders. Any exterior painting or fiberglass repairs are performed over drop cloths with the entire boat surrounded by a curtain. Any exterior engine repairs are confined to the engine compartment of the vessel. Areas separate from industrial activity, such as office buildings and those buildings not associated with the marina do not contribute pollutants to the existing storm water discharges **Attachment 2** identifies areas associated with industrial activities.

## 2.3 Inventory of Materials

This section includes an inventory of materials handled on the site that may have the potential to be exposed and contribute pollutants to storm water, an assessment of potential pollutants associated with those materials, and an explanation of how significant materials are managed to prevent pollution of storm water.

**Attachment 3** provides an inventory of materials handled or produced on the site that may have the potential to be exposed and contribute pollutants to storm water. The category of significant materials includes, but is not limited to:

- Sandblast grit.
- Paint removal dust.
- Raw materials.
- Fuels.
- Solvents.
- Detergents.
- Plastic pellets.
- Metal products.
- Paints.
- Waste products such as pressure wash wastewater, spent sandblast grit, ash, slag, and sludge that have the potential to be released with storm water discharges.

**Attachment 4** provides a list of significant spills or leaks of toxic or hazardous pollutants that have occurred on the site in the last five years.

## 2.4 Non-Storm water Miscellaneous Discharges

**Attachment 5** lists the non-storm water miscellaneous discharges at the facility. These discharges are specified as to volume, frequency of discharge, expected duration of discharge, and BMPs or analysis to assure that these discharges are uncontaminated.

### **3. Monitoring Plan**

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Sampling of storm water discharges will be conducted on a quarterly basis in accordance with the MSGP. Visual observations of storm water discharges will be made in accordance with Section 3.5. Monitoring for and sampling of non-storm water discharges will occur in accordance with Section 3.6. The results of sampling and analysis will be recorded and kept onsite. If there is no discharge during the entire month, a report will be submitted stating that no discharge occurred. Monitoring records will be retained on site for a minimum of 5 years. Sampling of each type of discharge is discussed in the following sections.

Samples will be taken and analyzed by:

Samples will be collected by approved staff of the Crystal Cove Marina

Samples will be analyzed by Alpha Analytical, Westboro, MA

Contact: Kevin Levine (508) 439-5110

#### **3.1 Storm water Sampling Locations and Rationale**

Discharges to surface waters will be monitored in accordance with sections 6.2 and 6.3 of the MSGP.

The following designated sampling locations will be monitored (as indicated on Figure 1 at the end of Section 3):

1. South end of property at boat ramp.

Samples will be collected from locations affected by boatyard related activities. Care shall be taken not to take samples that may be commingled with discharges associated with the Town of Winthrop's outfall pipe located in the middle of the property and shown the sampling figure. Because storm water runoff generated by this facility occurs as sheet flow, a collection point will be constructed to collect a sample at each location. The samples will be collected during the first flush of the storm event. If storm water discharges do not occur during the sampling period, then "no discharge" will be indicated on the Discharge Monitoring Report (DMR). Sampling results will be reported to EPA no later than 30 days after you have received the complete laboratory results. Samples may be submitted to EPA using EPA's online eNOI system ([www.epa.gov/npdes/eNOI](http://www.epa.gov/npdes/eNOI)) or EPA's MSGP discharge monitoring report (MDMR) available at [www.epa.gov/npdes.stormwater.msgp](http://www.epa.gov/npdes.stormwater.msgp).

#### **Table 1 – Monitoring Periods**

- January 1 – March 31
- April 1 – June 30
- July 1 – September 30
- October 1 – December 31

The monitoring requirements begin in the first full quarter following either April 1 or the date of discharge authorization; whichever comes later. Monitoring must begin at least once in each of the above three months.



**Table 2 – Benchmark Monitoring**

Category	Parameter	Benchmark Monitoring Concentration	Sample Type
Benchmark Monitoring (SIC 4412-4499)	Total Aluminum	0.75 mg/L	Grab
	Total Iron	1.0 mg/L	Grab
	Total Lead	Hardness Dependent	Grab
	Total Zinc	Hardness Dependent	Grab
	Total Copper	Hardness Dependent	Grab

For values that are “hardness dependent,” the hardness of the receiving water must be obtained in accordance with Part 6.2.1.1 of the MSGP to identify the applicable hardness range. Hardness Dependent Benchmarks Follow in the table below:

**Hardness Dependent Ranges**

Water Hardness Range	Lead (mg/L)	Zinc (mg/L)
0-25 mg/L	0.014	0.04
25-50 mg/L	0.023	0.05
50-75 mg/L	0.045	0.08
75-100 mg/L	0.069	0.111
100-125 mg/L	0.095	0.13
125-150 mg/L	0.122	0.16
150-175 mg/L	0.151	0.18
175-200 mg/L	0.182	0.20
200-225 mg/L	0.213	0.23
225-250 mg/L	0.246	0.25
250 + mg/L	0.262	0.26

Benchmark monitoring samples must be analyzed consistent with 40 CFR Part 136 analytical methods and using test procedures with quantitation limits at or below benchmark values for all bench parameters required. Benchmark monitoring must be conducted quarterly as noted in Table 1 above for the first four (4) full quarters of permit coverage commencing no earlier than April 1. Subsequent to the collection of four (4) quarterly samples, if the average of the 4 monitoring values does not exceed the benchmark, then the benchmark-monitoring requirement has been fulfilled for that parameter of the permit term. For averaging purposes, use a value of zero for any individual sample parameter, analyzed using procedures consistent with Part 6.2.1 of the MSGP, which is determined to be less than the method detection limit. For sample values that fall between the method detection level and the quantitation limit, use a value halfway between zero and the quantitation limit.

**Impaired Waters Monitoring without and EPA approved or established TMDL**

Beginning in the first full quarter following April 1 or the date of the MSGP authorization, whichever date comes later, a sample must be taken once per year at each location shown on Figure 1. The sample shall be analyzed for the pollutant for which is impairing Boston Harbor (*Fecal Coli Form*). If the pollutant for which the water is impaired is not present and not expected to be present in the discharge, then the owner shall notify the EPA in the first monitoring report and the annual monitoring associated with Impaired Waters may be discontinued.

### 3.2 Sampling Procedures

1. Sample will be a grab sample, a time-proportionate sample, or a flow-proportionate sample. Grab samples are taken within the first hour after discharge begins. Time and flow proportionate samples are started within the first 30 minutes after discharge begins and are taken over a two hour period.
2. Sample will be collected as close to the point of discharge as reasonably and safely practical.
3. Storm event samples will be collected after at least 0.1 inches of rain in a 24-hour period, preceded by at least 24 hours of less than trace precipitation.
4. Laboratory-supplied sample bottles will be used to collect the sample.
5. Samples will be collected from mid-flow, in a location with moderate flow.
6. Once sample is collected, bottle will be capped, sealed, and labeled.
7. The following items will be recorded at the time of sampling:
  - a. Time rainfall began.
  - b. Sampling location (when there is more than one).
  - c. Date of sampling.
  - d. Time of sampling.
  - e. How sample was collected (for example, "from a ditch by hand").
  - f. Name of the sampler(s).
  - g. Number, types (parameters) of samples collected.
  - h. Unusual circumstances that may affect the sample results.
  - i. Visual observations, as detailed in Section 3.5.
8. Samples will be sent to an Ecology-certified laboratory for analyses of the applicable parameters, as indicated in Table 1.

### 3.3 Special Considerations for Oil and Grease Sampling

Only grab samples will be collected for analysis of oil and grease. The sample should not be transferred from one container to another. A solvent pre-rinsed one-liter glass bottle with a Teflon insert in the lid will be used to collect the sample. The sample will be preserved by adding sulfuric or hydrochloric acid to a pH of less than 2.0 and stored no longer than 28 days at four degrees C, until analyzed. Confirm with the analytical laboratory that the oil and grease sampling bottles provided already have the preservative added.

### 3.4 Sample Analysis, Handling and Preservation

Samples will be analyzed, handled, and preserved in accordance with Code of Federal Regulations (CFR) Title 40, Part 136. Samples will be submitted to a laboratory accredited by WAC 173-50, Accreditation of Environmental Laboratories. Copper will be analyzed using GFAA method number 220.2 or a similar method. The expected method detection limit (MDL) is one  $\mu\text{g/L}$  and the expected minimum level (ML) is five  $\mu\text{g/L}$ . Oil and grease will be analyzed using United States Environmental Protection Agency (USEPA) method number 1664A. The expected ML is five  $\text{mg/L}$  or lower. Total suspended solids will be analyzed using USEPA method number 160.2. The expected ML is four  $\text{mg/L}$ .

### 3.5 Visual Monitoring

Visual monitoring of storm water discharges will be conducted quarterly for the term of the permit at storm water sampling locations, as well as at the time of storm water sampling. The results of visual monitoring will be recorded in writing and kept with the SWPPP for a minimum of five years. Visually inspect the sample for the following water quality characteristics: color, odor, clarity, floating solids, suspended solids, foam, oil sheen and other obvious indicators of storm water pollution. Observations of the performance of the Best Management Practices (BMPs) described in this document will also be made, and if necessary, failing practices will be corrected.

The results of each inspection (visual monitoring of storm water discharges) event will be summarized on **Attachment 6** and will be attached to this SWPPP. Quarterly, visual monitoring reports will be signed by the person making the observations.

### 3.6 Non-storm water Discharge Monitoring

Once a month, a survey of non-storm water discharges will be conducted at the facility. These may include discharges from fire fighting activities, fire protection system testing and maintenance, de-chlorinated potable water, uncontaminated condensate, uncontaminated groundwater, and dewatering activities. **Attachment 7** provides a template for collection of observations.

### 3.7 Health and Safety

Monitoring personnel are trained in proper safety procedures. Storm water monitoring may subject sampling personnel to hazardous conditions, such as the following:

- Hazardous weather conditions (for example, wind, lightning, flooding).
- Sampling in confined spaces (for example, manholes).
- Hazards associated with chemicals and biological hazards (for example, rodents and snakes).
- Physical hazards (for example, traffic, falling objects, sharp edges, slippery footing).
- Lifting injuries from activities such as opening or removing access panels and manhole covers.

## **4. Best Management Practices**

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The Multi-Sector General Permit requires the implementation of best management practices (BMPs) to meet the following storm water requirements:

- No discharge of oil.
- No discharge of floatables.
- No change in receiving water turbidity or color.
- No discharge of process water.
- Oil and Grease concentration in storm water less than the benchmark of 6.0 mg/L.
- Total Suspended Solids (TSS) concentration in storm water less than the benchmark.

This SWPPP uses the Presumptive Approach to demonstrate that the storm water management BMPs implemented at the facility comply with state water quality standards and satisfy the technology-based treatment requirements of 40 CFR Part 125.3.

### **4.1 Mandatory Boatyard BMPs**

The following mandatory BMPs will be implemented at this site. These BMPs will be described in a hand out which will be provided to all boatyard employees, contractors, boat owners, and other customers. The handout will be posted clearly within the work areas.

#### **4.1.1 Use of Vacuum Sander**

A vacuum sander or rotary tool meeting minimum performance standards shall be used for all paint removal where a sander is appropriate. Non-vacuum sanders and grinders are prohibited.

#### **4.1.2 Tidal Grids**

Use tidal grids only for emergency repair and marine surveying. Do not use tidal grids for surface preparation, painting, routine maintenance or other non-emergency uses.

#### **4.1.3 In-Water Vessel Maintenance and Repair**

Cleaning, repair, modifications, surface preparation or coating of any portion of a vessel's hull while the vessel is afloat is prohibited. If this work is necessary, then the vessel shall be hauled out to the upland portion of the facility covered by this general permit.

Repairs, modifications, surface preparation, or coating of topside or superstructure shall be limited to 25 percent of the topside or superstructure surface where the deck composes one collection surface. When stripping, sanding, scraping, sandblasting, painting, coating and/or varnishing any deck or superstructure of a vessel in-water, all particles, oils, grits, dusts, flakes, chips, drips, sediments, debris and other solids shall be collected and managed to prevent their release into the environment and entry into waters of the Commonwealth.

Drop cloths, tarpaulins, drapes, shrouding or other protective devices shall be securely fastened between various portions of the vessel or between the vessel and the dock, pier, boathouse, bulkhead or shoreline to collect all

such materials. No work shall be done from a float or another boat. The cleanup of all collected materials shall be conducted daily to prevent their release into the environment and entry into waters of the state.

#### **4.1.4 Upland Vessel Maintenance and Repair**

When stripping, sanding, scraping, sandblasting, painting, coating, or varnishing any portion of a vessel, all particles, oils, grits, dusts, flakes, chips, drips, sediments, debris and other solids shall be collected and managed to prevent their release into the environment and entry into waters of the state.

Drop cloths, tarpaulins, structures, drapes, shrouding, or other protective devices shall be secured around the vessel, as necessary, to collect all such materials. The cleanup of all collected materials shall be routinely undertaken to prevent their release into the environment and entry into waters of the state.

#### **4.1.5 Solids Management**

All particles, oils, grits, dusts, flakes, chips, drips, sediments, debris and other solids from work, service and storage areas of the boatyard shall be collected to prevent their release into the environment and entry into waters of the state. The minimum collection frequency is once per day when solids-generating activity is occurring. Solids shall be kept as dry as possible during collection and shall not be washed into any surface water or into a storm water collection system.

The boat ramp shall be cleaned of all solids and garbage prior to being submerged to prevent such materials from being washed into waters of the state.

#### **4.1.6 Paint and Solvent Use**

Paints and solvents shall be used in such a manner as to prevent their release into the environment and entry into waters of the state. Drip pans, drop cloths, tarpaulins or other protective devices shall be used during surface preparation, paint transfer, solvent transfer, paint mixing, and application unless completely enclosed in a building.

Painting of the hull surface over water is prohibited except for minor touchup, such as the vessel numbers, with non-metallic paints. When painting decks or superstructure, paint cans shall be placed in a drip pan on top of a drop cloth or tarpaulin. Paints and solvents shall only be mixed at secure locations onshore or onboard a vessel.

Paints containing tributyltin are prohibited from use on any vessel.

#### **4.1.7 Oils and Bilge Water Management**

Hydraulic fluids, oily wastes, and petroleum products shall not be discharged to waters of the state. Bilge water discharges shall not cause any visible sheen in waters of the state.

Bilge waters shall not be discharged to waters of the Commonwealth if solvents, detergents, emulsifying agents, or dispersants have been added to the bilge. If a vessel is moved prior to pumping out the bilge, absorbent pads shall be used to prevent the accidental discharge of oils to waters of the state.

Drip pans or other containment devices shall be used during all petroleum product transfer operations to catch incidental leaks and spills. Absorbent pads and booms shall be available during petroleum transfer operations occurring over water.

#### **4.1.8 Sacrificial Anode (Zincs) Management**

Zincs used as sacrificial anodes shall not be disposed of into waters of the Commonwealth. Spent zincs shall be stored in a covered container and be recycled for their material value.

#### **4.1.9 Chemical Management**

Solid chemical products, chemical solutions, paints, oils, solvents, acids, caustic solutions and waste materials, including used batteries, lead, and copper waste, shall be stored under cover on an impervious surface.

All chemical liquids and fluids shall be stored on a durable impervious bermed surface capable of containing 10 percent of the total tank and container volume or 110 percent of the largest tank or container volume, whichever is greater.

#### **4.1.10 Wash Pad Decontamination**

Prior to actively pumping or passively discharging any storm water from the pressure wash pad to waters of the state, the pad shall be cleaned of all debris, paint waste, sludge, and other solids. Then the entire pad shall be pressure washed into the collection sump and the sump cleaned of all debris and other solids.

#### **4.1.11 Sewage and Gray Water Discharges**

Owners of vessels docked or moored for repair or under repair at a permitted facility shall be notified in writing by the Permittee that this permit prohibits the discharge of sewage (including discharges from the vessel's galley) into waters of the Commonwealth. Sanitary waste discharges shall be to either the sanitary sewer or into a holding tank. The Permittee shall make available to customers a list of contractors providing holding tank pump-out services.

### **4.2 Other Minimum Source Control BMPs**

Other minimum source control BMPs are discussed below. Implementation is outlined in **Attachment 9**.

#### **4.2.1 Pollution Prevention Team**

The responsibilities and makeup of the pollution prevention team are presented in Section 1.

#### **4.2.2 Good Housekeeping**

Implement the following good housekeeping activities at the site:

- Clean regularly all accessible work, service and storage areas to remove debris, spent sandblasting material, and any other potential storm water pollutants.
- Promptly contain and clean up solid and liquid pollutant leaks and spills including oils, solvents, fuels, and dust from manufacturing operations on any soil, vegetation, or paved area exposed to storm water.
- Sweep paved material handling and storage areas regularly as needed to collect and dispose of dust and debris that could contaminate storm water. Do not hose down pollutants from any area to the ground, storm drain, conveyance ditch, or receiving water unless necessary for dust control purposes to meet air quality regulations and unless the pollutants are conveyed to a treatment system approved by the local jurisdiction.
- Collect spent abrasives regularly and store under cover to await proper disposal.
- Dispose of greasy rags, oil filters, air filters, batteries, spent coolant, and degreasers properly.
- Convey sanitary sewage to pump-out stations, portable on-site pump-outs, or commercial mobile pump-out facilities or other appropriate onshore facilities.
- Maintain automatic bilge pumps in a manner that will prevent waste material from being pumped automatically into surface water.

- Prohibit uncontained spray painting, blasting or sanding activities over open water.
- Do not dump or pour waste materials down floor drains, sinks, or out door storm drain inlets that discharge to surface water. Plug floor drains that are connected to storm drains or to surface water. If necessary, install a sump that is pumped regularly.
- Prohibit outside spray-painting, blasting, or sanding activities during windy conditions that make containment ineffective.
- Do not burn paint or use spray guns on topsides or above decks.
- Immediately clean up any spillage on dock, boat, or ship deck areas and dispose of the wastes properly.
- Consider recycling paint, paint thinner, solvents, used oils, oil filters, pressure-wash wastewater and any other recyclable materials.
- Perform paint related activities such as paint mixing, solvent mixing, and fuel mixing onshore in an area where spills are contained.
- Clean oils, debris, sludge, or other objects from all BMP systems regularly, including catch basins, sedimentation basins, oil/water separators, boomed areas, and conveyance systems, to prevent the contamination of storm water.
- Promptly repair or replace all substantially cracked or otherwise damaged paved secondary containment, high-intensity parking, and any other drainage areas, which are subjected to pollutant material leaks or spills.
- Promptly repair or replace all leaking connections, pipes, hoses, valves, or other equipment objects that can contaminate storm water.
- Use solid absorbents, for example, clay, peat absorbents, and rags for cleanup of liquid spills/leaks, where practicable.

#### **4.2.3 Preventive Maintenance**

Implement the following preventive maintenance activities at the site:

- Prevent the discharge of unpermitted liquid or solid wastes, process wastewater, and sewage to ground, which discharges, to surface water or to the ground. Floor drains in potential pollutant source areas shall not be connected to storm drains, surface water, or to the ground. Eliminate illicit non-storm water discharges as soon as possible but no later than 30 days of discovery.
- Conduct all oily parts cleaning in a self-contained system. When steam cleaning or pressure washing equipment and containers, either inside a building or outside on an impervious contained area (such as a concrete bermed pad), ensure all wash water is completely recycled or sent to a municipal sewage treatment system. Prevent all contaminated wash water and storm water originating from these areas from entering either surface waters or storm drains that discharge to surface waters.
- Do not pave over contaminated soil unless it has been determined that groundwater has not been and will not be contaminated by the soil.
- Construct impervious areas that are compatible with the materials handled. Consider using Portland cement concrete, asphalt, or equivalent material.
- Use drip pans to collect leaks and spills from equipment such as cranes, industrial parts, trucks, and other vehicles that are stored outside. After a spill or leak is collected in an uncovered area, empty drip pan immediately.

- Drain oil from fuel filters before disposal. Discard empty oil filters, fuel filters, oily rags, and other oily solid waste into appropriately closed and properly labeled containers and in compliance with the Local and State Fire Code.
- For the storage of liquids use containers, such as steel and plastic drums, that are rigid and durable, corrosion resistant to the weather and fluid content, non-absorbent, water tight, rodent-proof, and equipped with a close fitting cover.
- For the temporary storage of solid wastes contaminated with liquids or other potential pollutant materials use dumpsters, garbage cans, drums and comparable containers that are durable, corrosion resistant, non-absorbent, non-leaking, and equipped with either a solid cover or screen cover to prevent littering. If covered with a screen, the container must be stored under a lean-to or equivalent structure.
- Store cracked batteries in a covered secondary container.
- Where exposed to storm water, use containers, piping, tubing, pumps, fittings, and valves that are appropriate for their intended use and for the contained liquid.

#### **4.2.4 Applicable Boatyard Structural Source Control BMPs**

- Use fixed platforms with appropriate plastic or tarpaulin barriers as work surfaces and for containment when work is performed on a vessel in the water to prevent blast material or paint overspray from contacting storm water or the receiving water. Use of such platforms will be kept to a minimum and at no time be used for extensive repair or construction (anything in excess of 25 percent of the surface area of the vessel above the waterline).
- Use plastic or tarpaulin barriers beneath the hull to contain and collect waste and spent materials. Clean and sweep regularly to remove debris.
- Enclose, cover, or contain blasting and sanding activities to the maximum extent practicable to prevent abrasives, dust, and paint chips, from reaching storm sewers or receiving water. Use plywood or plastic sheeting to cover open areas between decks when sandblasting (scuppers, railings, freeing ports, ladders, and doorways).
- Ensure storm water from areas with little or no exposure to pollutants (for example, infrequently used parking areas or roof drainage) is diverted away from areas of high pollutant exposure (for example, a hull refinish area.) Examples include, but are not limited to: drains, ditches, temporary or permanent berms, or walls.

#### **4.2.5 Spill Prevention and Reporting and Emergency Cleanup**

- Stop, contain, and clean up all spills immediately upon discovery. Collect the contaminated absorbent material as a solid and place in appropriate disposal containers. Do not flush absorbent materials or other spill cleanup materials to a storm drain or to surface water.
- Notify DEP and the local sewer authority immediately (within one hour) if a spill of reportable quantities has reached or may reach a sanitary or storm sewer, groundwater, or surface water. A spill of reportable quantity is any amount of material that can cause sheen or any amount of material that can pose a threat to human health or the environment. Take reasonable steps to minimize any adverse impacts to waters of the state and to correct the problem. If you call in the spill report, follow up with written documentation covering the event within thirty (30) days unless DEP and EPA waives or extends this requirement.
- Place and maintain emergency spill containment and cleanup kit(s) at outside areas where there is a potential for fluid spills. These kits should be appropriate for the materials being handled and the size of the potential spill, and readily accessible to personnel responsible for spill response.



**Spill response numbers are:**

- Clean Harbors: 221 Sutton Street  
221 Sutton Street  
North Andover, MA 01845  
(978) 683-2787

#### **4.2.6 Employee Training**

All employees who work in pollutant source areas will be trained in identifying pollutant sources and in understanding pollutant control measures, spill prevention and response, good housekeeping, and environmentally acceptable material handling and management practices. Training will be scheduled and implemented by the Pollution Prevention Team as described in **Attachment 10**.

#### **4.2.7 Inspections, Reporting and Recordkeeping**

- Submit all collected data to EPA on the required DMR.
- Summarize and report monitoring data collected during the previous month on the form provided in the SWPPP.
- Postmark no later than 30 days from the date of the sampling, unless otherwise specified.
- Send report(s) to the EPA.
- Retain records of all monitoring information for a minimum of five years.
- Include all calibration records, maintenance records, original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for the Multi-Sector General Permit.

For each measurement or sample taken, the following information will be recorded:

1. Date, exact place, method, and time of sampling.
2. Individual who performed the sampling or measurement.
3. Dates the analyses were performed.
4. Name of the person(s) who performed the analyses.
5. Analytical techniques or methods used.
6. Results of all analyses.

#### **4.3 Enhanced/Additional BMPs**

In addition to the operational and structural source control BMPs listed in Sections 4.1 and 4.2, the boatyard shall implement enhanced or additional BMPs because of a notice from EPA or DEP, facility changes, self-inspection, or if monitoring values exceed benchmark values for one to three times. A schedule for implementation (plan) must be entered into the SWPPP within 30 days of a determination of necessary improvements or exceedance of benchmark values.

The potential enhanced or additional BMPs include:

##### **Structural Source Control BMPs**

- Enclose and/or contain all work while using a spray gun or conducting sandblasting.

- Install additional controls at pressure wash pad to prevent pressure wash wastewater from reaching drainage system.
- Isolate and segregate pollutant-causing materials to minimize exposure to storm water runoff.
- Install new impervious surface in work area to improve sweeping efficiency.
- Cover and berm pollutant causing activity.
- Berm or slope the ground surface in work areas to prevent run-on of uncontaminated storm water and runoff of contaminated storm water to outside area.
- Enclose pollutant-causing activity in a building.
- Divert storm water to the municipal sewage treatment plant.

### **Treatment BMPs**

Appropriate treatment BMPs will be selected based on the pollutant requiring removal and other site specific criteria. As described at the beginning of this section, this SWPPP uses the Presumptive Approach to demonstrate that the storm water management BMPs implemented at the facility comply with state water quality standards and satisfy the technology-based treatment requirements of 40 CFR Part 125.3 and the Storm water requirements of 310 CMR 10. Therefore, Volume II of the *Massachusetts Storm water Handbook* will be used to select treatment BMPs.

Design, construction, and operation of treatment BMPs will be in accordance Volume II of the *Massachusetts Storm water Handbook*.

The potential treatment BMPs for implementation at boatyards are:

- Catch basin inserts.
- Oil/water separation units.
- Wet pond/Wet vault.
- Sand filter.
- Media Filter (Storm Filter, etc.).
- Biofiltration swale.
- Constructed wetland.
- Infiltration with appropriate pretreatment.
- Manufactured storm drain structures (Storm ceptor, Vortechinics, etc.).
- High efficiency street sweepers.

## ***5. Modification History***

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Include a detailed list of all modifications made to this SWPPP. (For example: June 2013 – modified with current names of Pollution Prevention Team members; or June 2013 – modified to include revision to (specify) BMP.)

During the summer of 2013 we replaced our rip rap, and during the final repaving of the improved area, we eliminated two of our run off locations.

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**Pollution Prevention Team**

**Attachment #1**

Completed by: Dan Curtin

Title: President

Date: August 26, 2015

Responsible Official: Dan Curtin

Title: President

Team Leader: Lloyd Thompson Marina General Mgr.

Office Phone: 617-846-7245

Responsibilities:

Oversee and assist with all marina and repair operations. Identify and implement Best Management Practices ("BMP") covering all marina and repair operations. Make and or oversee marina facility upkeep and improvements while incorporating BMP's while doing so. Train and or oversee training of your staff and oversee their activities while always mindful or working towards a pollution-free operation.

(1) Greg Curtin

Title: Asst. Manager

Office Phone: 617-846-7245

Responsibilities:

Assist General Manager with the marina operation, including but not limited to boat hauling, launching, rigging and unrigging of vessels, in-yard boat-moving, washing, positioning boats for yard storage, yard cleaning, policing of boaters' activities while implementing and insuring adherence to our BMP's. Activities also include continuing education and overseeing yard hands as to the implementation and further development and fine-tuning of our BMP's throughout our operation.

(2) Phil Naas

Title: Head Mechanic Naas

Office Phone: 617-846-1100

Responsibilities:

In charge of hands on mechanical functions of Crystal Cove Services. Phil's activities include but are not limited to doing all mechanical and boat and motor repairs requested by our customers. Oversees 1 or 2 other mechanics as to BMP's including proper boat and motor preparation to eliminate spillage or other errors, which would fall to the ground and potentially impact our storm water run off. He is responsible for proper handling and disposal o all lubricants, cleaners, etc and tracking their disposal. He utilizes and trains his mechanics to utilize BMP's with regards to operations and clean up of the occasional mishap. He is constantly upgrading our methodology in an effort to improve our no-pollution philosophy.

(3) _____	Title: _____
Responsibilities:	Office Phone: _____
_____	
_____	
_____	