

Green Marine Environmental Program

2025



Performance Indicators for Shipyards

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AIR EMISSIONS - GREENHOUSE GASES AND AIR POLLUTANTS

OBJECTIVE: Reduce greenhouse gas (GHG) and air pollutant emissions.

LEVEL 1
Monitoring of regulations
LEVEL 2
<p>2.1 Implement measures that discourage idling of vehicles and other equipment powered by Internal Combustion Engines. Include, at minimum, the participant's own road, off-road, and unlicensed vehicles.</p> <p>2.2 Promote sustainable transportation practices by employees (e.g., incentives for public transport and; carpooling, reorganization of business travel, installation of bicycle racks and electric vehicle charging stations).</p> <p>2.3 Implement measures to reduce truck congestion.</p>
LEVEL 3
<p>3.1 Complete an annual report on total GHG emissions. <u>Note:</u> Include Scope 1 at minimum, and Scope 2 is recommended, as defined by the GHG Reporting Protocol. See Annex 1-A.</p>
LEVEL 4
<p>4.1 Complete a detailed inventory of total air pollutants emitted within the boundary of the participant's footprint within the last five years. Inventory should include key criteria air pollutants, such as NO_x, SO_x, VOC, and PM. <u>Note:</u> Participants that are in nonattainment areas or that have potential "hotspots" should place a priority on an inventory of their relevant criteria air pollutants. Criteria air pollutants refer to those reported in Environment Canada's National Pollutant Release Inventory (NPRI) or U.S. EPA's National Emissions Inventory (NEI).</p> <p>4.2 Adopt a performance plan for air emissions resulting directly from the participant's activities. In the plan, define reduction measures and establish targets to be carbon-neutral by 2050. <u>Note:</u> See Annex 1-B. <u>Note:</u> Carbon neutrality, or net zero CO₂ emissions, refers only to carbon dioxide emissions and is a state of balance between the CO₂ emitted into and removed from the atmosphere. <u>Note:</u> See Annex 1-B.</p>
LEVEL 5
<p>5.1 Achieve an annual average reduction in GHG intensity of $\geq 2.4\%$ based on a 2008 inventory baseline, or other annual average reduction based on another baseline year to achieve carbon neutrality by 2050. <u>Note:</u> An annual average reduction percentage based on a year other than 2008, X, can be calculated by $100 \% \div (2050 - X)$.</p>

COMMUNITY IMPACTS

OBJECTIVE: Reduce potential community exposure and negative impacts due to dust & other polluting air emissions, noise & vibrations, light, visual pollution, traffic, potable water usage, and odours & nuisance wildlife caused by the participant's activities and operations.

NOTE:

- In the context of this indicator, the community includes all people in close proximity to the participant (e.g., employees, nearby tenants, residents, Indigenous Peoples, local businesses, people using nearby recreational areas).
- Indigenous Peoples and the Nations that constitute them may be affected in specific ways (culturally, environmentally, spiritually, socially, economically, etc.), and consultations distinct from other local communities are welcomed. In acknowledgment of the unique role of local stewardship that indigenous peoples can play in environmental management, these consultations are recommended as they demonstrate the good faith and good intentions of the participants. Under Green Marine's voluntary program, depending on the context of each participant and where this may apply in implementing the Community Impacts indicator criteria, special attention should be given to impacts on Indigenous Peoples, and the measures implemented should be reasonably adapted. Where applicable, attention should also be given to developing a long-lasting collaborative relationship with Indigenous Peoples.

LEVEL 1
Monitoring of regulations
LEVEL 2
<p>Implementation of the majority of applicable criteria:</p> <p><u>Noise & Vibrations</u></p> <p>2.1 Impose speed limits on vehicles in sensitive zones.</p> <p>2.2 Adopt operational procedures or take measures limiting the use, or reducing the impact of warning signals, without compromising safety (e.g., use strobe light during nighttime operations, use lynx alarm, adapt the height or direction of the device, adjust the frequency of the signal).</p> <p>2.3 Take measures to reduce the noise emanating from shipyard operations (e.g., sandblasting, heavy machinery operations).</p> <p>2.4 Limit idling of vehicles and equipment.</p> <p>2.5 Have a documented process (e.g., purchase policy) for selecting less noisy equipment when buying new equipment.</p> <p>2.6 Carry out activities and operations that generate noise and vibrations as much as possible within hours that would have the least impact on the local community.</p> <p><u>Dust & Other Pollutant Air Emissions</u></p> <p>2.7 Adopt dust control measures sitewide (e.g., watering, wet brushing, sweeping, maintenance of pavement, landscaping).</p> <p><u>Odours & Nuisance wildlife</u></p> <p>2.8 Take measures to avoid garbage and recycling dispersion by wind and wildlife (ex. covers, fencing) and to reduce odours.</p> <p>2.9 Keep wildlife that is or can become a nuisance to the local community away from operation and construction sites, outbuildings, and workboats (e.g., limit access to wildlife, use sustainable visual or audio deterrence measures).</p> <p><u>Traffic</u></p> <p>2.10 Implement measures to manage traffic in and out of the property to avoid local congestion (e.g., signboard, traffic coordinator, or checker).</p> <p><u>Light Pollution</u></p> <p>2.11 Direct lights so they only illuminate the necessary zone.</p> <p>2.12 Switch off bothersome lighting at a specific time if there are no operations underway.</p> <p><u>Visual Pollution</u></p> <p>2.13 Maintain all spaces on the property clean and free of litter, especially in areas bordering and visible from public spaces and roads (e.g., next to a residential area or a park).</p> <p><u>Potable Water Usage</u></p> <p>2.14 Adopt common potable water conservation measures (e.g., repair water leaks, run dishwasher when full, turn off the water when not in use, do not water vegetation or use water for housekeeping purposes during full sun or dry periods).</p>

LEVEL 3

3.1 (Optional for 2025) Assess activities and operations to determine the level of impact they have on the local community (e.g., dust and other polluting air emissions, noise, vibrations, light, visual pollution, traffic, potable water usage, and odours & nuisance wildlife).

3.2 Adopt a Community Impacts Mitigation and Management Plan (CIMMP) to mitigate and manage impacts related to the participant's activities, operations, and new projects, including when contracting work to a third party, and that incorporates all applicable best practices in level 2.

Note: See Annex 3-A.

3.3 Have a procedure for evaluating environmental and social aspects of new projects, activities, or types of operations including handling of new products, if there is uncertainty around the potential for environmental and social impacts and where mitigation measures are not known to be effective and established.

Note: Not applicable to projects that are subject to an environmental assessment under existing regulation.

Note: See Annex 3-B.

Visual Pollution

3.4 (Optional for 2025) Maintain buildings and facilities on the property (e.g., exterior cleaning and repainting) to limit visual pollution, especially in areas bordering and visible from public spaces and roads.

LEVEL 4

4.1 (Optional in 2025) Based on the assessment in criterion 3.1, further develop and implement the CIMMP to define objectives and an action plan.

Note: See Annex 3-A.

Implementation of the **majority** of the following applicable criteria:

4.2 Install and maintain green corridors (e.g., dune system), vegetated or recreational areas (e.g., tree alley, parks) between the operating site and residential area.

4.3 Have a procedure or system in place that optimizes truck movements to manage congestion and mitigate other associated issues.

Noise

4.4 Monitor noise in real-time in areas of concern, as identified in the assessment of criterion 3.1 (e.g., areas located close to residences or subject to frequent complaints) and have a data monitoring process in place.

4.5 Create and maintain noise barriers using a sustainable approach (e.g., vegetated buffer zone or noise barrier walls with limited community and environmental impacts).

4.6 Install silencer, muffler, timer, or another device to reduce noise from noisy equipment or cover with sound-insulating material.

Dust & Other Polluting Air Emissions

4.7 Monitor dust and other polluting air emissions (e.g., PM_{2.5}, PM₁₀, CO, NO₂, O₃, SO₂, H₂S, heavy metal vapours or particles, VOCs, PAHs, or odours) in the areas of concern, as identified in the assessment of criterion 3.1 (e.g., areas located close to residences, areas subject to frequent complaints, areas particularly exposed to wind) and have a data monitoring process in place. Choose monitoring frequencies in line with best practices specific to the emissions (e.g., near real-time to monthly measurements).

Light Pollution

4.8 Install fixtures that optimize lighting and reduce light pollution when replacing fixtures or during new projects.

4.9 Evaluate existing lighting plans and take effective measures to optimize lighting and reduce impacts.

Visual Pollution

4.10 Implement and, where applicable, maintain beautification measures such as landscaping (e.g., planting trees and shrubs, adding ornamental features), murals, improved design or engineered solutions for existing and/or new buildings and facilities, aboveground infrastructure, external furniture, fences, etc., especially in areas bordering or visible from public spaces and roads.

Potable Water Usage

4.11 (Optional for 2025) Use equipment or technologies to minimize or recycle/reuse water for the most water-intensive operations.

LEVEL 5

5.1 Implement all applicable criteria listed in Level 4.

5.2 (Optional for 2025) Demonstrate that the objectives set as part of the CIMMP for each community impact relevant to the participant are met according to the timeline of the action plan and that the measures implemented are as effective as possible.

5.3 For impacts of concern to the local community (e.g., noise pollution, dust and other pollutant air emissions like PM_{2.5}, PM₁₀, CO, NO₂, O₃, SO₂, H₂S, heavy metal vapours or particles, VOCs, PAHs), publicly disclose monitoring data collected at Level 4 (e.g., real-time noise data, near real-time PM_{2.5} data, biannual reporting for metal analysis) through an online portal or website, making sure the data is digestible for the general public.

COMMUNITY RELATIONS

OBJECTIVE: Maintain or improve the quality of relations with the various community stakeholders through open and transparent communications.

Definition of 'community' in the present context: Local stakeholders affected by the participant's activities.

NOTES:

- For participants certifying multiple locations, refer to General Annex 6-A for information relative to the implementation of criteria at the corporate level versus regional or at each certified location (i.e., *Requirement* bullet). Individual locations within close proximity to each other can be regionally grouped if they share the same community stakeholders.
- In the Constitution of Canada, issues relating to Indigenous Peoples take on a particular dimension that affects the notion of the nations that constitute them. Consequently, Indigenous Peoples are not considered as stakeholders and specific rules may apply regarding their consultation. Under Green Marine's voluntary program, and more specifically for this indicator, the Indigenous Peoples concerned are considered by the participant within the broader group in the same way as the stakeholders identified by the latter. For practical purposes, therefore, Indigenous Peoples are included in the list of examples of indicator stakeholders (criterion 2.3). However, depending on the context of each participant and where this may apply in the implementation of the criteria, participants are encouraged to consider Indigenous Peoples as distinct from other stakeholders.
- For this indicator, General Annex 6-A should be consulted to ensure the proper implementation of the criteria. This appendix contains additional information (rationales, examples of justification documents for external verification, precision of the requirements, implementation options and certain definitions) to help participants properly interpret the criteria and guide them with the implementation of these criteria.

LEVEL 1
Monitoring of regulations
LEVEL 2
<p>2.1 Make available/post a telephone number of, or redirect calls to, the authority in charge of receiving inquiries and concerns (including complaints) related to the participant's activities.</p> <p>2.2 Develop and implement a documented procedure to keep track of and respond to inquiries and concerns (including complaints). As appropriate, dedicate a person to respond and/or be dispatched to the site in a timely fashion, implement and monitor corrective measures and readjust as needed.</p> <p>2.3 Identify, locate, and update the participant's network of local stakeholders (e.g. employees, tenants, residents, Indigenous Peoples, NGOs, municipalities/towns, governmental and environmental organizations, suppliers).</p> <p>2.4 Regularly monitor media posts about the participant's activities.</p> <p>2.5 Communicate information about the participant's activities and operations using at least two communication means. For example:</p> <ol style="list-style-type: none"> a) Social Media (e.g., Facebook, Instagram, TikTok); b) LinkedIn; c) TV; d) YouTube; e) Radio or podcast; f) Webpage with community related content; g) Local newspapers; h) Newsletter; or i) Magazine. <p>2.6 Incorporate in the applicable policies or value statement of the company the commitment of senior management to maintain and improve the quality of community relations.</p>

LEVEL 3

Fulfill at least three of the following criteria:

3.1 Describe each stakeholder or stakeholder group identified in criterion 2.3. For each of them, identify issues and concerns related to the participant's activities, as well as any ongoing and potential future collaboration opportunities.

3.2 Develop and implement a documented communication strategy or plan with a focus on responsiveness, transparency, engagement to reach out to the community, and feedback.

3.3 Publicly disclose at least one annual report or corporate plan related in part or entirely to social responsibility (e.g. sustainability action plan or annual report, corporate social responsibility report, strategic plan).

3.4 Implement or participate at least two community outreach strategies annually (e.g., port or shipyard days, open houses, info sessions, voluntary workshops, visitor or information center, webinars, site tours, school visits).

3.5 Participate in social and/or environmental activities or events every year with the community and/or to the benefit of the community (e.g. shoreline clean-up operations, tree-planting campaigns, educational activities, fundraising events, scholarships).
Note: The participant must provide support, whether through financial means, human resources and/or material and equipment.

LEVEL 4

4.1 Actively participate in meetings with one or more local community organization or NGO to discuss subject matter that contributes to the environmental or social well-being of the community and that is not directly related to the participant's activities (e.g., be a Board member, regularly participate in committee meetings).
Note: Payment of membership is not sufficient to fulfill this criterion.

4.2 Hold or actively participate, at least twice a year, in meetings with one or more local community members or groups to discuss subjects directly related to the participant's activities. These meetings can include the implementation and/or participation on a permanent committee open to the local community that meets twice a year (e.g., citizen or liaison committee).

4.3 Recognize community relationships within the participant's strategic plan as part of the company-wide culture (e.g. aiming for responsiveness, transparency, engagement, and feedback).

4.4 Develop and implement a communication process to regularly inform and allow the community to ask questions and make comments before, during, and after implementing new projects with potential social and environmental impacts. Make public and easily accessible all required steps for the community to ask questions and make comments.

Note: New projects include new services, operations, activities, or handled products with potential environmental or social impacts. Note: See Annex 3-B for more detail.

LEVEL 5

5.1 Evaluate within the last three years the community's perception of the participant. Based on the results, develop and implement measures addressing the concerns raised to improve the relationship with local stakeholders.

Note: See guidelines in Annex 6-B.

5.2 Within the last five years, carry out or participate in a co-creation project or initiative in collaboration with one or more local stakeholders.

Note: See guidelines in Annex 6-C.

ENVIRONMENTAL LEADERSHIP

OBJECTIVE: Encourage and recognize the implementation of original and exemplary environmental initiatives by private marine companies.

LEVEL 1
1.1 Reach level 2 for at least one other performance indicator of the program.
LEVEL 2
2.1 Reach level 2 for at least 2 other performance indicators of the program. AND fulfill one of the following 2 criteria: 2.2 Write and publicly communicate an environmental policy. OR 2.3 Develop and update annually a section on the company's public website presenting an overview of the Green Marine program and the participant's latest performance results. <u>Note:</u> Green Marine offers assistance to participants in developing the content.
LEVEL 3
3.1 For companies operating multiple sites, at least 2 of the participant's eligible shipyards are Green Marine participants. <u>Note:</u> Not applicable if the company operates only one eligible shipyard. 3.2 Undergo an internal or external audit at least every 5 years to verify the environmental compliance of all operations. <u>Note:</u> Any non-compliances found should be rectified, when possible, within the following year. Otherwise, an action plan with a timeline should be developed. 3.3 Actively participate in social and/or environmental community activities every year (e.g. shoreline clean-up operations, tree-planting campaigns, scholarships, educational activities, open-house, etc.). <u>Note:</u> Active participation is defined as the provision of support by the participant, whether through financial means, human resources, and/or material/equipment.

LEVEL 4

4.1 For companies operating more than 3 sites, 50% of the participant's eligible shipyards are Green Marine participants.

4.2 Attain an average that is equivalent to level 3 with respect to the program's other performance indicators.

AND fulfill at least 2 of the following criteria:

4.3 Publicly disclose GHG and air pollutants' reduction targets and timeframe.

4.4 Implement an environmental management system (EMS) (e.g., ISO 14001 standard).

Note: At level 4, the EMS is not required to be certified if the participant can demonstrate that all the elements of an EMS are in place. An EMS certification is however mandatory to use this criterion to achieve level 5.

4.5 Publish an annual report providing details of the participant's environmental performance.

Note: The report must follow a recognized standard, such as the Global Reporting Initiative's Reporting Guidelines.

4.6 Have a replacement policy for converting the fleet of road vehicles and/or non-road vehicles for more environmentally friendly technologies or models (high-renewable-content fuels, hybrids, electrical, higher tier engines, etc.) and have started to convert the fleet or to test new technologies or models.

Note: For a detailed definition of high-renewable content fuel, refer to the Renewable Fuels Regulations (Canada) or to the Renewable Fuels Standard (U.S.). More information can be found on the document "Renewable Fuels Regulations" in the Members section of the Green Marine website.

4.7 Introduce innovative or exemplary technologies or projects, within the last five (5) years, aimed at significantly reducing the environmental footprint of the participant's activities.

Note: See Annex 4-A.

4.8 Any other comparable measure accepted by Green Marine.

Note: The project must have been started (e.g., installation of equipment, final investment decision, etc.) during the last three (3) years.

Note: See Annex 4-A.

4.9 Finance or make annual donations of at least 1% of annual operating revenues to environmental and/or social projects.

4.10 Implement a sustainable infrastructure framework, such as Envision or Waterfront Edge Design Guidelines (WEDG), in the development process of infrastructure projects.

LEVEL 5

5.1 For companies operating multiple sites, all of the company's eligible shipyards are Green Marine participants.

5.2 Fulfill at least two additional criteria listed in level 4.

Note: Reminder that an EMS certification is required to use criterion 4.4 toward achieving Level 5.

5.3 Attain an average that is equivalent to level 4 with respect to the program's other performance indicators.

SPILL PREVENTION AND STORMWATER MANAGEMENT

OBJECTIVE: Prevent spills and leaks of pollutants and manage stormwater to minimize contamination into the environment (water and land).

NOTE: The term ‘location’, as mentioned in levels 4 and 5 for criteria related to stormwater management, refers to any given delimited area on the participant’s owned or leased property where stormwater can potentially be contaminated based on activities and operations and/or known data (as identified in the Water and Land Pollution Prevention Plan under criterion 3.2). A location could also be outside the participant’s owned or leased property in some specific cases (e.g. in the context of regional stormwater management compensation projects).

LEVEL 1
Monitoring of regulations
LEVEL 2
<u>Implementation of at least 60% of the applicable criteria</u>
<p>2.1 Perform vehicle and machinery fueling, lubrication, and maintenance in an adequately equipped designated area and/or at a minimum distance of 30 m (100 ft) from the water and at a minimum distance of 15 m (50 ft) from a tributary (e.g., catch basin, ditch, storm drains) unless the area is covered by or is part of a permitted and properly operating stormwater management system. If these requirements cannot be met, alternative pollution prevention measures must be taken (e.g., watertight lids, rubber rugs, retention pans).</p> <p>2.2 In areas draining to surface water, use, inspect and ensure proper maintenance of secondary containment for stationary devices and equipment that can potentially leak or which need to be resupplied periodically (e.g., generating sets, compressors). Use a risk-based approach to determine the adequate volume of each secondary containment to contain anticipated spills or leaks. All employees using such devices and equipment must be aware of the procedure to follow (what to do, who to contact) in case of a spill or leak (e.g., proper signage visibly posted directly on devices and equipment, internal emergency number, annual employee training).</p> <p>2.3 Implement inspection and maintenance procedures for all devices and equipment (e.g., tanks, generating sets, compressors, landscaping equipment) that could potentially leak liquid contaminants into the environment (e.g. drainage system, natural receiving environment).</p> <p>2.4 Regularly inspect nearshore water and property to identify any illicit discharge. If such a discharge is identified implement corrective measures as soon as possible to stop contamination from the source or inform the entity responsible or any other relevant entity if the contamination is not under the control of the participant.</p> <p>2.5 Check for visible sheen on, colour and odour of water collected in secondary containments and excavation pits or extracted from monitoring wells. If there is a doubt about its quality, the water must be sampled, analyzed for contaminants of concern, and managed appropriately or treated prior to being discharged into the environment.</p> <p>2.6 Always have at key locations a spill kit containing all the necessary material to adequately respond as soon as possible to accidental discharges. Ensure the relevant staff is competent to use these kits (e.g., through appropriate training, an annual refresh of response procedures, various information and communication tools) and that any contaminated material is disposed of by an authorized firm.</p> <p>2.7 Implement good housekeeping practices to ensure surfaces near storm drains (e.g., wharves, driveways, loading and unloading areas, paint blasting areas or other pathways to surface waters) are clear of pollutants (e.g., solid wastes, grit, dust, paint or paint residues).</p> <p>2.8 Prevent the uncontrolled discharge of wash water that could contain oils, chemical products (e.g., detergents, solvents), or residues/suspended solids into the environment via treatment or containment, for example.</p>
LEVEL 3
<p>3.1 Implement all applicable best practices of level 2.</p> <p>3.2 Adopt a Water and Land Pollution Prevention plan that covers all sites that the participant operates on. <u>Note:</u> See Annex 2-A.</p> <p>3.3 Keep a record of all accidental discharges of pollutants into the environment that occur on the participant’s operated property and report such incidents to the relevant authorities, if applicable.</p> <p>3.4 Keep a registry of all owned and leased fixed, portable, and mobile (e.g., forklifts, mobile cranes) hydraulic equipment operated near the shore. At least for each owned equipment, assess the technical feasibility as well as modernization and maintenance costs of switching from conventional to readily and inherently biodegradable, minimally toxic, and non-bioaccumulative lubricants (includes oils and greases).</p>

LEVEL 4

4.1 Implement a documented Preventive Inspection and Maintenance program for vehicles and equipment, containers and tanks, and any associated conveyance systems (e.g., conveyor, aboveground piping, transfer hoses) used exclusively for the participant's direct activities and which might release discharges into the environment (fuel, lubricants, etc.).

Note: See Annex 2-B.

4.2 Based on the assessment at Level 3, develop and start implementing an action plan with targets and a reasonable timeframe to progressively switch from conventional to biodegradable, minimally toxic, and non-bioaccumulative lubricants (oils and greases), while respecting OEM specifications. The action plan should prioritize readily over inherently biodegradable lubricants for equipment sub-systems (e.g., hydraulic systems, engines, transmissions, gear reducers) posing the greatest spill risk (i.e., potential for hose rupture) and water and soil contamination.

AND fulfill one criteria option that exceeds the participant's regulatory requirements: 4.3 OR 4.4 OR 4.5-4.7

4.3 Develop and adopt a Stormwater Management plan.

Note: See Annex 2-C.

OR

4.4 Participate and/or support local or regional environmental education programs relating to water quality that facilitate community and stakeholder engagement and demonstrate measurable improvements year on year. Improvements could be measured in terms of, for example, outreach (e.g., how many people are being reached with the programs, how are the programs expanding over time) and/or training (e.g., how many training sessions/year, follow up interview feedback on outreach and usefulness of training).

OR

In at least **one** of the participant's locations where stormwater has a potential to be contaminated as defined in the note below the objective (for shipyard operators, this means one or more locations within each shipyard participating in the Green Marine program):

4.5 Collect and treat stormwater using an appropriate stormwater treatment system.

Note: Stormwater treatment must be adapted to the contaminants present (e.g., catch basins, bioswales, oil separators, hydrodynamic separators, or any other type of simple or complex treatment system).

4.6 Inspect and maintain stormwater treatment systems on a regular basis or according to the manufacturer's specifications to ensure good performance of the systems.

4.7 Sample and analyze treated stormwater routinely to ensure the proper functioning of treatment equipment and infrastructure. Samples must be collected following a recognized/approved procedure and analyzed by an accredited laboratory.

LEVEL 5

5.1 Have secondary containment in place for all fixed and portable outdoor above ground storage tanks and containers (permanent and in transit) that are located within a distance of 30 m (100 ft) from the water and 15 m (50 ft) from any ditch, sewer system, underground stream, etc. This requirement applies to all hazardous products.

Note: Secondary containment includes any measure preventing a spill or a discharge from a primary storage tank or container from entering the environment. The chosen measure(s) and its/their capacity for secondary containment must be able to address a discharge resulting from the most typical failure mode. Acceptable measures include:

- Impervious dikes, berms, or retaining walls;
- Curbing;
- Drainage system;
- Weirs, booms, floating barriers;
- Spill diversion or retention ponds;
- Drip pans or retention pans;
- Sumps or collection systems;
- Double-walled tanks;
- Any other equipment, material, and/or resources to contain the spill or discharge.

5.2 Perform a spill response exercise on a regular basis (at least annually in case of a tabletop exercise, at least every two years for a simulated site-specific drill, including the post-mortem of a spill incident).

5.3 Demonstrate that the targets set in the action plan developed in 4.2 relative to the use of biodegradable, minimally toxic, and non-bioaccumulative lubricants (oils and greases) are met according to the set timeframe.

Fulfill the following 3 criteria in the majority of the participant's locations where stormwater has a potential to be contaminated as defined in the note below the objective (for shipyard operators, this means one or more locations within each terminal participating in the Green Marine program):

5.4 Collect and treat stormwater via an appropriate stormwater treatment system.

Note: Stormwater treatment must be adapted to the contaminants present (e.g., catch basins, bioswales, oil separators, hydrodynamic separators, or any other type of simple to complex treatment system).

5.5 Inspect and maintain stormwater treatment systems on a regular basis and/or according to the manufacturer's specifications to ensure good performance of the systems.

5.6 Sample and analyze treated stormwater routinely to ensure the proper functioning of treatment equipment and infrastructure. Samples must be collected following a recognized/approved procedure and analyzed by an accredited laboratory.

AND fulfill one criterion that exceeds the participant's regulatory requirements: 5.7 OR 5.8

5.7 Develop and adopt a Storm Water Management plan.

Note: See Annex 2-C.

OR

5.8 Carry out or participate in a research and development project or demonstration for a spill management or stormwater treatment technology within the last three years.

SURFACE TREATMENTS AND COATINGS *NEW* (Optional in 2025)

OBJECTIVE: Reduce the generation of waste and release of harmful substances into the environment from painting, coating, and blasting operations.

LEVEL 1
Monitoring of regulations
LEVEL 2
<p>2.1 Train staff annually on standard industry best practices for awareness, efficiency, and minimization of environmental impacts in painting, coating, and blasting operations (e.g., product application precision, reduction in material usage, proper equipment maintenance), and monitor best practice implementation.</p> <p>2.2 Collect and confine spent abrasives and debris (after blasting to dock-bottom or yard grounds) to avoid dispersion by wind and runoff (e.g., cover piles of spent abrasives and debris or store them in covered containers).</p> <p>2.3 Do not dilute paints or coatings unless called for in original equipment manufacturer (OEM) specifications.</p> <p>2.4 Distill and reuse solvents, abrasives, and paints whenever possible and according to OEM specifications.</p> <p>2.5 Minimize environmental impacts at the point of use during painting, coating, or blasting operations (e.g., use efficient painting guns or automated painting tools, efficient blasting nozzles/valves, canvas, tarpaulins, curtains, or other equivalent control barriers).</p> <p>2.6 Ensure proper storage and preparation of paints, coatings, solvents, and blasting products to prevent their degradation or release into the environment.</p> <p>2.7 Reduce hazardous waste generation (e.g., steam dried paint in cans to separate hazardous waste from recyclables).</p>
LEVEL 3
<p>3.1 Maintain a registry of all paints and coatings on site. Conduct a market review and technical feasibility assessment every three (3) years of alternative paints, coatings, and application methodologies. This assessment must evaluate key product attributes, which may include the content of volatile organic compounds (VOCs), ethylbenzene, per- and polyfluoroalkyls substances (PFAS), and hazardous air pollutants (HAPs), and may also evaluate the energy intensity of material production and product lifespan.</p> <p>3.2 Maintain a registry of all blasting media, processes, and equipment used on site. Conduct a market review and technical feasibility assessment every three (3) years of alternative blasting media, processes, and equipment. This assessment must evaluate key product attributes, which may include reusability, recyclability, low/no toxicity and dust content, energy intensity of material production, material efficiency, and certification status as per the California Air Resources Board (CARB) or equivalent standards.</p> <p>3.3 Inform customers of alternative painting/blasting/coating products, processes, and equipment options available (e.g., in bid tenders, via email).</p>
LEVEL 4
<p>4.1 Based on the technical feasibility assessment conducted in criterion 3.1, implement an action plan with defined objectives, annual measurable targets, and a reasonable timeframe to progressively transition from conventional paints, coatings, and/or application methodologies to less impactful alternatives.</p> <p>4.2 Based on the technical feasibility assessment conducted in criterion 3.2, implement an action plan with defined objectives, annual measurable targets, and a reasonable timeframe to progressively transition from conventional blasting media, processes, and/or equipment to less impactful alternatives.</p> <p>4.3 Provide specialized staff-training on all advanced alternative painting, coating, and blasting products, processes, and equipment in use according to criteria 4.1 and 4.2.</p>
LEVEL 5
<p>5.1 Demonstrate that the objectives and annual measurable targets set in the action plan developed in 4.1 relative to the use of alternative paints, coatings, application methodologies are met and maintained.</p> <p>5.2 Demonstrate that the objectives and annual measurable targets set in the action plan developed in 4.2 relative to the use of alternative blasting media, process, and equipment are met and maintained.</p> <p>5.3 Participate within the last three years in a research and development project or a demonstration for an advanced painting/coating product or technique, innovative blasting media or technique, or advanced blasting waste management technology. <u>Note:</u> Active participation in the project is defined as the provision of support by the participant, whether through human resources, facility access, equipment, and/or experimental on-site trials, in partnership with an academic institution, technology developer, innovation accelerator, or government agency.</p>

WASTE MANAGEMENT

OBJECTIVE: Increase waste diversion and reduce at source the waste arising from administrative activities and site operations.

LEVEL 1
Monitoring of regulations
LEVEL 2
<p>Implementation of the majority of criteria:</p> <p>2.1 Equip offices, workspaces, and facilities with recycling bins, including for used batteries, cartridges, and fluorescent light bulbs, and make sure they are strategically located and appropriately labeled.</p> <p>2.2 Install clear signage for waste disposal on shipyard property.</p> <p>2.3 Provide training and/or educate staff on established garbage management procedures and hierarchy (Reduce, Reuse, Recycle, Valorize – as in to add value), including procedures for handling and disposing of hazardous waste.</p> <p>2.4 Encourage the use of 1) reusable, 2) recyclable and 3) compostable supplies (e.g. reusable dishes, etc.).</p> <p>2.5 Encourage staff to adopt sustainable paper use practices (e.g. reduce overall printing and copy paper consumption, double-sided printing, use post-consumer recycled paper, reuse and recycle paper, etc.).</p> <p>2.6 Promote and encourage users, contractors, and/or clients to minimize waste and to recycle.</p> <p>2.7 Gather information from the local service provider/waste hauler in order to have a better understanding of the relative costs and the environmental benefits related to the disposal of waste, recycling, and organics.</p> <p>2.8 Eliminate or limit the use of plastic straws, plastic bottles, single-use coffee cups, and any other similar items in the administrative office.</p> <p>2.9 Place marked garbage and recycling containers at convenient locations on site (e.g., for employees and visitors).</p>
LEVEL 3
<p>3.1 Implement all applicable best practices listed at level 2.</p> <p>AND, fulfill one of the following 2 criteria:</p> <p>3.2 Produce an annual inventory of all waste being generated during the participant's direct activities (administrative and/or site operations).</p> <p>OR</p> <p>3.3 Conduct a waste audit every five (5) years to identify the types and amount of waste being generated during the participant's direct activities (administrative and/or site operations). <u>Note:</u> The inventory or audit does not include waste generated from demolition or construction projects. <u>Note:</u> See Annex 5-A.</p>

LEVEL 4

4.1 Adopt an environmentally preferable purchasing policy that encourages sustainable purchasing practices (e.g., products using less packaging, reusable/recyclable/compostable products, products with post-consumer recycled content, circular economy products).

4.2 Conduct a waste audit every five years to identify the types and amount of waste being generated during the participant's direct activities (administrative and/or site operations).

Note: The waste audit does not include waste generated from demolition or construction projects.

Note: See Annex 5-A.

4.3 Based on the results from the waste audit, adopt and implement a Waste Management and Reduction plan that describes the participant's waste management practices and procedures, including all applicable best practices of levels 2 and 3. The plan must also define measurable waste reduction, recycling, and/or diversion rates and identify practices and strategies to achieve these rates.

Note: Each participant defines its own "normalizer" to take into account fluctuations in activities (e.g., per capita, per ton, per vessel, etc.).

Note: See Annex 5-B.

4.4 Adopt and implement formal procedures for reducing, reusing, recycling, and valorizing and/or properly disposing of waste generated during construction, excavation and demolition work (e.g. cement, concrete, bricks, gypsum, wool, asphalt, wood, steel, and other metals, etc.). These procedures must be included in all construction, demolition, and excavation projects.

LEVEL 5

5.1 Demonstrate continual achievement in waste diversion and reduction at source in line with the objectives established in the Waste Management and Reduction plan.