
Water Permits Division



Application Form 1

General Information

NPDES Permitting Program

Note: All applicants to the National Pollutant Discharge Elimination System (NPDES) permits program, with the exception of publicly owned treatment works and other treatment works treating domestic sewage, must complete Form 1. Additionally, all applicants must complete one or more of the following forms: 2B, 2C, 2D, 2E, or 2F. To determine the specific forms you must complete, consult the “General Instructions” for this form.

Paperwork Reduction Act Notice

The U.S. Environmental Protection Agency estimates the average burden to collect information and complete Form 1 to be 2.9 hours for new applicants and 0.9 hours for applicants renewing existing permits. This estimate includes time to review instructions, search existing data sources, gather and maintain the needed data, and complete and review the collection of information. New respondents must also prepare a topographic map. Send comments about the burden estimate or any other aspect of this collection of information to the Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

DESCRIPTION OF NPDES PERMIT APPLICATION FORMS	CONTENTS OF FORM 1 PACKAGE
<p>The application forms for individual National Pollutant Discharge Elimination System (NPDES) permits include the following:</p> <p>Form 1—General Information (<i>included in this package</i>).</p> <p>Form 2—Forms Based on Facility or Activity Type (<i>not included in this package</i>):</p> <p>2A. New and Existing Publicly Owned Treatment Works</p> <p>2B. Concentrated Animal Feeding Operations and Concentrated Aquatic Animal Production Facilities</p> <p>2C. Existing Manufacturing, Commercial, Mining, and Silvicultural Operations</p> <p>2D. New Manufacturing, Commercial, Mining, and Silvicultural Operations That Have Not Yet Commenced Discharge of Process Wastewater</p> <p>2E. Manufacturing, Commercial, Mining, and Silvicultural Facilities Which Discharge Only Nonprocess Wastewater</p> <p>2F. Stormwater Discharges Associated with Industrial Activity</p> <p>2S. New and Existing Treatment Works Treating Domestic Sewage</p>	<p>Form 1—General Instructions</p> <p>Form 1—Line-by-Line Instructions</p> <p>Form 1—Activities That Do Not Require Permits</p> <p>Form 1—Glossary</p> <p>Form 1—Application</p>

FORM 1—GENERAL INSTRUCTIONS

Who Must Apply for an NPDES Permit?

With the exceptions described in “Form 1—Activities That Do Not Require Permits,” the federal Clean Water Act (33 U.S.C. 1251 *et seq.*) prohibits any person from discharging pollutants into waters of the United States without first having been issued a permit under the NPDES program.

Who Must Complete Form 1?

All applicants, other than publicly owned treatment works (POTWs) and treatment works treating domestic sewage (TWTDS), must submit Form 1. If you operate one of the following facilities, you must submit Form 1: concentrated animal feeding operations and aquatic animal production facilities; manufacturing, commercial, mining, and silvicultural operations; or other industrial facilities.

At the state level, either the U.S. Environmental Protection Agency (EPA) or an approved state agency administers the NPDES permit program. If you are located in a jurisdiction in which an EPA regional office administers the NPDES permit program, you should use Form 1 and all other applicable forms described in these instructions. If you are located in a jurisdiction where a state administers the NPDES permit program, contact the state to determine the forms you should complete. States often develop their own application forms rather than use the federal forms. See <http://www.epa.gov/npdes/npdes-state-program-information> for a list of states that have approved NPDES permit programs and those that do not.

Exhibit 1–1 (see end of this section) provides contact information for each of EPA’s 10 regional offices. Since the exhibit’s content is subject to change, consult EPA’s website for the latest information: <http://www.epa.gov/aboutepa#regional>.

Upon your request, and based on information supplied by you, EPA or the authorized NPDES state will determine whether you are required to obtain a permit for a particular facility or activity. Be sure to contact EPA or your state if you have a question.

Form 1 collects general information only. You must also complete a more detailed application based on your proposed discharge activity, as follows:

- If your facility is a **concentrated animal feeding operation** or a **concentrated aquatic animal production facility**, you must also complete Form 2B.
- If your facility is an **existing** manufacturing, commercial, mining, or silvicultural facility that currently discharges process wastewater, you must also complete Form 2C.
- If your facility is a **new** manufacturing, commercial, mining, or silvicultural facility that has yet to commence discharge of process wastewater, you must also complete Form 2D.
- If your facility is a **new or existing facility** (including manufacturing, commercial, mining, and silvicultural facilities) that discharges **only nonprocess wastewater**, you must also complete Form 2E.
- If your facility is a **new or existing facility** whose discharge is composed entirely of stormwater associated with industrial activity—excluding discharges from construction activity under 122.26(b)(14)(x) or (b)(15)—you must also complete Form 2F. If the discharge is composed of stormwater *and* non-stormwater, you must complete Form 2F *and* you must also complete Forms 2C, 2D, and/or 2E, as appropriate. See Form 2F’s instructions for further details.

FORM 1—GENERAL INSTRUCTIONS CONTINUED

Where to File Your Completed Form

- If you are in a jurisdiction with an approved state NPDES permit program, file according to the instructions on the state forms.
- If you are in a jurisdiction where EPA is the NPDES permitting authority (i.e., the state is *not* an NPDES-authorized state), mail the completed application forms to the EPA regional office that covers the state in which your facility is located (see Exhibit 1–1).

When to File Your Completed Form

Because of statutory and regulatory requirements, the deadlines for filing applications vary according to your facility or activity type and the type of permit you need. The various permit application deadlines are listed in Exhibit 1–2 at the end of this section.

Fees

EPA does not require applicants to pay a fee for applying for NPDES permits. However, states that administer the NPDES permit program may charge fees. Consult with state officials for further information.

Public Availability of Submitted Information

EPA will make information from NPDES permit application forms available to the public for inspection and copying upon request. You may not claim any information on Form 1 (or related attachments) as confidential.

You may make a claim of confidentiality for any information that you submit to EPA that goes beyond the information required by Form 1. If you do not assert a claim of confidentiality at the time you submit your information to the NPDES permitting authority, EPA may make the information available to the public without further notice to you. EPA will handle claims of confidentiality in accordance with the Agency's business confidentiality regulations at Part 2 of Title 4 of the *Code of Federal Regulations* (CFR).

Completion of Forms

Print or type in the specified areas only. If you do not have enough space on the form to answer a question, you may continue on additional sheets, as necessary, using a format consistent with the form.

The NPDES permitting authority could consider your application incomplete if you do not provide an answer (or indicate "NA" for "not applicable") for all questions on Form 1 and the applicable Form 2.

Provide your EPA Identification Number from the Facility Registry Service, NPDES permit number, and facility name at the top of each page of Form 1 and any attachments. If your facility is new (i.e., not yet constructed), write or type "New Facility" in the space provided for the EPA Identification Number and NPDES number. If you do not know your EPA Identification Number, contact your NPDES permitting authority. See Exhibit 1–1 for contact information.

Do not leave any response areas blank unless the form directs you to skip them. If the form directs you to respond to an item that does not apply to your facility or activity, enter "NA" for "not applicable" to show that you considered the item and determined a response was not necessary for your facility.

The NPDES permitting authority will consider your application complete when it and any supplementary material are received and completed according to the authority's satisfaction. The NPDES permitting authority will judge the completeness of any application independently of the status of any other permit application or permit for the same facility or activity.

FORM 1—GENERAL INSTRUCTIONS CONTINUED

Exhibit 1–1. Addresses of EPA Regional Contacts and Covered States

REGION 1 U.S. Environmental Protection Agency, Region 1 5 Post Office Square, Suite 100, Boston, MA 02109-3912 Phone: (617) 918-1111; toll free: (888) 372-7341 Fax: (617) 918-0101 Website: http://www.epa.gov/aboutepa/epa-region-1-new-england Covered states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont	REGION 6 U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200, Dallas, TX 75202-2733 Phone: (214) 665-2200; toll free: (800) 887-6063 Fax: (214) 665-7113 Website: http://www.epa.gov/aboutepa/epa-region-6-south-central Covered states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas
REGION 2 U.S. Environmental Protection Agency, Region 2 290 Broadway, New York, NY 10007-1866 Phone: (212) 637-3000; toll free: (877) 251-4575 Fax: (212) 637-3526 Website: http://www.epa.gov/aboutepa/epa-region-2 Covered states: New Jersey, New York, Virgin Islands, and Puerto Rico	REGION 7 U.S. Environmental Protection Agency, Region 7 11201 Renner Boulevard, Lenexa, KS 66219 Phone: (913) 551-7003; toll free: (800) 223-0425 Website: http://www.epa.gov/aboutepa/epa-region-7-midwest Covered states: Iowa, Kansas, Missouri, and Nebraska
REGION 3 U.S. Environmental Protection Agency, Region 3 1650 Arch Street, Philadelphia, PA 19103-2029 Phone: (215) 814-5000; toll free: (800) 438-2474 Fax: (215) 814-5103 Website: http://www.epa.gov/aboutepa/epa-region-3-mid-atlantic Covered states: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia	REGION 8 U.S. Environmental Protection Agency, Region 8 1595 Wynkoop Street, Denver, CO 80202-1129 Phone: (303) 312-6312; toll free: (800) 227-8917 Fax: (303) 312-6339 Website: http://www.epa.gov/aboutepa/epa-region-8-mountains-and-plains Covered states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming
REGION 4 U.S. Environmental Protection Agency, Region 4 Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW, Atlanta, GA 30303-8960 Phone: (404) 562-9900; toll free: (800) 241-1754 Fax: (404) 562-8174 Website: http://www.epa.gov/aboutepa/about-epa-region-4-southeast Covered states: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee	REGION 9 U.S. Environmental Protection Agency, Region 9 75 Hawthorne Street, San Francisco, CA 94105 Phone: (415) 947-8000; toll free: (866) EPA-WEST Fax: (415) 947-3553 Website: http://www.epa.gov/aboutepa/epa-region-9-pacific-southwest Covered states: Arizona, California, Hawaii, Nevada, Guam, American Samoa, and Trust Territories
REGION 5 U.S. Environmental Protection Agency, Region 5 77 West Jackson Boulevard, Chicago, IL 60604-3507 Phone: (312) 353-2000; toll free: (800) 621-8431 Fax: (312) 353-4135 Website: http://www.epa.gov/aboutepa/epa-region-5 Covered states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin	REGION 10 U.S. Environmental Protection Agency, Region 10 1200 Sixth Avenue, Suite 900, Seattle, WA 98101 Phone: (206) 553-1200; toll free: (800) 424-4372 Fax: (206) 553-2955 Website: http://www.epa.gov/aboutepa/epa-region-10-pacific-northwest Covered states: Alaska, Idaho, Oregon, and Washington

Exhibit 1–2. Filing Dates for NPDES Permit Applications

Permit Application	When to File
2A	180 days before your present NPDES permit expires or, if you are a new discharger, 180 days before the date on which the discharge is to commence unless the NPDES permitting authority has granted permission for a later date.
2B	180 days before your present NPDES permit expires or 180 days prior to startup if you are a new facility.
2C	180 days before your present NPDES permit expires.
2D	180 days prior to startup.
2E	180 days before your present NPDES permit expires, or 180 days prior to startup if you are a new facility.
2F	Construction: 90 days prior to date construction is to commence. Nonconstruction: 180 days before your present NPDES permit expires or 180 days prior to startup if you are a new facility.
2S	180 days before your present NPDES permit expires or 180 days prior to startup if you are a new facility.

FORM 1—LINE-BY-LINE INSTRUCTIONS

Section 1. Activities Requiring an NPDES Permit

Item 1.1. Review the questions in Item 1.1 to determine if you are required to submit Form 1. Be sure to check the Form 1—Glossary for the legal definitions of any key terms.

If you answer “Yes” to a question in Item 1.1, then you do *not* need to complete Form 1, but you *must* comply with the application requirements specified.

Item 1.2. Respond to the questions in Items 1.2.1 to 1.2.5. If you answer “Yes” to any question, you must complete Form 1 *and* the Form 2 application specified. See Exhibit 1–2 for filing deadlines.

If you answer “No” to every question in Items 1.1 and 1.2, then you do *not* need an NPDES permit, and you do *not* need to complete and return any of the NPDES application forms.

Section 2. Name, Mailing Address, and Location

Item 2.1. Enter the facility’s official or legal name. Do not use a colloquial name.

Item 2.2. Provide your EPA Identification Number from the Facility Registry Service if you have an existing facility. If you do not know your EPA Identification Number, contact your NPDES permitting authority. If your facility is new (i.e., not yet constructed), write or type “New Facility.”

Item 2.3. Give the name (first and last), title, work telephone number, and email address of the person who is thoroughly familiar with the operation of the facility and with the facts reported in this application. The NPDES permitting authority will contact the person listed if they have questions on the material submitted.

Item 2.4. Give the complete mailing address of the office to which the NPDES permitting authority should send correspondence. This often is *not* the address used to designate the location of the facility or activity.

Item 2.5. Give the address or location of the facility identified under Item 2.1. If the facility lacks a street name or route number, give the most accurate, alternative geographic information (e.g., section number or quarter section number from county records or “at intersection of Routes 425 and 22”). Also provide the county name, county code (if known), city or town, state, and zip code.

For concentrated aquatic animal production facilities, provide the address or location of the production area (i.e., the location where the animals are contained, grown, or held).

Section 3. SIC and NAICS Codes

Items 3.1 and 3.2. List, in descending order of significance, up to four 4-digit standard industrial classification (SIC) codes and North American Industrial Classification System (NAICS) codes that best describe your facility in terms of the principal products or services it produces or provides. If the SIC or NAICS codes do not adequately describe your facility’s products or services, you have the option to provide additional descriptive information.

You can find SIC code numbers and descriptions in the 1987 *Standard Industrial Classification Manual*, prepared by the Executive Office of the President, Office of Management and Budget. This document is available from the Government Printing Office, Washington, D.C. An online version of the manual is also available courtesy of the Occupational Safety and Health Administration at http://www.osha.gov/pls/imis/sic_manual.html.

You can find NAICS code numbers and descriptions in the *North American Industrial Classification System Manual* prepared by the Executive Office of the President, Office of Management and Budget. This document is available from the National Technical Information Service (NTIS) in Alexandria, Virginia. It is also available online at <http://www.census.gov/eos/www/naics/>.

Use the latest edition of the manuals. If you have any questions about the appropriate SIC or NAICS codes for your facility, contact your NPDES permitting authority.

Section 4. Operator Information

Item 4.1. Give the legal name of the person, firm, public organization, or other entity that operates the facility described in this application. This may or may not be the same as the facility’s name. The operator of the facility is the legal entity that controls the facility’s operation rather than the plant or site manager. Do not use a colloquial name.

Item 4.2. Indicate whether the entity listed in response to Item 4.1 also owns the facility by marking the appropriate box.

Item 4.3. Indicate the ownership status of the operator of the facility by marking the appropriate box. If the facility is a federal facility (i.e., owned by the U.S. government), check the box for “Public—federal.” If the facility is owned by a state government, check the box for “Public—state.” If the facility is owned by a county government, municipal (e.g., city or town) government, tribal government, school district, water district, or other local government entity, check the box for “Other public” and specify the type of government entity. If the facility is owned by a corporation or other private entity, check the box for “Private.” If the facility has mixed ownership (e.g., public/private) or is not owned by an entity of the types previously listed, check the box for “Other” and specify the type of entity.

Items 4.4 to 4.6. Enter the telephone number, address, and email address of the operator identified in Item 4.1.

Section 5. Indian Land

Item 5.1. Indicate whether the facility is located on Indian Land.

Section 6. Existing Environmental Permits

Item 6.1. Check the appropriate boxes and provide the permit numbers for all relevant federal, state, and local environmental permits or construction approvals received or applied for under any of the programs listed below. If you have more than one currently effective permit under a particular permit program for your facility, list the additional permit numbers on the application form or on a separate sheet of paper.

FORM 1—LINE-BY-LINE INSTRUCTIONS CONTINUED

- Hazardous waste management program under the Resource Conservation and Recovery Act (RCRA).
- Underground Injection Control (UIC) program under the Safe Drinking Water Act (SDWA).
- NPDES program under the Clean Water Act (CWA).
- Prevention of Significant Deterioration (PSD) program under the Clean Air Act (CAA).
- Nonattainment program under the CAA.
- National Emission Standards for Hazardous Pollutants (NESHAPs) preconstruction approval under the CAA.
- Ocean dumping permits under the Marine Protection Research and Sanctuaries Act (MPRSA).
- Dredge or fill permits under Section 404 of the CWA.
- Other federal, state, or local environmental permits.

Section 7. Map

Unless the facility is a concentrated animal feeding operation, provide a topographic map(s) of the area extending at least one mile beyond the property boundaries of the facility that clearly shows the following:

- The legal boundaries of the facility.
- The location and serial number of each of your existing and proposed intake and discharge structures.
- All hazardous waste management, storage, and disposal facilities.
- Each well where you inject fluids underground.
- All wells, springs, surface water bodies, and drinking water wells that are in the public record or otherwise known to you and that are located in the map area.

If the facility has associated water intakes, discharge structures, hazardous waste disposal sites, or injection wells and these items are located more than one mile from the facility, include them on the map if possible. If you cannot, attach additional sheets describing the location of the structures, disposal site(s), or well(s) and identify the U.S. Geological Survey (USGS) or other map corresponding to the location(s).

On each map, include the map scale, a meridian arrow showing north, and latitude and longitude to the nearest second. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., <https://mynasadata.larc.nasa.gov/latitudeandlongitude-finder/>), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., USGS).

On all maps of rivers, show the direction of the current. In tidal waters, show the directions of ebb and flow tides.

You may develop your map by going to USGS's National Map website at <http://nationalmap.gov/>. (For a map from this site, use the traditional 7.5-minute quadrangle format. If none is available, use a USGS 15-minute series map.) You may also use a plat or other appropriate map. Briefly describe land uses in the map area

(e.g., residential, commercial). An example of an acceptable location map is shown as Exhibit 1–3 at the end of these instructions. **Note:** Exhibit 1–3 is provided for illustration only; it does not show an actual facility.

If the facility is a concentrated animal feeding operation, you are not required to provide the topographic map required by this section of Form 1. Instead, you are required to provide a topographic map as specified in Section 4 of Form 2B.

Item 7.1. Note that you have completed your topographic map and attached it to the application.

Section 8. Nature of Business

Briefly describe the nature of your business (e.g., products produced or services provided). See Examples 1 and 2.

Example 1

Facilities Subject to 40 CFR 426, Subparts F and G

Industry A is an auto tempered and auto laminated glass manufacturing facility subject to effluent limitation guidelines (ELGs) for the "Automotive Glass Tempering" and "Automotive Glass Laminating" subcategories of the "Glass Manufacturing" point source category at 40 CFR 426, subparts F and G. At the facility, glass is cut and then passed through a series of processes that grind and polish the edges, bend the glass, and then temper the glass to produce side and back windows for automobiles. Tempering involves heating the glass near the melting point, then rapidly cooling it to increase its mechanical and thermal endurance. The facility also produces automobile windshields and undertakes processes that laminate a plastic sheet between two layers of glass and that prepare the glass for lamination (e.g., cutting, bending, and washing).

Example 2

Facility Not Subject to ELGs

Industry B undertakes batch-type resin manufacturing operations. It has aboveground storage tanks for raw materials and finished goods, resin loading operations, and warehouses for 55-gallon drums of finished product. Industry B manufactures alkyd, saturated and unsaturated polyester resins in batches using reactor vessels and mix tanks. Most of the feedstock liquids are pumped from storage tanks to the kettles and mixers via a closed piping system. Additional feedstocks are added manually as solids from bags and sacks via manways, which are located on top of the kettles. The resin is then chemically reacted in the kettles. After the reaction step finishes, the resin is transferred from the kettles to the mix tanks, where solvents are added to thin it. The primary byproduct of the reaction is water vapor containing condensed soluble organics. The byproduct flows to an isolation tank where the vapors are directed to an onsite thermal oxidizer. The finished resin is then pumped through one of three types of filtration systems into finished goods storage tanks, 55-gallon drums, 350-gallon intermediate bulk container totes, or directly into tanker trucks. A typical batch takes about 30 hours to complete.

Section 9. Cooling Water Intake Structures

Item 9.1. Indicate whether the facility uses cooling water. If yes, continue to Item 9.2. If no, skip to Item 10.1.

Item 9.2. Identify the source of the cooling water. For example, indicate whether the cooling water is from a surface water, groundwater well, public water system, or treated effluent that would otherwise be discharged to a water of the U.S.

If the facility uses a cooling water intake structure as described in 40 CFR 125, Subparts I and J, the facility may have additional application requirements under 40 CFR 122.21(r). Note that the information required by 40 CFR 122.21(r) is not requested as part of Form 1. Contact your NPDES permitting authority to determine the specifics of what you should provide and when.

Section 10. Variance Requests

An applicant (other than a POTW) may request a variance from otherwise applicable effluent limitations under certain conditions described at 40 CFR 122.21(m).

Item 10.1. If known at the time of application, check all of the authorized variances that you plan to request or renew. Note that you are not being asked to submit any other information at this time. Contact your NPDES permitting authority to determine the specifics of what you should provide and when. The ability to request a variance is not limited to the time of application, and an applicant may request a variance consistent with statutory and regulatory requirements.

Section 11. Checklist and Certification

Item 11.1. Review the checklist provided. In Column 1, mark the sections of Form 1 that you have completed and are submitting with your application. In Column 2, indicate for each section whether you are submitting attachments.

Item 11.2. The Clean Water Act provides for severe penalties for submitting false information on this application form. CWA Section 309(c)(2) provides that, "Any person who knowingly makes any false statement, representation, or certification in any application, ...shall upon conviction, be punished by a fine of no more than \$10,000 or by imprisonment for not more than six months, or both."

FEDERAL REGULATIONS AT 40 CFR 122.22 REQUIRE THIS APPLICATION TO BE SIGNED AS FOLLOWS:

- A. For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.
- C. For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (1) The chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

[illegible]

FORM 1—ACTIVITIES THAT DO NOT REQUIRE PERMITS

You are not required to obtain an NPDES permit if your discharge is in one of the following categories, as provided by the CWA and NPDES regulations at 40 CFR 122 to 125. (However, under CWA Sections 510 and 312, some discharges exempted from the federal NPDES requirements may still be regulated by a state permitting authority.)

- Any discharge of sewage from vessels and any effluent from properly functioning marine engines, laundry, shower, and galley sink wastes, or any other discharge incidental to the normal operation of a vessel, including vessels of the Armed Forces within the meaning of section 312 of the CWA and recreational vessels within the meaning of section 502(25) of the CWA. None of these exclusions apply to rubbish, trash, garbage, or other such materials discharged overboard; nor to other discharges when the vessel is operating in a capacity other than as a means of transportation such as when used as an energy or mining facility, a storage facility or a seafood processing facility, or when secured to a storage facility or a seafood processing facility, or when secured to the bed of the ocean, contiguous zone or waters of the United States for the purpose of mineral or oil exploration or development.
- Discharges of dredged or fill material into waters of the United States that are regulated under CWA Section 404.
- The introduction of sewage, industrial wastes, or other pollutants into publicly owned treatment works by indirect dischargers. Plans or agreements to switch to this method of disposal in the future do not relieve dischargers of the obligation to have and comply with permits until all discharges of pollutants to waters of the United States are eliminated. (See also 40 CFR 122.47(b).) This exclusion does not apply to the introduction of pollutants to privately owned treatment works or to other discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other party not leading to treatment works.
- Any discharge in compliance with the instructions of an On-Scene Coordinator pursuant to 40 CFR 300 (The National Oil and Hazardous Substances Pollution Contingency Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances).
- Any introduction of pollutants from non point-source agricultural and silvicultural activities, including stormwater runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges from concentrated animal feeding operations as defined in 40 CFR 122.23, discharges from concentrated aquatic animal production facilities as defined in 40 CFR 122.23, discharges from concentrated aquatic animal production facilities as defined in 40 CFR 122.24, discharges to aquaculture projects as defined in 40 CFR 122.25, and discharges from silvicultural point sources as defined in 40 CFR 122.27. **Note:** Per 40 CFR 122.26(b)(14)(ii), facilities classified within SIC 24, Industry Group 241, that are rock crushing, gravel washing, log sorting, or log storage facilities operated in connection with silvicultural activities defined in 40 CFR 122.27(b)(2)–(3) and Industry Groups 242 through 249; 26 (except 265 and 267), 28 (except 283), 29, 311, 32 (except 323), 33, 3441, and 373 (not included are all other types of silviculture facilities) are considered stormwater discharges associated with industrial activity, and are required to obtain an NPDES permit.
- Return flows from irrigated agriculture.
- Discharges into a privately owned treatment works, except as the NPDES permitting authority may otherwise require under 40 CFR 122.44(m).
- Discharges from a water transfer. “Water transfer” means an activity that conveys or connects waters of the United States without subjecting the transferred water to intervening industrial, municipal, or commercial use. This exclusion does not apply to pollutants introduced by the water transfer activity itself to the water being transferred.

FORM 1—GLOSSARY

Note: This glossary includes terms used in the various NPDES application forms, including Form 1. The definitions are from the NPDES regulations at 40 CFR 122.2 unless otherwise specified. If you have any questions concerning the meaning of any of these terms, contact your NPDES permitting authority.

ANIMAL FEEDING OPERATION (defined at § 122.23) means a lot or facility (other than an aquatic animal production facility) where the following conditions are met;

- Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period; and
- Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

APPLICATION means the EPA standard national forms for applying for a permit, including any additions, revisions, or modifications to the forms; or forms approved by EPA for use in approved states, including any approved modifications or revisions.

APPROVED PROGRAM or **APPROVED STATE** means a State or interstate program which has been approved or authorized by EPA under part 123.

AQUACULTURE PROJECT (defined at § 122.25) means a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals. **DESIGNATED PROJECT AREA** means the portions of the waters of the United States within which the permittee or permit applicant plans to confine the cultivated species, using a method or plan or operation (including, but not limited to, physical confinement) which, on the basis of reliable scientific evidence, is expected to ensure that specific individual organisms comprising an aquaculture crop will enjoy increased growth attributable to the discharge of pollutants, and be harvested within a defined geographic area.

AVERAGE MONTHLY DISCHARGE LIMITATION means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during that month divided by the number of daily discharges measured during that month.

AVERAGE WEEKLY DISCHARGE LIMITATION means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

BEST MANAGEMENT PRACTICES (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs include treatment requirements, operation procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

BIOSOLIDS (*see sewage sludge*).

BYPASS (defined at § 122.41(m)) means the intentional diversion of waste streams from any portion of a treatment facility.

COMBINED SEWER OVERFLOW (CSO) means a discharge from a combined sewer system (CSS) at a point prior to the Publicly Owned Treatment Works (POTW) Treatment Plant (defined at § 403.3(r)).

COMBINED SEWER SYSTEM (CSS) means a wastewater collection system owned by a State or municipality (as defined by section 502(4) of the CWA) which conveys sanitary wastewaters (domestic, commercial and industrial wastewaters) and storm water through a single-pipe system to a Publicly Owned Treatment Works (POTW) Treatment Plant (as defined at § 403.3(r)).

CONCENTRATED ANIMAL FEEDING OPERATION (defined at § 122.23) means an animal feeding operation that is defined as a Large CAFO or as a Medium CAFO by the terms of (A) or (B) below, or that is designated as a CAFO in accordance with 40 CFR 122.23(c). Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes.

A. **LARGE CONCENTRATED ANIMAL FEEDING OPERATION (LARGE CAFO)** means an AFO that stables or confines as many as or more than the numbers of animals specified in any of the following categories:

1. 700 mature dairy cows, whether milked or dry;
2. 1,000 veal calves;
3. 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
4. 2,500 swine each weighing 55 pounds or more;
5. 10,000 swine each weighing less than 55 pounds;

FORM 1—GLOSSARY CONTINUED

6. 500 horses;
7. 10,000 sheep or lambs;
8. 55,000 turkeys;
9. 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;
10. 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
11. 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
12. 30,000 ducks (if the AFO uses other than a liquid manure handling system); or
13. 5,000 ducks (if the AFO uses a liquid manure handling system).

B. **MEDIUM CONCENTRATED ANIMAL FEEDING OPERATION (MEDIUM CAFO)** means any AFO with the type and number of animals that fall within any of the ranges listed below and which has been defined or designated as a CAFO. An AFO is defined as a Medium CAFO if:

1. The type and number of animals that it stables and confines falls within any of the following ranges:
 - a. 200 to 699 mature dairy cows, whether milked or dry;
 - b. 300 to 999 veal calves;
 - c. 300 to 999 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
 - d. 750 to 2,499 swine each weighing 55 pounds or more;
 - e. 3,000 to 9,999 swine each weighing less than 55 pounds;
 - f. 150 to 499 horses;
 - g. 3,000 to 9,999 sheep or lambs;
 - h. 16,500 to 54,999 turkeys;
 - i. 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;
 - j. 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
 - k. 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;
 - l. 10,000 to 29,999 ducks (if the AFO uses other than a liquid manure handling system); ore
 - m. 1,500 to 4,999 ducks (if the AFO uses a liquid manure handling system); and
2. Either one of the following conditions are met:
 - a. Pollutants are discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device; or
 - b. Pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with animals confined in the operation.

CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY (defined at § 122.24) means a hatchery, fish farm, or other facility which contains, grows, or holds aquatic animals in either of the following categories, or which the Director designates as such on a case-by-case basis:

- A. Cold water fish species or other cold water aquatic animals including, but not limited to, the *Salmonidae* family of fish (e.g., trout and salmon) in ponds, raceways, or other similar structures which discharge at least 30 days per year but does not include:
 1. Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; and
 2. Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.
- B. Warm water fish species or other warm water aquatic animals including, but not limited to, the *Ameiuridae*, *Cetrarchidae*, and *Cyprinidae* families of fish (e.g., respectively, catfish, sunfish, and minnows) in ponds, raceways, or other similar structures which discharge at least 30 days per year, but does not include:
 1. Closed ponds which discharge only during periods of excess runoff; or
 2. Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.

FORM 1—GLOSSARY CONTINUED

CWA means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92–500, as amended by Public Law 95–217, Public Law 95–576, Public Law 96–483 and Public Law 97–117, 33 U.S.C. 1251 *et seq.*

CWA AND REGULATIONS means the Clean Water Act (CWA) and applicable regulations promulgated thereunder. In the case of an approved State program, it includes State program requirements.

DAILY DISCHARGE means the “discharge of a pollutant” measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.

DIRECT DISCHARGE means the “discharge of a pollutant.”

DIRECTOR means the Regional Administrator or the State Director, as the context requires, or an authorized representative. When there is no “approved State program,” and there is an EPA administered program, “Director” means the Regional Administrator. When there is an approved State program, “Director” normally means the State Director. In some circumstances, however, EPA retains the authority to take certain actions even when there is an approved State program. (For example, when EPA has issued an NPDES permit prior to the approval of a State program, EPA may retain jurisdiction over that permit after program approval, see § 123.1.) In such cases, the term “Director” means the Regional Administrator and not the State Director.

DISCHARGE (OF A POLLUTANT) means:

- Any addition of any pollutant or combination of pollutants to waters of the United States from any point source; or
- Any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes discharges into waters of the United States from: surface runoff which is collected or channelled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any “indirect discharger”.

DISCHARGE MONITORING REPORT means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by “approved States” as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the state agency name, address, logo, and other similar information, as appropriate, in place of EPA’s.

DRAFT PERMIT means a document prepared under § 124.6 indicating the Director’s tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a “permit.” A notice of intent to terminate a permit, and a notice of intent to deny a permit, as discussed in § 124.5, are types of “draft permits.” A denial of a request for modification, revocation and reissuance, or termination, as discussed in § 124.5, is not a “draft permit.” A “proposed permit” is not a “draft permit.”

EFFLUENT LIMITATION means any restriction imposed by the Director on quantities, discharge rates, and concentrations of “pollutants” which are “discharged” from “point sources” into “waters of the United States,” the waters of the “contiguous zone,” or the ocean.

EFFLUENT LIMITATIONS GUIDELINES means a regulation published by the Administrator under section 304(b) of the CWA to adopt or revise “effluent limitations.”

ENVIRONMENTAL PROTECTION AGENCY (EPA) means the United States Environmental Protection Agency.

FACILITY or **ACTIVITY** means any NPDES “point source” or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

GENERAL PERMIT means an NPDES “permit” issued under § 122.28 authorizing a category of discharges under the CWA within a geographical area.

HAZARDOUS SUBSTANCE means any substance designated under 40 CFR part 116 pursuant to section 311 of the CWA.

INDIAN COUNTRY (or **INDIAN LANDS**) means:

- All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
- All dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and
- All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

FORM 1—GLOSSARY CONTINUED

INDIAN TRIBE means any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian reservation.

INDIRECT DISCHARGE means a nondomestic discharger introducing “pollutants” to a “publicly owned treatment works.”

LARGE MUNICIPAL SEPARATE STORM SEWER SYSTEM (defined at § 122.26(b)(4)) means all municipal separate storm sewers that are either:

- (i) Located in an incorporated place with a population of 250,000 or more as determined by the 1990 Decennial Census by the Bureau of the Census (Appendix F of 40 CFR 122); or
- (ii) Located in the counties listed in appendix H of 40 CFR 122, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
- (iii) Owned or operated by a municipality other than those described in paragraphs (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraphs (i) or (ii). In making this determination the Director may consider the following factors:
 - (A) Physical interconnections between the municipal separate storm sewers;
 - (B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (i);
 - (C) The quantity and nature of pollutants discharged to waters of the United States;
 - (D) The nature of the receiving waters; and
 - (E) Other relevant factors; or
- (iv) The Director may, upon petition, designate as a large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (i), (ii), (iii).

LOG SORTING AND LOG STORAGE FACILITIES (defined at § 122.27) means facilities whose discharges result from the holding of unprocessed wood, for example, logs or roundwood with bark or after removal of bark held in self-contained bodies of water (mill ponds or log ponds) or stored on land where water is applied intentionally on the logs (wet decking). (See 40 CFR 429, subpart I, including the effluent limitations guidelines.)

MAJOR FACILITY means any NPDES “facility or activity” classified as such by the Regional Administrator, or, in the case of “approved State programs,” the Regional Administrator in conjunction with the State Director.

MAXIMUM DAILY DISCHARGE LIMITATION means the highest allowable “daily discharge.”

MEDIUM MUNICIPAL SEPARATE STORM SEWER SYSTEM (defined at § 122.26(b)(7)) means all municipal separate storm sewers that are either:

- (i) Located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of the Census (appendix G of 40 CFR 122); or
- (ii) Located in the counties listed in appendix I of 40 CFR 122, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
- (iii) Owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph (i) or (ii). In making this determination the Director may consider the following factors:
 - (A) Physical interconnections between the municipal separate storm sewers;
 - (B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (i);
 - (C) The quantity and nature of pollutants discharged to waters of the United States;
 - (D) The nature of the receiving waters; or
 - (E) Other relevant factors; or

FORM 1—GLOSSARY CONTINUED

(iv) The Director may, upon petition, designate as a medium municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (i), (ii), (iii) of this section.

MUNICIPALITY means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA.

MUNICIPAL SEPARATE STORM SEWER (defined at § 122.26(b)(8)) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.
- Designed or used for collecting or conveying stormwater.
- Which is not a combined sewer; and
- Which is not part of a POTW as defined at 40 CFR 122.2.

MUNICIPAL SLUDGE (*see sewage sludge*)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the CWA. The term includes an “approved program.”

NEW DISCHARGER means any building, structure, facility, or installation:

- From which there is or may be a “discharge of pollutants;”
- That did not commence the “discharge of pollutants” at a particular “site” prior to August 13, 1979;
- Which is not a “new source;” and
- Which has never received a finally effective NPDES permit for discharges at that “site.”

This definition includes an “indirect discharger” which commences discharging into “waters of the United States” after August 13, 1979. It also means any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas developmental drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a “site” for which it does not have a permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental drilling rig that commences the discharge of pollutants after August 13, 1979, at a “site” under EPA’s permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the Regional Administrator in the issuance of a final permit to be an area of biological concern. In determining whether an area is an area of biological concern, the Regional Administrator shall consider the factors specified in 40 CFR 125.122(a)(1) through (10).

An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a “new discharger” only for the duration of its discharge in an area of biological concern.

NEW SOURCE means any building, structure, facility, or installation from which there is or may be a “discharge of pollutants,” the construction of which commenced:

- After promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- After proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

OWNER OR OPERATOR means the owner or operator of any “facility or activity” subject to regulation under the NPDES program.

PERMIT means an authorization, license, or equivalent control document issued by EPA or an “approved State” to implement the requirements of this part and parts 123 and 124. “Permit” includes an NPDES “general permit” (§ 122.28). Permit does not include any permit which has not yet been the subject of final agency action, such as a “draft permit” or a “proposed permit.”

PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES FROM PESTICIDE APPLICATION means the application of biological pesticides, and the application of chemical pesticides that leave a residue, from point sources to waters of the United States. In the context of this definition of pesticide discharges to waters of the United States from pesticide application, this does not include

FORM 1—GLOSSARY CONTINUED

agricultural storm water discharges and return flows from irrigated agriculture, which are excluded by law (33 U.S.C. 1342(l); 33 U.S.C. 1362(14)).

PESTICIDE RESIDUE for the purpose of determining whether a NPDES permit is needed for discharges to waters of the United States from pesticide application, means that portion of a pesticide application that is discharged from a point source to waters of the United States and no longer provides pesticidal benefits. It also includes any degradates of the pesticide.

POINT SOURCE means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff. (See § 122.3).

POLLUTANT means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

- Sewage from vessels; or
- Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources. Note: Radioactive materials covered by the Atomic Energy Act are those encompassed in its definition of source, byproduct, or special nuclear materials. Examples of materials not covered include radium and accelerator-produced isotopes. See *Train v. Colorado Public Interest Research Group, Inc.*, 426 U.S. 1 (1976).

PRIMARY INDUSTRY CATEGORY means any industry category listed in the NRDC settlement agreement (*Natural Resources Defense Council et al. v. Train*, 8 E.R.C. 2120 (D.D.C. 1976), modified 12 E.R.C. 1833 (D.D.C. 1979)); also listed in appendix A of part 122.

PRIVATELY OWNED TREATMENT WORKS means any device or system which is (1) used to treat wastes from any facility whose operator is not the operator of the treatment works and (2) not a "POTW."

PROCESS WASTEWATER means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

PROPOSED PERMIT means a state NPDES "permit" prepared after the close of the public comment period (and, when applicable, any public hearing and administrative appeals) which is sent to EPA for review before final issuance by the State. A "proposed permit" is not a "draft permit."

PUBLICLY OWNED TREATMENT WORKS or **POTW** (defined at § 403.3) means a treatment works as defined by CWA Section 212, which is owned by a state or municipality (as defined by CWA Section 502(4)). This definition includes any devices or systems used in the storage, treatment, recycling, and reclamation) of municipal sewage or industrial wastes of a liquid nature. This definition also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW. The term also means the municipality as defined in CWA Section 502(4), which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

REGIONAL ADMINISTRATOR means the Regional Administrator of the appropriate Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

ROCK CRUSHING AND GRAVEL WASHING FACILITIES (defined at § 122.27) means facilities which process crushed and broken stone, gravel, and riprap (See 40 CFR 436, subpart B, including the effluent limitations guidelines).

SCHEDULE OF COMPLIANCE means a schedule of remedial measures included in a "permit", including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with the CWA and regulations.

SECONDARY INDUSTRY CATEGORY means any industry category which is not a primary industry category.

SEWAGE FROM VESSELS means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under section 312 of the CWA, except that with respect to commercial vessels on the Great Lakes this term includes graywater. For the purposes of this definition, "graywater" means galley, bath, and shower water.

SEWAGE SLUDGE means any solid, semi-solid, or liquid residue removed during the treatment of municipal waste water or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced waste water treatment, scum, septage, portable toilet pumpings, type III marine sanitation device pumpings (33 CFR 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

FORM 1—GLOSSARY CONTINUED

SILVICULTURAL POINT SOURCE (defined at § 122.27) means any discernible, confined, and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the United States. This term does not include non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural runoff. However, some of these activities (such as stream crossing for roads) may involve point source discharges of dredged or fill material which may require a CWA Section 404 permit (see 33 CFR 209.120 and part 233).

SITE means the land or water area where any “facility or activity” is physically located or conducted, including adjacent land used in connection with the facility or activity.

SLUDGE-ONLY FACILITY means any “treatment works treating domestic sewage” whose methods of sewage sludge use or disposal are subject to regulations promulgated pursuant to section 405(d) of the CWA and is required to obtain a permit under § 122.1(b)(2).

STANDARDS FOR SEWAGE SLUDGE USE OR DISPOSAL means the regulations promulgated pursuant to section 405(d) of the CWA which govern minimum requirements for sludge quality, management practices, and monitoring and reporting applicable to sewage sludge or the use or disposal of sewage sludge by any person.

STATE means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, or an Indian Tribe as defined in these regulations which meets the requirements of § 123.31 of this chapter.

STATE DIRECTOR means the chief administrative officer of any State or interstate agency operating an “approved program,” or the delegated representative of the State Director. If responsibility is divided among two or more State or interstate agencies, “State Director” means the chief administrative officer of the State or interstate agency authorized to perform the particular procedure or function to which reference is made.

STORMWATER (or STORM WATER) (defined at § 122.26(b)(13)) means stormwater runoff, snow melt runoff, and surface runoff and drainage.

STORMWATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY (defined at § 122.26(b)(14)) means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under this part 122. For the categories of industries identified in this section, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities (including industrial facilities that are federally, State, or municipally owned or operated that meet the description of the facilities listed in paragraphs 1 through 14 below) include those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in “industrial activity” for purposes of 40 CFR 122.26(b)(14):

1. Facilities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under paragraph 11 below);
2. Facilities classified as Standard Industrial Classification 24, Industry Group 241 that are rock crushing, gravel washing, log sorting, or log storage facilities operated in connection with silvicultural activities defined in 40 CFR 122.27(b)(2)–(3) and Industry Groups 242 through 249; 26 (except 265 and 267), 28 (except 283), 29, 311, 32 (except 323), 33, 3441, 373; (not included are all other types of silvicultural facilities);
3. Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites

FORM 1—GLOSSARY CONTINUED

- where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);
4. Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA;
 5. Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under subtitle D of RCRA;
 6. Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;
 7. Steam electric power generating facilities, including coal handling sites;
 8. Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221–25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs 1–7 or 9–11 are associated with industrial activity;
 9. Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA;
 10. Construction activity including clearing, grading and excavation, except operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more;
 11. Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, and 4221–25.

TOXIC POLLUTANT means any pollutant listed as toxic under section 307(a)(1) or, in the case of “sludge use or disposal practices,” any pollutant identified in regulations implementing section 405(d) of the CWA.


TREATMENT WORKS TREATING DOMESTIC SEWAGE (TWTDS) means a POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices. For purposes of this definition, “domestic sewage” includes waste and waste water from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved State sludge management program under section 405(f) of the CWA, the Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal in 40 CFR 503 as a “treatment works treating domestic sewage,” where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 CFR 503.

UPSET (defined at § 122.41(n)) means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

VARIANCE means any mechanism or provision under section 301 or 316 of the CWA or under 40 CFR 125, or in the applicable “effluent limitations guidelines” which allows modification to or waiver of the generally applicable effluent limitation requirements or time deadlines of the CWA. This includes provisions which allow the establishment of alternative limitations based on fundamentally different factors or on sections 301(c), 301(g), 301(h), 301(i), or 316(a) of the CWA.

WATERS OF THE UNITED STATES as defined at § 122.2.

WHOLE EFFLUENT TOXICITY (WET) means the aggregate toxic effect of an effluent measured directly by a toxicity test.

EPA Identification Number		NPDES Permit Number		Facility Name		Form Approved 03/05/19 OMB No. 2040-0004	
Form 1 NPDES			U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater GENERAL INFORMATION				
SECTION 1. ACTIVITIES REQUIRING AN NPDES PERMIT (40 CFR 122.21(f) and (f)(1))							
Activities Requiring an NPDES Permit	1.1		Applicants <i>Not Required</i> to Submit Form 1				
	1.1.1	Is the facility a new or existing publicly owned treatment works ? If yes, STOP. Do NOT complete <input type="checkbox"/> No Form 1. Complete Form 2A.			1.1.2	Is the facility a new or existing treatment works treating domestic sewage ? If yes, STOP. Do NOT <input type="checkbox"/> No complete Form 1. Complete Form 2S.	
	1.2		Applicants <i>Required</i> to Submit Form 1				
	1.2.1	Is the facility a concentrated animal feeding operation or a concentrated aquatic animal production facility ? <input type="checkbox"/> Yes → Complete Form 1 <input type="checkbox"/> No and Form 2B.			1.2.2	Is the facility an existing manufacturing, commercial, mining, or silvicultural facility that is currently discharging process wastewater ? <input type="checkbox"/> Yes → Complete Form <input type="checkbox"/> No 1 and Form 2C.	
	1.2.3	Is the facility a new manufacturing, commercial, mining, or silvicultural facility that has not yet commenced to discharge ? <input type="checkbox"/> Yes → Complete Form 1 <input type="checkbox"/> No and Form 2D.			1.2.4	Is the facility a new or existing manufacturing, commercial, mining, or silvicultural facility that discharges only nonprocess wastewater ? <input type="checkbox"/> Yes → Complete Form <input type="checkbox"/> No 1 and Form 2E.	
	1.2.5	Is the facility a new or existing facility whose discharge is composed entirely of stormwater associated with industrial activity or whose discharge is composed of both stormwater and non-stormwater ? <input type="checkbox"/> Yes → Complete Form 1 <input type="checkbox"/> No and Form 2F unless exempted by 40 CFR 122.26(b)(14)(x) or (b)(15).					
SECTION 2. NAME, MAILING ADDRESS, AND LOCATION (40 CFR 122.21(f)(2))							
Name, Mailing Address, and Location	2.1		Facility Name				
	2.2		EPA Identification Number				
	2.3		Facility Contact				
	Name (first and last)		Title		Phone number		
Email address							
2.4		Facility Mailing Address					
Street or P.O. box							
City or town		State		ZIP code			


EPA Identification Number		NPDES Permit Number		Facility Name		Form Approved 03/05/19 OMB No. 2040-0004	
Name, Mailing Address, and Location Continued	2.5	Facility Location					
		Street, route number, or other specific identifier					
		County name		County code (if known)			
		City or town		State		ZIP code	
SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(f)(3))							
SIC and NAICS Codes	3.1	SIC Code(s)		Description (optional)			
	3.2	NAICS Code(s)		Description (optional)			
SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(f)(4))							
Operator Information	4.1	Name of Operator					
	4.2	Is the name you listed in Item 4.1 also the owner? <input type="checkbox"/> Yes <input type="checkbox"/> No					
	4.3	Operator Status <input type="checkbox"/> Public—federal <input type="checkbox"/> Public—state <input type="checkbox"/> Other public (specify) _____ <input type="checkbox"/> Private <input type="checkbox"/> Other (specify) _____					
Operator Information Continued	4.4	Phone Number of Operator					
	4.5	Operator Address					
	Street or P.O. Box						
Operator Information Continued		City or town		State		ZIP code	
		Email address of operator					
SECTION 5. INDIAN LAND (40 CFR 122.21(f)(5))							
Indian Land	5.1	Is the facility located on Indian Land? <input type="checkbox"/> Yes <input type="checkbox"/> No					

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))			
Existing Environmental Permits	6.1	Existing Environmental Permits (check all that apply and print or type the corresponding permit number for each)	
		<input type="checkbox"/> NPDES (discharges to surface water)	<input type="checkbox"/> RCRA (hazardous wastes)
		<input type="checkbox"/> PSD (air emissions)	<input type="checkbox"/> Nonattainment program (CAA)
		<input type="checkbox"/> Ocean dumping (MPRSA)	<input type="checkbox"/> Dredge or fill (CWA Section 404)
		<input type="checkbox"/> UIC (underground injection of fluids)	<input type="checkbox"/> NESHAPs (CAA)
		<input type="checkbox"/> Other (specify) _____	
SECTION 7. MAP (40 CFR 122.21(f)(7))			
Map	7.1	Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> CAFO—Not Applicable (See requirements in Form 2B.)	
SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(f)(8))			
Nature of Business	8.1	Describe the nature of your business.	
SECTION 9. COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(f)(9))			
Cooling Water Intake Structures	9.1	Does your facility use cooling water? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 10.1.	
	9.2	Identify the source of cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J may have additional application requirements at 40 CFR 122.21(r). Consult with your NPDES permitting authority to determine what specific information needs to be submitted and when.)	
SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(f)(10))			
Variance Requests	10.1	Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(m)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.) <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%; padding: 5px;"><input type="checkbox"/> Fundamentally different factors (CWA Section 301(n))</div> <div style="width: 50%; padding: 5px;"><input type="checkbox"/> Water quality related effluent limitations (CWA Section 302(b)(2))</div> <div style="width: 50%; padding: 5px;"><input type="checkbox"/> Non-conventional pollutants (CWA Section 301(c) and (g))</div> <div style="width: 50%; padding: 5px;"><input type="checkbox"/> Thermal discharges (CWA Section 316(a))</div> <div style="width: 50%; padding: 5px;"><input type="checkbox"/> Not applicable</div> </div>	

EPA Identification Number	NPDES Permit Number	Facility Name
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Form Approved 03/05/19
OMB No. 2040-0004

SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement	11.1	In Column 1 below, mark the sections of Form 1 that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.	
		Column 1	Column 2
	<input type="checkbox"/>	Section 1: Activities Requiring an NPDES Permit	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 2: Name, Mailing Address, and Location	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 3: SIC Codes	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 4: Operator Information	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 5: Indian Land	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 6: Existing Environmental Permits	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 7: Map	<input type="checkbox"/> w/ topographic map <input type="checkbox"/> w/ additional attachments
	<input type="checkbox"/>	Section 8: Nature of Business	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 9: Cooling Water Intake Structures	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 10: Variance Requests	<input type="checkbox"/> w/ attachments
	<input type="checkbox"/>	Section 11: Checklist and Certification Statement	<input type="checkbox"/> w/ attachments
	11.2	Certification Statement <i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
	Name (print or type first and last name)	Official title	
	Signature 	Date signed	

Water Permits Division



Application Form 2F

Stormwater Discharges Associated with Industrial Activity

NPDES Permitting Program

Note: Complete this form *and* Form 1 if you are a new or existing facility whose discharge is composed entirely of stormwater associated with industrial activity, excluding discharges from construction activity under 40 CFR 122.26(b)(14)(x) or (b)(15). If your discharge is composed of stormwater *and* non-stormwater, you must complete Forms 1 and 2F, *and* you must complete Form 2C, 2D, or 2E, as appropriate. See the “Instructions” inside for further details.

Paperwork Reduction Act Notice

The U.S. Environmental Protection Agency estimates the average burden to collect and complete Form 2F to be 28.1 hours. The estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments about the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

FORM 2F—INSTRUCTIONS

General Instructions

Who Must Complete Form 2F?

You must complete Form 2F if you answered “Yes” to Item 1.2.5 on Form 1—that is, you are a new or existing facility and your discharge is composed entirely of stormwater associated with industrial activity (excluding discharges from construction activity under 40 CFR 122.26(b)(14)(x) or (b)(15)) or composed of stormwater and non-stormwater and are seeking coverage under an *individual* National Pollutant Discharge Elimination System (NPDES) permit. Note that applicants in the latter category must also complete Forms 2C, 2D, or 2E, as applicable. See inset below.

Notes

- Form 2F must be completed by any operator of a facility that discharges stormwater associated with industrial activity or the operator of any stormwater discharger that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard.
- For discharges composed entirely of stormwater, the operator must complete Form 2F in conjunction with Form 1.
- For discharges of stormwater combined with process wastewater, the operator must complete and submit Form 2F, Form 1, and Form 2C. Process wastewater is water that comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, waste product, or wastewater.
- For discharges of stormwater combined with nonprocess wastewater, the operator must complete Form 2F, Form 1, and Form 2E. Nonprocess wastewater includes noncontact cooling water and sanitary wastes that are not regulated by effluent guidelines, except discharges by educational, medical, or commercial chemical laboratories.
- For new discharges of stormwater associated with industrial activity that will be combined with other new non-stormwater discharges, the operator must submit Form 2F, Form 1, and Form 2D.

Where to File Your Completed Form

Submit your completed application package (Forms 1 and 2F plus any other applicable forms) to your NPDES permitting authority. Consult Exhibit 1–1 of Form 1’s “General Instructions” to identify your NPDES permitting authority.

Public Availability of Submitted Information

The U.S. Environmental Protection Agency (EPA) will make information from NPDES permit application forms available to the public for inspection and copying upon request. You may not claim any information on Form 2F (or related attachments) as confidential.

You may make a claim of confidentiality for any information that you submit to EPA that goes beyond the information required by Form 2F. Note that NPDES permitting authorities will deny claims for treating any effluent data (estimated or actual) as confidential. If you do not assert a claim of confidentiality at the time you submit your information to the NPDES permitting authority, EPA may make the information available to the public without further notice to you. EPA will handle claims of confidentiality in accordance with the Agency’s business confidentiality regulations in Part 2 of Title 40 of the *Code of Federal Regulations* (CFR).

Completion of Forms

Print or type in the specified areas only. If you do not have enough space on the form to answer a question, you may continue on additional sheets, as necessary, using a format consistent with the form.

Provide your EPA Identification Number from the Facility Registry Service, NPDES permit number, and facility name at the top of each page of Form 2F and any attachments. If your facility is new (i.e., not yet constructed), write or type “New Facility” in the space provided for the EPA Identification Number an NPDES permit number. If you do not know your EPA Identification Number, contact your NPDES permitting authority. See Exhibit 1–1 of Form 1’s “General Instructions” for contact information. Additionally, for Tables A through D, provide the applicable outfall number at the top of each page.

Do not leave any response areas blank unless the form directs you to skip them. If the form directs you to respond to an item that does not apply to your facility or activity, enter “NA” for “not applicable” to show that you considered the item and determined a response was not necessary for your facility.

The NPDES permitting authority will consider your application complete when it and any supplementary material are received and completed according to the authority’s satisfaction. The NPDES permitting authority will judge the completeness of any application independently of the status of any other permit application or permit for the same facility or activity.

Definitions

The legal definitions of all key terms used in these instructions and Form 2F are in the “Glossary” at the end of the “General Instructions” in Form 1.

Line-by-Line Instructions**Section 1. Outfall Location**

Item 1.1. Identify each of the facility's outfalls by number. For each outfall, specify the latitude and longitude to the nearest 15 seconds and name of the receiving water. Latitude and longitude coordinates may be obtained in a variety of ways, including use of hand held devices (e.g., a GPS enabled smartphone), internet mapping tools (e.g., <https://mynasadata.larc.nasa.gov/latitudelongitude-finder/>), geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., U.S. Geological Survey or USGS). The location of each outfall (i.e., where the coordinates are collected) shall be the location where collected and concentrated stormwater flows are discharged from the facility such that the first receiving water body into which the discharge flows, either directly or through a separate storm sewer system, is a water of the United States. If you need further guidance in responding to Item 1.1, refer to <http://www.epa.gov/geospatial/latitudelongitude-data-standard>.

Note: In EPA's stormwater permits, "outfalls" are referred to as "discharge points."

Note that space has been provided on the form for six outfalls. If you have more than this number, type your information on a separate sheet of paper in a format similar to that of the form. Make sure you note the EPA Identification Number, NPDES permit number, and facility name at the top of the page and indicate the specific item of the form to which you are responding—Item 1.1 in this case. In other sections of the form, you will be asked to provide information by outfall number (Sections 2, 4, 5, and 7).

Section 2. Improvements

Item 2.1. Indicate if you are required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application. The requirements include, but are not limited to, permit conditions, administrative enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions. If yes, continue to Item 2.2. If no, skip to Section 3.

Item 2.2. Briefly identify and describe each applicable project (e.g., consent decree, enforcement order, or permit condition). For each condition, specify the affected outfall number(s), the source(s) of the discharge, the required final compliance date, and the projected final compliance date.

Item 2.3. OPTIONAL ITEM. Indicate if you have attached any sheets describing any additional water pollution control programs (or other environmental projects that could affect your discharges) that you may now have underway or planned. If you attach additional sheets, indicate in the attachment whether each program is actually underway or is planned, and indicate your actual or planned schedule for construction. Be sure to note your EPA Identification Number, NPDES permit number, and facility name at the top of any attached pages.

Section 3. Site Drainage Map

Item 3.1 Attach a site drainage map showing the topography of the facility. If a topographic map is unavailable, you may provide an outline of drainage areas served by the outfall(s) covered in the application. The site map must include the following information:

- Each of its drainage and discharge structures.
- The drainage area of each stormwater outfall.
- Paved areas and buildings within the drainage area of each stormwater outfall; each past or present area used for outdoor storage or disposal of significant materials; each existing structural control measure to reduce pollutants in stormwater runoff; materials loading and access areas; and areas where pesticides, herbicides, soil conditioners, and fertilizers are applied.
- Each hazardous waste treatment, storage, or disposal facility (including each area not required to have a Resource Conservation and Recovery Act permit and is used for accumulating hazardous waste for less than 90 days under 40 CFR 262.34).
- Each well where fluids from the facility are injected underground.
- Springs and other surface water bodies that receive stormwater discharges from the facility.

When you have completed and attached your site map to Form 2F, answer "Yes" to Item 3.1.

Section 4. Pollutant Sources

Item 4.1. List all outfalls discharging stormwater. Provide an estimate of the impervious surface area drained by the outfall. Specify units of measure. (Impervious surfaces are surfaces where stormwater runs off at rates significantly higher than background rates—e.g., predevelopment levels. They include paved areas, building roofs, parking lots, and roadways.)

Provide an estimate of the total surface area (impervious and pervious areas) drained by each outfall (within a mile radius of the facility). You may use the site map developed under Item 3.1 to estimate the total area drained by each outfall. For areas under 5 acres, consult your NPDES permitting authority to determine whether the area should be reported to the nearest tenth of an acre or nearest quarter of an acre.

Item 4.2. Provide a narrative description of the following:

- Significant materials that in three years prior to the submittal of this application have been treated, stored, or disposed of in a manner to allow exposure to stormwater.
- Method of treatment, storage, or disposal of such materials.
- Materials management practices employed, in the three years prior to the submittal of this application, to minimize contact by these materials with stormwater runoff.
- Materials loading and access areas.
- The location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

You should identify your significant materials by chemical name,

FORM 2F—INSTRUCTIONS CONTINUED

form (e.g., powder, liquid, etc.), and type of container or treatment unit. Indicate any materials treated, stored, or disposed of together. The term “significant materials” includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act; any chemical the facility is required to report pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act; and fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with stormwater discharges.

Item 4.3. For each outfall, list the location and type of existing structural and non-structural control measure(s) to reduce pollutants in stormwater runoff. Structural controls include structures that enclose materials handling or storage areas; structures that cover materials; and berms, dikes, or diversion ditches around manufacturing, production, storage, or treatment units and retention ponds. Spill prevention plans, employee training, visual inspections, preventive maintenance, and housekeeping measures are examples of non-structural controls.

Describe the treatment, including the schedule and type of maintenance activities performed, and the ultimate disposal of any solid or fluid wastes other than by discharge. For each structural control identified, indicate the type of treatment the stormwater receives using the codes in Exhibit 2F–1, at the end of the instructions. For each non-structural control identified, indicate “Not Applicable” in the “Codes from Exhibit 2F–1” column.

Section 5. Non-Stormwater Discharges

Item 5.1. Provide a certification that all outfalls that should contain stormwater discharges associated with industrial activity have been tested or evaluated for the presence of non-stormwater discharges. Tests for such non-stormwater discharges can include smoke tests, fluorometric dye tests, analysis of accurate schematics, and others.

Item 5.2. Include a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test used to support the certification in Item 5.1. All non-stormwater discharges must be identified in a Form 2C, 2D, or 2E. See “Who Must Complete Form 2F?” above for more information.

Section 6. Significant Leaks or Spills

Item 6.1. Describe any significant leaks or spills of toxic or hazardous pollutants at the facility within the three years prior to the submittal of this application. Include the approximate date and location of the spill or leak and the type and amount of material released.

Section 7. Discharge Information

Item 7.1. Answer whether you are a new source or new discharge. Contact your NPDES permitting authority to determine if you are a new source or new discharge.

Tables A, B, C, and D

Items 7.2 to 7.17. These items require you to collect and report data in Tables A through D, at the end of Form 2F, for the parameters and pollutants listed in Exhibits 2F–2, 2F–3, and 2F–4 (at the end of the instructions). The instructions for completing Tables A through D are table-specific, as are the criteria for determining who should complete them.

Important note: Read the “General Instructions for Reporting, Sampling, and Analysis” below before completing Items 7.2 to 7.17.

Item 7.2 and Table A. All applicants must complete Table A. If the discharge is an existing discharge and your discharge is composed exclusively of stormwater (i.e., no process or nonprocess wastewater) then you only need to provide monitoring data for oil and grease, total phosphorus, total Kjeldahl nitrogen, and total nitrogen. Indicate “NA” for “not applicable” in the columns for all other parameters. Answer “Yes” to Item 7.2 once you have completed this task.

Item 7.3 and Table B. Indicate whether the facility is subject to an effluent limitations guideline (ELG) (see 40 CFR Subchapter N to determine which pollutants are limited in ELGs) or if the facility is subject to effluent limitations in an NPDES permit for its process wastewater or stormwater (if the facility is operating under an existing NPDES permit). If yes, continue to Item 7.4. If no, skip to Item 7.5.

Note: Stormwater discharges from certain industrial sources or activities have specific ELGs for which they must comply. These *stormwater-specific* ELGs include:

Regulated Discharge	40 CFR Section
Discharges resulting from spraydown or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, byproducts or waste products (SIC 2874)	Part 418, Subpart A
Runoff from asphalt emulsion facilities	Part 443, Subpart A
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436, Subparts B, C, and D
Runoff from hazardous waste and non-hazardous waste landfills	Part 445, Subparts A and B
Runoff from coal storage piles at steam electric generating facilities	Part 423
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Part 449

Item 7.4. In Table B, list all pollutants that are limited in an ELG to which the facility is subject and all pollutants listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit) and provide quantitative data for each pollutant (provide actual data for existing dischargers and estimated data for new sources and new dischargers). If a pollutant in Exhibits 2F–2 or 2F–3 is indirectly limited by an ELG through an indicator (e.g., use of total suspended solids as an indicator to control the discharge of iron and aluminum), you must provide data for the pollutant in Table B. Complete one table for each outfall. Answer “Yes” to Item 7.4 once you have completed this task.

FORM 2F—INSTRUCTIONS CONTINUED

Item 7.5 and Table C. Table C requires you to address the pollutants in Exhibits 2F–2, 2F–3, and 2F–4 for each outfall. Pollutants in each of these exhibits are addressed differently.

Indicate whether you know or have reason to believe any pollutants in Exhibit 2F–2 are present in the discharge. If yes, continue to Item 7.6. If no, skip to Item 7.7.

Item 7.6. For each outfall, list all pollutants in Exhibit 2F–2 that you know or have reason to believe are present in the discharge in Table C (except pollutants previously listed in Table B that are limited directly or indirectly by an ELG) and either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged. Answer “Yes” to Item 7.6 once you have completed this task.

Item 7.7. This item asks if you qualify as a “small business.” If so, you are exempt from the reporting requirements for the organic toxic pollutants listed in Exhibit 2F–3.

You can qualify as a small business in two ways: (1) If your facility is a coal mine and if your probable total annual production is less than 100,000 tons per year, you may submit past production data or estimated future production (such as a schedule of estimated total production under 30 CFR 795.14(c)) instead of conducting analyses for the organic toxic pollutants; (2) If your facility is not a coal mine and if your gross total annual sales for the most recent three years average less than \$100,000 per year (in second quarter 1980 dollars), you may submit sales data for those years instead of conducting analyses for the organic toxic pollutants. The production or sales data must be for the facility that is the source of the discharge. The data should not be limited to production or sales for the process or processes that contribute to the discharge, unless those are the only processes at your facility. For sales data, in situations involving intra-corporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures for years after 1980 should be indexed to the second quarter of 1980 by using the gross national product price deflator (second quarter of 1980 = 100). This index is available online from the U.S. Department of Commerce, Bureau of Economic Analysis at <http://www.bea.gov/national/pdf/SNTables.pdf>.

If you qualify as a small business according to the criteria above, answer “Yes” to Item 7.7 and skip to Item 7.18. Otherwise, answer “No” and continue to Item 7.8.

Item 7.8. Indicate whether you know or have reason to believe any pollutants in Exhibit 2F–3 are present in the discharge. If yes, continue to Item 7.9. If no, skip to Item 7.10.

Item 7.9. For each outfall, list all pollutants in Exhibit 2F–3 that you know or have reason to believe are present in the discharge in Table C (except pollutants previously listed in Table B). Answer “Yes” to Item 7.9 once you have completed this task.

Item 7.10. Indicate whether you expect any of the pollutants from Exhibit 2F–3 to be discharged in concentrations of 10 parts per billion (ppb) or greater. If yes, continue to Item 7.11. If no, skip to Item 7.12.

Item 7.11. Provide quantitative data in Table C for those pollutants in Exhibit 2F–3 that you expect to be discharged in concentrations of 10 ppb or greater (provide actual data for existing dischargers and estimated data for new sources and new dischargers). Answer “Yes” to Item 7.11 once you have completed this task.

Item 7.12. Indicate whether you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater. If yes, continue to Item 7.13. If no, skip to Item 7.14.

Item 7.13. Provide quantitative data in Table C for the pollutants identified in Item 7.12 that you expect to be discharged in concentrations of 100 ppb or greater (provide actual data for existing dischargers and estimated data for new sources and new dischargers). Answer “Yes” to Item 7.13 once you have completed this task.

Item 7.14. For any pollutants you expect to be present in the discharge at concentrations less than 10 ppb (or less than 100 ppb for the above four pollutants), either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged in Table C. Answer “Yes” to Item 7.14 once you have completed this task.

Item 7.15. Indicate whether you know or have reason to believe any pollutants in Exhibit 2F–4 are present in the discharge. If yes, continue to Item 7.16. If no, skip to Item 7.17.

Item 7.16. For each outfall, list any pollutant in Exhibit 2F–4 that you know or believe to be present in the discharge in Table C and explain why you believe it to be present. No analysis is required, but if you have analytical data, you must report it. Answer “Yes” to Item 7.16 once you have completed this task.

Note: Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed in Exhibit 2F–5) may be exempted from the requirements of CWA Section 311, which establishes reporting requirements, civil penalties, and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance can be exempted if the origin, source, and amount of the discharged substances are identified in the NPDES permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. If you would like to apply for an exemption from the requirements of CWA Section 311, attach additional sheets of paper to your application, setting forth the following information:

1. The substance and the amount of each substance that might be discharged.
2. The origin and source of the discharge of the substance.
3. The treatment to be provided for the discharge by:
 - a. An onsite treatment system separate from any treatment system treating your normal discharge;
 - b. A treatment system designed to treat your normal discharge and that is additionally capable of treating the amount of the substance identified under paragraph 1 above; or
 - c. Any combination of the above.

See 40 CFR 117.12(a)(2) and (c) or contact your NPDES permitting authority for further information on exclusions from CWA Section 311.

Item 7.17 and Table D. Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow weighted composite sample in Table D. If sampling is conducted during more than one storm event, you only need to report the information

requested on Table D for the storm event(s) that resulted in any maximum pollutant concentration reported on Tables A through C.

Provide flow measurements or estimates of the flow rate, as well as the total amount of discharge for the storm event(s) sampled, the method of flow measurement, or estimation. Provide the data and duration of the storm event(s) sampled, rainfall measurements, or estimates of the storm event that generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event. Answer "Yes" to Item 7.17 once you have completed this task.

Used or Manufactured Toxics

Item 7.18. Review Exhibits 2F–2 through 2F–4 and determine if you currently use or manufacture any of the pollutants listed as intermediate or final products or byproducts. If so, answer "Yes." You should also answer "Yes" if you know or have reason to believe that 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD) is discharged or if you use or manufacture 2,4,5-trichlorophenoxy acetic acid (2,4,5-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP). If your answer to Item 7.18 is "No," skip to Section 8.

Item 7.19. List all of the toxic pollutants identified under Item 7.18, including TCDD. Note that the NPDES permitting authority may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the NPDES permitting authority has adequate information to issue your permit. You may not claim any information submitted in response to Item 7.18 as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Section 8. Biological Toxicity Testing Data

Item 8.1. Answer whether you know of or have reason to believe that biological toxicity testing has been conducted of your wastewater treatment, including engineering reports or pilot plant studies. If no, skip to Section 9. Otherwise, continue.

Item 8.2. List any tests of which you are aware and their purposes.

Section 9. Contract Analysis Information

Item 9.1. Indicate if any of the analyses performed in Section 7 were performed by a contract laboratory or consulting firm. If no, skip to Section 10. If yes, continue to Item 9.2.

Item 9.2. Provide the name, address, phone number, and pollutants analyzed by the laboratory or consulting firm(s) in the spaces provided.

Section 10. Checklist and Certification Statement

Item 10.1. Review the checklist provided on the application. In Column 1, mark the sections of Form 2F that you have completed and are submitting with your application. For each section in Column 2, indicate whether you are submitting attachments.

Item 10.2. The Clean Water Act (CWA) provides for severe penalties for submitting false information on this application form. Section 309(c)(2) of the CWA provides that, "Any person who knowingly makes any false material statement, representation, or certification in any application, ...shall upon conviction be punished by a fine of not more than \$10,000 or by imprisonment for not more than six months or both."

FEDERAL REGULATIONS AT 40 CFR 122.22 REQUIRE THIS APPLICATION TO BE SIGNED AS FOLLOWS:

- A. For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- B. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.
- C. For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (1) The chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

END

**Submit your completed Form 1, Form 2F, and
all associated attachments
(and any other required NPDES application forms)
to your NPDES permitting authority.**

General Instructions for Reporting, Sampling, and Analysis

Important note: Read these instructions before completing Tables A through C and Section 7 of Form 2F.

General Items

Complete the applicable tables for each outfall at your facility. Be sure to note the EPA Identification Number, NPDES permit number, facility name, and applicable outfall number at the top of each table page and any associated attachments.

You may report some or all of the required data by attaching separate sheets of paper instead of completing Tables A through C for each of your outfalls so long as the sheets contain all of the required information and are similar in format to Tables A through C. For example, you may be able to print a report in a compatible format from the data system used in your gas chromatography/mass spectrometry (GC/MS) analysis completed under Table B.

If you are an existing discharger, you are required to report *actual* quantitative data. See "Use of Historic Data" below for use of historic data. If you are a new source or discharge, you may supply *estimated* data along with the source of each estimate. If you have quantitative data available, however, you must provide it. Base estimates on available, in-house or contractor engineering reports, or any other studies performed on the proposed facility. Use the following codes to report your source information in the "Source of Information" column:

Data Source	Code
Engineering reports	1
Actual data from pilot plants	1
Estimates from other engineering reports	2
Data from other similar plants	3
Best professional estimates	4
Others	5 and specify on the table

No later than 24 months after your facility commences to discharge, you must complete and submit sampling and analysis data for the pollutants and parameters in Tables A through C. However, you need not report results for tests you have already performed and reported under the discharge monitoring requirements of your NPDES permit.

Table A requires you to report at least one analysis for each pollutant listed. Tables B and C require you to report analytical data in two ways. For some pollutants addressed in Tables B and C, if you know or have reason to know that the pollutant is present in your discharge, you may be required to list the pollutant and test (sample and analyze) and report the levels of the pollutants in your discharge. For all other pollutants addressed in Tables B and C, you must list the pollutant if you know or have reason to know that the pollutant is present in the discharge, and either report quantitative data for the pollutant or briefly describe the reasons the pollutant is expected to be discharged. (See Items 7.2 through 7.17 of the instructions for completing Tables A through C.). Base your determination that a pollutant is/will be present in your discharge on your knowledge of the facility's raw materials, material management practices, maintenance chemicals, history of spills and releases, intermediate and final products and

byproducts, and any previous analyses known to you of your effluent or similar effluent.

Sampling

The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater or stormwater discharges. You may contact your NPDES permitting authority for detailed guidance on sampling techniques and for answers to specific questions. See Exhibit 1-1 of Form 1 for contact information. Any specific requirements in the analytical methods—for example, sample containers, sample preservation, holding times, and the collection of duplicate samples—must be followed.

The time when you sample should be representative of your normal operation, to the extent feasible, with all processes that contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Collect samples from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present NPDES permit, or at any site adequate for the collection of a representative sample.

Grab samples must be taken in the first 30 minutes of discharge (or as soon thereafter as practicable) for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*) and enterococci (previously known as fecal streptococcus at 40 CFR 122.26(d)(2)(iii)(A)(3)), and volatile organic compounds. You are not required to analyze a flow-weighted composite for these parameters.

For all other pollutants, both a grab sample collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge and a flow-weighted composite sample must be analyzed. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours.

All samples must be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

A grab sample must be taken during the first 30 minutes of the discharge (or as soon thereafter as practicable), and a flow-weighted composite must be taken for the entire event or for the first three hours of the event.

Grab and composite samples are defined as follows:

Grab sample: An individual sample of at least 100 milliliters collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge. This sample is to be analyzed separately from the composite sample.

Flow-weighted composite sample: A flow-weighted composite sample may be taken with a continuous sampler that proportions the amount of sample collected with the flow rate or as a combination of a minimum of three sample aliquots taken in each hour of discharge

General Instructions for Reporting, Sampling, and Analysis Continued

for the entire event or for the first three hours of the event, with each aliquot being at least 100 milliliters and collected with a minimum period of 15 minutes between aliquot collections. The composite must be flow proportional; the time interval between either each aliquot or the volume of each aliquot must be proportional to either the stream (effluent) flow at the time of sampling or the total stream (effluent) flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. Where GC/MS volatile organic analysis is required, aliquots must be combined in the laboratory immediately before analysis. Only one analysis for the composite sample is required.

Use of Historical Data

Existing data may be used, if available, in lieu of sampling conducted solely for the purposes of this application, provided it is representative of the present discharge and was collected within 3 years of the application due date. If you sample for a listed pollutant on a monthly or more frequent basis, summarize the data collected within one year of the application for the pollutant(s) at issue.

Among the factors that would cause the data to be unrepresentative are significant changes in production level; changes in raw materials, processes, or final products; and changes in stormwater treatment. The NPDES permitting authority may request additional information, including current quantitative data, if they determine it to be necessary to assess your discharges. The NPDES permitting authority may allow or establish appropriate site-specific sampling procedures or requirements including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rainfall), protocols for collecting samples under 40 CFR 136, and additional time for submitting data on a case-by-case basis.

Reporting

Report sampling results for all pollutants in Tables A through C as concentration *and* mass, with the exception of flow, temperature, pH, color, and fecal coliform organisms.

Flow, temperature, pH, color, and fecal coliform organisms must be reported as million gallons per day (mgd), degrees Celsius (°C), standard units, color units, and most probable number per 100 milliliters (MPN/100 mL), respectively. Use the following abbreviations in the columns requiring "units" in Tables A through C.

Concentration	Mass
ppm = parts per million	lbs = pounds
mg/L = milligrams per liter	ton = tons (English tons)
ppb = parts per billion	mg = milligrams
µg/L = micrograms per liter	g = grams
MPN = most probable number per 100 milliliters	kg = kilograms
	T = tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal" unless:

- An applicable, promulgated ELG specifies the limitation for the metal in dissolved, valent, or total form;
- All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
- The NPDES permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations of the metal in dissolved, valent, or total form to carry out the provisions of the CWA.

If you measure only one grab sample and one flow-weighted composite sample for a given outfall, complete only the "Maximum Daily Discharge" columns in the tables and enter "1" in the "Number of Storm Events Sampled" column. The NPDES permitting authority may require you to conduct additional analyses to further characterize your discharges.

If you measure more than one value for a grab sample or a flow-weighted composite sample for a given outfall and those values are representative of your discharge, you must report them. You must describe your method of testing and analysis.

The "Average Daily Discharge" column on Tables A to C is *not* compulsory but should be filled out if data are available. To complete the "Average Daily Discharge" column, determine the average of all values within the last year and report the concentration and mass. Report the total number of storm events sampled under the "Number of Storm Events Sampled" column.

Substantially Identical Outfalls

If you have two or more substantially identical outfalls, you may request permission from your NPDES permitting authority to sample and analyze only one outfall and submit the results of the analysis for all substantially identical outfalls. If your request is granted, submit the following information on a separate sheet attached to the application form: the identity of the outfall you did test and an explanation of how it is substantially identical to the outfall(s) that you did not test.

Analysis

Except as specified below, all required quantitative data shall be collected in accordance with sufficiently sensitive analytical methods approved under 40 CFR 136 or required under 40 CFR chapter I, subchapter N or O. A method is "sufficiently sensitive" when:

- The method minimum level (ML) is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter.
- The method ML is above the water quality criterion, but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge.

General Instructions for Reporting, Sampling, and Analysis Continued

- The method has the lowest ML of the analytical methods approved under 40 CFR 136 or required under 40 CFR chapter I, subchapter N or O, for the measured pollutant or pollutant parameter.

Consistent with 40 CFR 136, you may provide matrix- or sample-specific MLs rather than the published levels. Further, where you can demonstrate that, despite a good faith effort to use a method that would otherwise meet the definition of “sufficiently sensitive,” the analytical results are not consistent with the quality assurance (QA)/quality control (QC) specifications for that method, then the NPDES permitting authority may determine that the method is not performing adequately and the NPDES permitting authority should

select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with 40 CFR 122.21(e)(3)(i). Where no other EPA-approved methods exist, you must select a method consistent with 40 CFR 122.21(e)(3)(ii).

When there is no analytical method that has been approved under 40 CFR 136; required under 40 CFR chapter I, subchapter N or O, and is not otherwise required by the NPDES permitting authority, you may use any suitable method but shall provide a description of the method. When selecting a suitable method, other factors such as a method’s precision, accuracy, or resolution, may be considered when assessing the performance of the method.

Exhibit 2F–1. Codes for Treatment Units and Disposal of Wastes Not Discharged

1. PHYSICAL TREATMENT PROCESSES

1-A.....	Ammonia stripping	1-M.....	Grit removal
1-B.....	Dialysis	1-N.....	Microstraining
1-C.....	Diatomaceous earth filtration	1-O.....	Mixing
1-D.....	Distillation	1-P.....	Moving bed filters
1-E.....	Electrodialysis	1-Q.....	Multimedia filtration
1-F.....	Evaporation	1-R.....	Rapid sand filtration
1-G.....	Flocculation	1-S.....	Reverse osmosis (<i>hyperfiltration</i>)
1-H.....	Flotation	1-T.....	Screening
1-I.....	Foam fractionation	1-U.....	Sedimentation (<i>settling</i>)
1-J.....	Freezing	1-V.....	Slow sand filtration
1-K.....	Gas-phase separation	1-W.....	Solvent extraction
1-L.....	Grinding (<i>comminutors</i>)	1-X.....	Sorption

2. CHEMICAL TREATMENT PROCESSES

2-A.....	Carbon adsorption	2-G.....	Disinfection (<i>ozone</i>)
2-B.....	Chemical oxidation	2-H.....	Disinfection (<i>other</i>)
2-C.....	Chemical precipitation	2-I.....	Electrochemical treatment
2-D.....	Coagulation	2-J.....	Ion exchange
2-E.....	Dechlorination	2-K.....	Neutralization
2-F.....	Disinfection (<i>chlorine</i>)	2-L.....	Reduction

3. BIOLOGICAL TREATMENT PROCESSES

3-A.....	Activated sludge	3-E.....	Pre-aeration
3-B.....	Aerated lagoons	3-F.....	Spray irrigation/land application
3-C.....	Anaerobic treatment	3-G.....	Stabilization ponds
3-D.....	Nitrification–denitrification	3-H.....	Trickling filtration

4. WASTEWATER DISPOSAL PROCESSES

4-A.....	Discharge to surface Water	4-C.....	Reuse/recycle of treated effluent
4-B.....	Ocean discharge through outfall	4-D.....	Underground injection

5. SLUDGE TREATMENT AND DISPOSAL PROCESSES

5-A.....	Aerobic digestion	5-M.....	Heat drying
5-B.....	Anaerobic digestion	5-N.....	Heat treatment
5-C.....	Belt filtration	5-O.....	Incineration
5-D.....	Centrifugation	5-P.....	Land application
5-E.....	Chemical conditioning	5-Q.....	Landfill
5-F.....	Chlorine treatment	5-R.....	Pressure filtration
5-G.....	Composting	5-S.....	Pyrolysis
5-H.....	Drying beds	5-T.....	Sludge lagoons
5-I.....	Elutriation	5-U.....	Vacuum filtration
5-J.....	Flotation thickening	5-V.....	Vibration
5-K.....	Freezing	5-W.....	Wet oxidation
5-L.....	Gravity thickening		

Exhibit 2F-2. Conventional and Nonconventional Pollutants (40 CFR 122.21, Appendix D, Table IV)

Bromide
Chlorine, total residual
Color
Fecal coliform
Fluoride
Nitrate-nitrite
Nitrogen, total organic (as N)
Oil and grease
Phosphorus (as P), total
Radioactivity (as alpha, total; beta, total; radium, total; and radium 226, total)
Sulfate (as SO₄)
Sulfide (as S)
Sulfite (as SO₃)
Surfactants
Aluminum, total
Barium, total
Boron, total
Cobalt, total
Iron, total
Magnesium, total
Molybdenum, total
Manganese, total
Tin, total
Titanium, total

Exhibit 2F–3. Toxic Pollutants (40 CFR 122.21, Appendix D, Tables II and III)

Toxic Pollutants and Total Phenol

Antimony, total	Copper, total	Silver, total
Arsenic, total	Lead, total	Thallium, total
Beryllium, total	Mercury, total	Zinc, total
Cadmium, total	Nickel, total	Cyanide, total
Chromium, total	Selenium, total	Phenols, total

GC/MS Fraction—Volatile Compounds

Acrolein	Dichlorobromomethane	1,1,2,2-tetrachloroethane
Acrylonitrile	1,1-dichloroethane	Tetrachloroethylene
Benzene	1,2-dichloroethane	Toluene
Bromoform	1,1-dichloroethylene	1,2-trans-dichloroethylene
Carbon tetrachloride	1,2-dichloropropane	1,1,1-trichloroethane
Chlorobenzene	1,3-dichloropropylene	1,1,2-trichloroethane
Chlorodibromomethane	Ethylbenzene	Trichloroethylene
Chloroethane	Methyl bromide	Vinyl chloride
2-Chloroethylvinyl ether	Methyl chloride	
Chloroform	Methylene chloride	

GC/MS Fraction—Acid Compounds

2-chlorophenol	2,4-dinitrophenol	Pentachlorophenol
2,4-dichlorophenol	2-nitrophenol	Phenol
2,4-dimethylphenol	4-nitrophenol	2,4,6-trichlorophenol
4,6-dinitro-o-cresol	P-chloro-m-cresol	

GC/MS Fraction—Base/Neutral Compounds

Acenaphthene	4-chlorophenyl phenyl ether	Hexachlorobenzene
Acenaphthylene	Chrysene	Hexachlorobutadiene
Anthracene	Dibenzo (a,h) anthracene	Hexachlorocyclopentadiene
Benzidine	1,2-dichlorobenzene	Hexachloroethane
Benzo (a) anthracene	1,3-dichlorobenzene	Indeno (1,2,3-cd) pyrene
Benzo (a) pyrene	1,4-dichlorobenzene	Isophorone
3,4-benzofluoranthene	3,3-dichlorobenzidine	Naphthalene
Benzo (ghi) perylene	Diethyl phthalate	Nitrobenzene
Benzo (k) fluoranthene	Dimethyl phthalate	N-nitrosodimethylamine
Bis (2-chloroethoxy) methane	Di-n-butyl phthalate	N-nitrosodi-n-propylamine
Bis (2-chloroethyl) ether	2,4-dinitrotoluene	N-nitrosodiphenylamine
Bis (2-chloroisopropyl) ether	2,6-dinitrotoluene	Phenanthrene
Bis (2-ethylhexyl) phthalate	Di-n-octyl phthalate	Pyrene
4-bromophenyl phenyl ether	1,2-diphenylhydrazine (as azobenzene)	1,2,4-trichlorobenzene
Butyl benzyl phthalate	Fluoranthene	
2-chloronaphthalene	Fluorene	

GC/MS Fraction—Pesticides

Aldrin	Dieldrin	PCB-1254
α-BHC	α-endosulfan	PCB-1221
β-BHC	β-endosulfan	PCB-1232
γ-BHC	Endosulfan sulfate	PCB-1248
δ-BHC	Endrin	PCB-1260
Chlordane	Endrin aldehyde	PCB-1016
4,4'-DDT	Heptachlor	Toxaphene
4,4'-DDE	Heptachlor epoxide	
4,4'-DDD	PCB-1242	

Exhibit 2F-4. Certain Hazardous Substances and Asbestos (40 CFR 122.21, Appendix D, Table V)


Toxic Pollutant		
Asbestos	Hazardous Substances	
Acetaldehyde	Dinitrobenzene	Naphthenic acid
Allyl alcohol	Diquat	Nitrotoluene
Allyl chloride	Disulfoton	Parathion
Amyl acetate	Diuron	Phenolsulfonate
Aniline	Epichlorohydrin	Phosgene
Benzonitrile	Ethion	Propargite
Benzyl chloride	Ethylene diamine	Propylene oxide
Butyl acetate	Ethylene dibromide	Pyrethrins
Butylamine	Formaldehyde	Quinoline
Captan	Furfural	Resorcinol
Carbaryl	Guthion	Strontium
Carbofuran	Isoprene	Strychnine
Carbon disulfide	Isopropanolamine	Styrene
Chlorpyrifos	Kelthane	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)
Coumaphos	Kepone	TDE (tetrachlorodiphenyl ethane)
Cresol	Malathion	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]
Crotonaldehyde	Mercaptodimethur	Trichlorofon
Cyclohexane	Methoxychlor	Triethanolamine
2,4-D (2,4-dichlorophenoxyacetic acid)	Methyl mercaptan	Triethylamine
Diazinon	Methyl methacrylate	Trimethylamine
Dicamba	Methyl parathion	Uranium
Dichlobenil	Mevinphos	Vanadium
Dichlone	Mexacarbate	Vinyl acetate
2,2-dichloropropionic acid	Monoethyl amine	Xylene
Dichlorvos	Monomethyl amine	Xylenol
Diethyl amine	Naled	Zirconium
Dimethyl amine		

Exhibit 2F–5. Hazardous Substances

1. Acetaldehyde
2. Acetic acid
3. Acetic anhydride
4. Acetone cyanohydrin
5. Acetyl bromide
6. Acetyl chloride
7. Acrolein
8. Acrylonitrile
9. Adipic acid
10. Aldrin
11. Allyl alcohol
12. Allyl chloride
13. Aluminum sulfate
14. Ammonia
15. Ammonium acetate
16. Ammonium benzoate
17. Ammonium bicarbonate
18. Ammonium bichromate
19. Ammonium bifluoride
20. Ammonium bisulfite
21. Ammonium carbamate
22. Ammonium carbonate
23. Ammonium chloride
24. Ammonium chromate
25. Ammonium citrate
26. Ammonium fluoroborate
27. Ammonium fluoride
28. Ammonium hydroxide
29. Ammonium oxalate
30. Ammonium silicofluoride
31. Ammonium sulfamate
32. Ammonium sulfide
33. Ammonium sulfite
34. Ammonium tartrate
35. Ammonium thiocyanate
36. Ammonium thiosulfate
37. Amyl acetate
38. Aniline
39. Antimony pentachloride
40. Antimony potassium tartrate
41. Antimony tribromide
42. Antimony trichloride
43. Antimony trifluoride
44. Antimony trioxide
45. Arsenic disulfide
46. Arsenic pentoxide
47. Arsenic trichloride
48. Arsenic trioxide
49. Arsenic trisulfide
50. Barium cyanide
51. Benzene
52. Benzoic acid
53. Benzonitrile
54. Benzoyl chloride
55. Benzyl chloride
56. Beryllium chloride
57. Beryllium fluoride
58. Beryllium nitrate
59. Butylacetate
60. n-butylphthalate
61. Butylamine
62. Butyric acid
63. Cadmium acetate
64. Cadmium bromide
65. Cadmium chloride
66. Calcium arsenate
67. Calcium arsenite
68. Calcium carbide
69. Calcium chromate
70. Calcium cyanide
71. Calcium dodecylbenzenesulfonate
72. Calcium hypochlorite
73. Captan
74. Carbaryl
75. Carbofuran
76. Carbon disulfide
77. Carbon tetrachloride
78. Chlordane
79. Chlorine
80. Chlorobenzene
81. Chloroform
82. Chloropyrifos
83. Chlorosulfonic acid
84. Chromic acetate
85. Chromic acid
86. Chromic sulfate
87. Chromous chloride
88. Cobaltous bromide
89. Cobaltous formate
90. Cobaltous sulfamate
91. Coumaphos
92. Cresol
93. Crotonaldehyde
94. Cupric acetate
95. Cupric acetoarsenite
96. Cupric chloride
97. Cupric nitrate
98. Cupric oxalate
99. Cupric sulfate
100. Cupric sulfate ammoniated
101. Cupric tartrate
102. Cyanogen chloride
103. Cyclohexane
104. 2,4-D acid (2,4-dichlorophenoxyacetic acid)
105. 2,4-D esters (2,4-dichlorophenoxyacetic acid esters)
106. DDT
107. Diazinon
108. Dicamba
109. Dichlobenil
110. Dichlone
111. Dichlorobenzene
112. Dichloropropane
113. Dichloropropene
114. Dichloropropene-dichloropropane mix
115. 2,2-dichloropropionic acid
116. Dichlorvos
117. Dieldrin
118. Diethylamine
119. Dimethylamine
120. Dinitrobenzene
121. Dinitrophenol
122. Dinitrotoluene
123. Diquat
124. Disulfoton
125. Diuron
126. Dodecylbenzenesulfonic acid
127. Endosulfan
128. Endrin
129. Epichlorohydrin
130. Ethion
131. Ethylbenzene
132. Ethylenediamine
133. Ethylene dibromide
134. Ethylene dichloride
135. Ethylene diaminetetracetic acid (EDTA)
136. Ferric ammonium citrate
137. Ferric ammonium oxalate
138. Ferric chloride
139. Ferric fluoride
140. Ferric nitrate
141. Ferric sulfate
142. Ferrous ammonium sulfate
143. Ferrous chloride
144. Ferrous sulfate
145. Formaldehyde
146. Formic acid
147. Fumaric acid
148. Furfural
149. Guthion
150. Heptachlor
151. Hexachlorocyclopentadiene
152. Hydrochloric acid
153. Hydrofluoric acid
154. Hydrogen cyanide
155. Hydrogen sulfide
156. Isoprene
157. Isopropanolamine dodecylbenzenesulfonate
158. Kelthane
159. Kepone
160. Lead acetate
161. Lead arsenate
162. Lead chloride
163. Lead fluoborate
164. Lead fluorite
165. Lead iodide
166. Lead nitrate
167. Lead stearate
168. Lead sulfate
169. Lead sulfide
170. Lead thiocyanate
171. Lindane
172. Lithium chromate
173. Malathion
174. Maleic acid
175. Maleic anhydride
176. Mercaptodimethur
177. Mercuric cyanide
178. Mercuric nitrate
179. Mercuric sulfate
180. Mercuric thiocyanate
181. Mercurous nitrate
182. Methoxychlor
183. Methyl mercaptan
184. Methyl methacrylate
185. Methyl parathion
186. Mevinphos
187. Mexacarbate
188. Monoethylamine
189. Monomethylamine
190. Naled
191. Naphthalene
192. Naphtheneic acid
193. Nickel ammonium sulfate
194. Nickel chloride
195. Nickel hydroxide
196. Nickel nitrate
197. Nickel sulfate
198. Nitric acid
199. Nitrobenzene
200. Nitrogen dioxide
201. Nitrophenol
202. Nitrotoluene
203. Paraformaldehyde
204. Parathion
205. Pentachlorophenol
206. Phenol
207. Phosgene
208. Phosphoric acid
209. Phosphorus
210. Phosphorus oxychloride
211. Phosphorus pentasulfide
212. Phosphorus trichloride
213. Polychlorinated biphenyls (PCB)
214. Potassium arsenate
215. Potassium arsenite

Exhibit 2F–5. Hazardous Substances

216. Potassium bichromate	245. Sodium phosphate (dibasic)	271. Uranyl acetate
217. Potassium chromate	246. Sodium phosphate (tribasic)	272. Uranyl nitrate
218. Potassium cyanide	247. Sodium selenite	273. Vanadium penoxide
219. Potassium hydroxide	248. Strontium chromate	274. Vanadyl sulfate
220. Potassium permanganate	249. Strychnine	275. Vinyl acetate
221. Propargite	250. Styrene	276. Vinylidene chloride
222. Propionic acid	251. Sulfuric acid	277. Xylene
223. Propionic anhydride	252. Sulfur monochloride	278. Xylenol
224. Propylene oxide	253. 2,4,5-T acid (2,4,5-trichlorophenoxyacetic acid)	279. Zinc acetate
225. Pyrethrins	254. 2,4,5-T amines (2,4,5-trichlorophenoxy acetic acid amines)	280. Zinc ammonium chloride
226. Quinoline	255. 2,4,5-T esters (2,4,5-trichlorophenoxy acetic acid esters)	281. Zinc borate
227. Resorcinol	256. 2,4,5-T salts (2,4,5-trichlorophenoxy acetic acid salts)	282. Zinc bromide
228. Selenium oxide	257. 2,4,5-TP acid (2,4,5-trichlorophenoxy propanoic acid)	283. Zinc carbonate
229. Silver nitrate	258. 2,4,5-TP acid esters (2,4,5-trichlorophenoxy propanoic acid esters)	284. Zinc chloride
230. Sodium	259. TDE (tetrachlorodiphenyl ethane)	285. Zinc cyanide
231. Sodium arsenate	260. Tetraethyl lead	286. Zinc fluoride
232. Sodium arsenite	261. Tetraethyl pyrophosphate	287. Zinc formate
233. Sodium bichromate	262. Thallium sulfate	288. Zinc hydrosulfite
234. Sodium bifluoride	263. Toluene	289. Zinc nitrate
235. Sodium bisulfite	264. Toxaphene	290. Zinc phenolsulfonate
236. Sodium chromate	265. Trichlorofon	291. Zinc phosphide
237. Sodium cyanide	266. Trichloroethylene	292. Zinc silicofluoride
238. Sodium dodecylbenzenesulfonate	267. Trichlorophenol	293. Zinc sulfate
239. Sodium fluoride	268. Triethanolamine dodecylbenzenesulfonate	294. Zirconium nitrate
240. Sodium hydrosulfide	269. Triethylamine	295. Zirconium potassium fluoride
241. Sodium hydroxide	270. Trimethylamine	296. Zirconium sulfate
242. Sodium hypochlorite		297. Zirconium tetrachloride
243. Sodium methylate		
244. Sodium nitrite		

EPA Identification Number		NPDES Permit Number		Facility Name		Form Approved 03/05/19 OMB No. 2040-0004	
Form 2F NPDES			U.S Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY				
SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1))							
Outfall Location	1.1	Provide information on each of the facility's outfalls in the table below					
		Outfall Number	Receiving Water Name	Latitude		Longitude	
				° ' "		° ' "	
				° ' "		° ' "	
				° ' "		° ' "	
				° ' "		° ' "	
				° ' "		° ' "	
				° ' "		° ' "	
SECTION 2. IMPROVEMENTS (40 CFR 122.21(g)(6))							
Improvements	2.1	Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 3.					
	2.2	Briefly identify each applicable project in the table below.					
		Brief Identification and Description of Project	Affected Outfalls (list outfall numbers)	Source(s) of Discharge		Final Compliance Dates	
						Required	Projected
2.3	Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? (Optional Item) <input type="checkbox"/> Yes <input type="checkbox"/> No						

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
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SECTION 3. SITE DRAINAGE MAP (40 CFR 122.26(c)(1)(i)(A))

Site Drainage Map	3.1	Have you attached a site drainage map containing all required information to this application? (See instructions for specific guidance.)
	<input type="checkbox"/> Yes <input type="checkbox"/> No	

SECTION 4. POLLUTANT SOURCES (40 CFR 122.26(c)(1)(i)(B))

Pollutant Sources	4.1	Provide information on the facility's pollutant sources in the table below.				
		Outfall Number	Impervious Surface Area (within a mile radius of the facility)		Total Surface Area Drained (within a mile radius of the facility)	
				specify units		specify units
				specify units		specify units
				specify units		specify units
				specify units		specify units
				specify units		specify units
				specify units		specify units
	4.2	Provide a narrative description of the facility's significant material in the space below. (See instructions for content requirements.)				
	4.3	Provide the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff. (See instructions for specific guidance.)				
		Stormwater Treatment				
		Outfall Number	Control Measures and Treatment		Codes from Exhibit 2F-1 (list)	

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
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SECTION 5. NON STORMWATER DISCHARGES (40 CFR 122.26(c)(1)(i)(C))

Non-Stormwater Discharges	5.1	I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-stormwater discharges. Moreover, I certify that the outfalls identified as having non-stormwater discharges are described in either an accompanying NPDES Form 2C, 2D, or 2E application.			
		Name (print or type first and last name)		Official title	
		Signature		Date signed	
	5.2	Provide the testing information requested in the table below.			
		Outfall Number	Description of Testing Method Used	Date(s) of Testing	Onsite Drainage Points Directly Observed During Test

SECTION 6. SIGNIFICANT LEAKS OR SPILLS (40 CFR 122.26(c)(1)(i)(D))

Significant Leaks or Spills	6.1	Describe any significant leaks or spills of toxic or hazardous pollutants in the last three years.
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SECTION 7. DISCHARGE INFORMATION (40 CFR 122.26(c)(1)(i)(E))

Discharge Information	See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.	
	7.1	Is this a new source or new discharge? <input type="checkbox"/> Yes → See instructions regarding submission of <i>estimated</i> data. <input type="checkbox"/> No → See instructions regarding submission of <i>actual</i> data.
	Tables A, B, C, and D	
	7.2	Have you completed Table A for each outfall? <input type="checkbox"/> Yes <input type="checkbox"/> No

EPA Identification Number		NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
Discharge Information Continued	7.3	Is the facility subject to an effluent limitation guideline (ELG) or effluent limitations in an NPDES permit for its process wastewater? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.5.		
	7.4	Have you completed Table B by providing quantitative data for those pollutants that are (1) limited either directly or indirectly in an ELG and/or (2) subject to effluent limitations in an NPDES permit for the facility's process wastewater? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	7.5	Do you know or have reason to believe any pollutants in Exhibit 2F-2 are present in the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.7.		
	7.6	Have you listed all pollutants in Exhibit 2F-2 that you know or have reason to believe are present in the discharge and provided quantitative data or an explanation for those pollutants in Table C? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	7.7	Do you qualify for a small business exemption under the criteria specified in the Instructions? <input type="checkbox"/> Yes → SKIP to Item 7.18. <input type="checkbox"/> No		
	7.8	Do you know or have reason to believe any pollutants in Exhibit 2F-3 are present in the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.10.		
	7.9	Have you listed all pollutants in Exhibit 2F-3 that you know or have reason to believe are present in the discharge in Table C? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	7.10	Do you expect any of the pollutants in Exhibit 2F-3 to be discharged in concentrations of 10 ppb or greater? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.12.		
	7.11	Have you provided quantitative data in Table C for those pollutants in Exhibit 2F-3 that you expect to be discharged in concentrations of 10 ppb or greater? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	7.12	Do you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.14.		
	7.13	Have you provided quantitative data in Table C for the pollutants identified in Item 7.12 that you expect to be discharged in concentrations of 100 ppb or greater? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	7.14	Have you provided quantitative data or an explanation in Table C for pollutants you expect to be present in the discharge at concentrations less than 10 ppb (or less than 100 ppb for the pollutants identified in Item 7.12)? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	7.15	Do you know or have reason to believe any pollutants in Exhibit 2F-4 are present in the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 7.17.		
	7.16	Have you listed pollutants in Exhibit 2F-4 that you know or believe to be present in the discharge and provided an explanation in Table C? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	7.17	Have you provided information for the storm event(s) sampled in Table D? <input type="checkbox"/> Yes <input type="checkbox"/> No		

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
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Discharge Information Continued	Used or Manufactured Toxics			
	7.18	Is any pollutant listed on Exhibits 2F–2 through 2F–4 a substance or a component of a substance used or manufactured as an intermediate or final product or byproduct?		
	<input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 8.			
	7.19	List the pollutants below, including TCDD if applicable.		
	<div style="display: flex; justify-content: space-between;"> 1.4.7. </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> 2.5.8. </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> 3.6.9. </div>			

SECTION 8. BIOLOGICAL TOXICITY TESTING DATA (40 CFR 122.21(g)(11))																	
Biological Toxicity Testing Data	8.1	Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last three years?															
	<input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 9.																
	8.2	Identify the tests and their purposes below.															
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;">Test(s)</th> <th style="width: 30%;">Purpose of Test(s)</th> <th style="width: 30%;">Submitted to NPDES Permitting Authority?</th> <th style="width: 10%;">Date Submitted</th> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> <td></td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> <td></td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No </td> <td></td> </tr> </table>	Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted			<input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted													
			<input type="checkbox"/> Yes <input type="checkbox"/> No														
		<input type="checkbox"/> Yes <input type="checkbox"/> No															
		<input type="checkbox"/> Yes <input type="checkbox"/> No															

SECTION 9. CONTRACT ANALYSIS INFORMATION (40 CFR 122.21(g)(12))																					
Contract Analysis Information	9.1	Were any of the analyses reported in Section 7 (on Tables A through C) performed by a contract laboratory or consulting firm?																			
	<input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 10.																				
	9.2	Provide information for each contract laboratory or consulting firm below.																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;"></th> <th style="width: 20%;">Laboratory Number 1</th> <th style="width: 20%;">Laboratory Number 2</th> <th style="width: 30%;">Laboratory Number 3</th> </tr> <tr> <td style="height: 60px; vertical-align: top;">Name of laboratory/firm</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="height: 60px; vertical-align: top;">Laboratory address</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="height: 60px; vertical-align: top;">Phone number</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="height: 60px; vertical-align: top;">Pollutant(s) analyzed</td> <td></td> <td></td> <td></td> </tr> </table>		Laboratory Number 1	Laboratory Number 2	Laboratory Number 3	Name of laboratory/firm				Laboratory address				Phone number				Pollutant(s) analyzed			
		Laboratory Number 1	Laboratory Number 2	Laboratory Number 3																	
	Name of laboratory/firm																				
	Laboratory address																				
Phone number																					
Pollutant(s) analyzed																					

EPA Identification Number	NPDES Permit Number	Facility Name
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SECTION 10. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement	10.1	In Column 1 below, mark the sections of Form 2F that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.	
		Column 1	Column 2
		<input type="checkbox"/> Section 1	<input type="checkbox"/> w/ attachments (e.g., responses for additional outfalls)
		<input type="checkbox"/> Section 2	<input type="checkbox"/> w/ attachments
		<input type="checkbox"/> Section 3	<input type="checkbox"/> w/ site drainage map
		<input type="checkbox"/> Section 4	<input type="checkbox"/> w/ attachments
		<input type="checkbox"/> Section 5	<input type="checkbox"/> w/ attachments
		<input type="checkbox"/> Section 6	<input type="checkbox"/> w/ attachments
		<input type="checkbox"/> Section 7	<input type="checkbox"/> Table A <input type="checkbox"/> w/ small business exemption request <input type="checkbox"/> Table B <input type="checkbox"/> w/ analytical results as an attachment <input type="checkbox"/> Table C <input type="checkbox"/> Table D
		<input type="checkbox"/> Section 8	<input type="checkbox"/> w/attachments
		<input type="checkbox"/> Section 9	<input type="checkbox"/> w/attachments (e.g., responses for additional contact laboratories or firms)
		<input type="checkbox"/> Section 10	<input type="checkbox"/>
	10.2	Certification Statement <i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
	Name (print or type first and last name)	Official title	
	Signature 	Date signed	

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
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Form Approved 03/05/19
OMB No. 2040-0004

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))¹

You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details and requirements.

Pollutant or Parameter		Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease						
2.	Biochemical oxygen demand (BOD ₅)						
3.	Chemical oxygen demand (COD)						
4.	Total suspended solids (TSS)						
5.	Total phosphorus						
6.	Total Kjeldahl nitrogen (TKN)						
7.	Total nitrogen (as N)						
8.	pH (minimum)						
	pH (maximum)						

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
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TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)

Provide a description of the method of flow measurement or estimate.

NDPES PERMIT APPLICATION QUESTIONNAIRE

SUPPLEMENTING FORM 2C

For Shipbuilding and Repair Facilities

I. GENERAL INFORMATION

- A. Name of Facility: Nichols Brothers Boat Builders
B. Address: 5400 S. Cameron Rd.
C. City: Freeland State: Washington Zip Code: 98249
D. Phone No.: 360.331.5500
E. Water Way: Holmes Harbor

II. SERVICES PROVIDED IN A TYPICAL YEAR

- A. Do you predominately provide new construction? ☒ Yes ☐ No
And/or repair? ☒ Yes ☐ No
- B. What types of vessels, i.e. tugs, fishing vessels, barges, factory ships, etc., do you provide services to?
All the above
- C. What hull materials do you work on?
☐ Wood
☒ Steel
☒ Aluminum
☐ Fiberglass
☐ Other
- D. Estimate total number of vessels worked on in a typical year? 10 - 20
- E. Does the facility have:
- | | | |
|-----------------|------------------------------|--|
| 1. Drydock | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| 2. Graving dock | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| 3. Marineway | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| 4. Lift | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| 5. Travel haul | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| 6. Crane | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |

III. YARD CAPACITY

- A. Capacity of the drydock, marine way, crane, etc., which remove vessels from the water for access to hull?
Code:
Tonnage:

Overall Length: N/Ap
Wingwall Length:
Width:
Wingwall Height:
- B. Describe the location and construction of the drydock, marine way, crane, etc.
(In addition to a narrative, please attach a site plan of the shipbuilding and repair facility.)
See Attachment A – Facility Operations Information

IV. HYDROBLASTING, SANDBLASTING PRACTICES

- A. Of the hulls your yard worked on in the last year, what percentage:

1. Needed the complete hull sandblasted and repainted? Approximately 20%
 2. Needed half the hull sandblasted and repainted: 0
 3. Needed less than $\frac{1}{4}$ of the hull sandblasted and repainted? Approximately 80%
 4. What percentage of the hulls only needed a high-pressure wash (hydroblasting)? N/Ap
 5. What percentage of the hulls only needed a low pressure wash? 100%
 6. How much of the paint removal consists of sanding and scraping? 10%
- B. For the sandblasting done in a typical year (the last year if that answer is easier to obtain), how many tons of abrasive material are used? Approximately 200 tons of copper slag and 200 tons of Green Diamond
- C. If possible, estimate the percentage of sandblast grit used on drydocks: 0 since NBBB's facility does not include a drydock.
1. In ship holds: N/Ap
 2. On ship superstructures: N/Ap
- D. Estimate the percent of grit used in a sandblast shed? 25%
- E. How do you store spent sandblast grit? Stored in mobile bin which is tarp covered in transit.
- F. How, how often, and where is the spent sandblast grit disposed of? Disposed upon request by True Blast (Tacoma, WA.)
- G. Where do you do hydroblasting (high pressure washing of hulls)? Hydroblasting (high pressure washing) does not occur at NBBB's facility (but regular pressure washing of boats and parts does occur).
- H. How far is the hydroblasting area from the nearest waterbody? N/Ap
- I. How and where do you discharge your hydroblasting water? N/Ap
- J. Do you use an acid solution when hydroblasting? ☐ Yes ☒ No
If so, which product?
- K. Do you pretreat, i.e., filter, settle, centrifuge, etc., the hydroblasting wash water? ☐ Yes ☒ No
If so, how?

V. PAINTING PRACTICES

- A. What anticorrosive paints are commonly used at your yard? (You may attach manufacturer's data sheets.)
Attached
- B. What antifouling paints are commonly used at your yard? (You may attach manufacturer's data sheets.)
Attached
- C. Describe the location and construction of the paint storage building or area. Located next to the west fence line adjacent to the warehouse are three (3) steel conexas that house the paint storage and holding area.
- D. Describe the location and construction of the painting booth. Is the floor paved? Are there drains in the painting booth? If yes, where do they drain to? The paint booths are temporary structures that are placed adjacent to vessels under construction/repair. The floor beneath the paint booths is concrete and does not contain drains. Dome tents are constructed over the vessels with the two ends tarped off.
- E. Where is paint mixed? At mixing stations
- F. Do you use drip pans or visquine to contain paint spills? Yes

- G. Do you or vessel owners/operators do touch-up painting or detail painting on vessels from floats?
☐ Yes ☒ No
- H. Do you have a still for recycling paint thinners?
☒ Yes ☐ No
- I. What are your procedures for minimizing waste paint disposal?
The use of a waste-still
- J. What waste disposal company disposes of your still bottoms and waste paint?
Emerald Services
- K. How often do you dispose of waste paint and still bottoms?
Monthly
- L. Where and how is waste paint stored prior to disposal?
Stored in containment before disposal

VI. ENGINE AND EQUIPMENT REPAIR SERVICES

- A. What is the estimated number of engine repairs made annually? N/Ap
- B. Describe the facility for storage of waste oil?
An 11-ft x 8-ft covered oil containment structure consisting of two (2) 250-gallon-totes together with other containment
- C. How often is stored waste oil disposed of? Upon demand
- D. Is it recycled and if so, by whom? ☒ Yes ☐ No
Safety-Kleen
- E. Do you drain engine filters before disposing of the filter?
☒ Yes ☐ No
- F. Do you have steam cleaning facilities at your yard?
☐ Yes ☒ No
- G. Do you use dip tanks for cleaning machine parts?
☐ Yes ☒ No
1. What type of degreasers do you use? N/Ap
2. What type of recycle/disposal service to you use for solvents and degreasers? N/Ap
- H. How do you store and dispose of used hydraulic fluids? Stored in oil containment area and periodically disposed upon request to Safety-Kleen
- I. How do you store and dispose of used antifreeze and coolants? Same As "H"
- J. What type of storage do you have for batteries? Car batteries are kept in a Conex on a shelving unit. A maximum of three car batteries are stored at a time and they get changed out as needed on Thursday of each week. Household batteries are stored in a five-gallon bucket and taken to Island Recycling as needed.
- K. How often do you dispose of used batteries? Upon request

VII. WASTE DISPOSAL SERVICES

- A. Do the services provided by your yard include?
1. Pumping bilge water? ☒ Yes ☐ No
2. If so, how frequently? As needed, during the wet season approximately 300 gallons every three months.

3. Pumping ballast water? ☐ Yes ☒ No
4. If so, how frequently? N/Ap
5. If so, how is bilge water or ballast water disposed of? It is pumped into one or more 250-gallon totes and disposed of by Safety-Kleen.
6. What facilities do you have for receiving sanitary wastes and gray water from docked vessels?
N/Ap

VIII. OTHER WASTE DISPOSAL OR RECYCLING

A. Who, how, and where, if you know, are the following solid wastes disposed of?

1. Sandblast grit: Kleen Industrial Services using a truck pickup of the holding bin, the grit is disposed at True Blast of Tacoma, WA.
2. Scrap metal: Island Recycling using a truck pickup of the scrap metal bin.
3. Glass: N/Ap

B. Who, how, and where, if you know, are fiberglass resin and solvents disposed of? N/Ap

IX. OTHER SERVICES

A. Do you supply cooling water to moored or drydocked vessels? ☐ Yes ☒ No

B. If so, how often? N/Ap

X. MANAGEMENT PRACTICES

- A. Do you have a maintenance plan for preventing accidental loss of oil, fuel, paint, etc., due to equipment failures? ☒ Yes ☐ No
- B. Does the plan specifically identify who is responsible for what tasks and how often? ☒ Yes ☐ No
- C. Does the maintenance plan include routine cleaning, sweeping, and vacuuming of docks, paved work areas, and catch basins? ☒ Yes ☐ No
- D. Please provide a copy with the return of the permit application. See Attachment D – Treatment System Operations Plan and Attachment F – Stormwater Pollution Prevention Plan.
- E. Do you provide guidance to arriving vessels on pollution prevention practices you expect them to comply with? ☐ Yes ☐ No N/Ap
- F. If so, please provide a copy with the return of the permit application.
- G. Do you have an employee training program which includes pollution prevention practices and worker right-to-know information? ☒ Yes ☐ No
If you would like that training program included or considered as part of the permit “Best Management Practices,” please provide a copy with the return of the permit application.
- H. Do you have in effect a Spill Prevention and Counter-Measure Plan? ☒ Yes ☐ No
- I. If so, please provide a copy.

XI. SITE PLAN

Please provide a Site Plan locating storm drains, catch basins, oil and waste oil storage areas, paint storage area, paint booth, solvent still, work areas, etc. (See Attachment A – Facility Operation Information)

Please provide a location map of the facility. It is sufficient to indicate the site location on a photocopy of a USGS quadrangle map. (See Attachment A – Facility Operation Information)

PRODUCT DESCRIPTION
TEMPERATE

A hard wearing, surface tolerant, two pack epoxy primer. A low temperature version is available for use at temperatures down to 23°F (see separate datasheet).

INTENDED USES

As an epoxy anticorrosive coating for use from Keel to Rail.
Suitable for use with controlled cathodic protection.
For use at Newbuilding, Maintenance & Repair or On Board Maintenance.

PRODUCT INFORMATION

Color	KHA300-Off White, KHA302-Grey, KHA303-Red, KHA304-Black, KHA305-Buffer These colors are suitable for immersion service. Special colors, which are not suitable for immersion service, can be matched to meet customer specifications.
Finish/Sheen	Low-Gloss
Part B (Curing Agent)	KHA062
Volume Solids	73% ±2% (ISO 3233:1998)
Mix Ratio	4 volume(s) Part A to 1 volume(s) Part B
Typical Film Thickness	5 mils dry (6.8 mils wet)
Theoretical Coverage	234 ft²/US gal at 5 mils dft, allow appropriate loss factors
Method of Application	Airless Spray, Brush, Conventional Spray, Roller
Flash Point	Part A 110°F; Part B 103°F; Mixed 103°F
Induction Period	30 minutes at temperatures below 70°F

Drying Information	50°F	59°F	77°F	95°F
Touch Dry [ISO 9117/3:2010]	12 hrs	8 hrs	6 hrs	4 hrs
Hard Dry [ISO 9117-1:2009]	28 hrs	24 hrs	18 hrs	10 hrs
Pot Life	7 hrs	6 hrs	4 hrs	2 hrs

Overcoating Data - see limitations

	Substrate Temperature							
	50°F		59°F		77°F		95°F	
Overcoated By	Min	Max	Min	Max	Min	Max	Min	Max
Intergard 263	16 hrs	21 days	11 hrs	21 days	6 hrs	21 days	4 hrs	21 days
Interthane 990HS	16 hrs	7 days	11 hrs	5 days	6 hrs	3 days	4 hrs	2 days
Intertuf 262	18 hrs	28 days	13 hrs	28 days	6 hrs	28 days	4 hrs	15 days

Note Stated drying times are for normal recoat situations with KHA062 converter. For low temperature dry time information, see Intertuf 262 low temperature product datasheet.

REGULATORY DATA

VOC 285 g/lit (2.38 lb/US gal) as supplied (EPA Method 24)

Note: VOC values are typical and are provided for guidance purposes only. These may be subject to variation depending on factors such as differences in color and normal manufacturing tolerances.

MIL SPEC

MIL-PRF-24647D, Type II, CL1, Gr A, Applications 2 & 3
MIL-PRF-23236C, Type V, CL 7 & 8, GrC



CERTIFICATION

When used as part of an approved scheme, this material has the following certification:

- Food Contact - Carriage of Grain (NOHA)
- Fire Resistance - Surface Spread of Flame (WFR) - (IMO Resolution A653 (16))
- Fire Resistance - Marine Equipment Directive compliant
- Food Contact - FDA Compliant: Dry Foodstuffs
- Fire Resistance - US Coast Guard Type Approval of Interior Finish

Consult your International Paint representative for details.

**SYSTEMS AND
COMPATIBILITY**

Consult your International Paint representative for the system best suited for the surfaces to be protected.

SURFACE PREPARATIONS

Use in accordance with the standard Worldwide Marine Specifications.

All surfaces to be coated should be clean, dry and free from contamination.

High pressure fresh water wash or fresh water wash, as appropriate, and remove all oil or grease, soluble contaminants and other foreign matter in accordance with SSPC-SP1 solvent cleaning.

NEWBUILDING

Where necessary, remove weld spatter and smooth weld seams and sharp edges.

Weld seams and damaged areas should be blast cleaned to Sa2½ (ISO 8501-1:2007) or power tooled to Pt3 (JSRA SPSS:1984)

For iron oxide epoxy shop primers, ensure the intact primer is clean and dry. Weld seams and damaged areas should be prepared to the specified standard (eg. Sa2½ ISO 8501-1:2001).

For PVB and unapproved shop primers, the surface should be blast cleaned to Sa2½ (ISO 8501-1:2007)

Intertuf 262 can be applied over Intergard 269. The primer surface should be dry and free from all contamination and Intertuf 262 must be applied within the overcoating interval specified (consult the Intergard 269 product data sheet).

Areas of breakdown, damage etc. should be prepared to the specified standard (eg Sa2½ (ISO 8501-1:2007)).

MAJOR REFURBISHMENT**Underwater Hull/Boottop/Topsides**

Abrasive blast clean to Sa2 (ISO 8501-1:2007). If oxidation has occurred between blasting and application of Intertuf 262, the surface should be reblasted to the specified visual standard.

Surface defects revealed by the blast cleaning process, should be ground, filled, or treated in the appropriate manner.

Intertuf 262 may be applied to surfaces prepared to International Paint Hydroblasting Standard HB2 which have flash rusted to no worse than HB2L for underwater hull/boottop or HB2M for above water areas.

REPAIR

Consult International Paint.

Intertuf 262 can be applied over Intergard 269. The primer surface should be dry and free from all contamination and Intertuf 262 must be applied within the overcoating interval specified (consult the Intergard 269 product data sheet).

Areas of breakdown, damage etc. should be prepared to the specified standard (eg Sa2½ (ISO 8501-1:2007)).

Or - Intertuf 262 may be applied to surfaces prepared to International Paint Hydroblasting Standard HB2 which have flash rusted to no worse than HB2M.

Consult your International Paint representative for specific recommendations and procedures.

NOTE:

For use in Marine situations in North America, the following surface preparation standards can be used:

SSPC-SP6 in place of Sa2 (ISO 8501-1:2007)

SSPC-SP10 in place of Sa2½ (ISO 8501-1:2007)

SSPC-SP11 in place of Pt3 (JSRA SPSS:1984)

APPLICATION	Apply by conventional or airless spray. Application other methods, brush or roller may require more than one coat and is suggested for small areas only of stripe coating. Strain material through a minimum 60 mesh screen before application. Apply at 6.3 mils wet which will yield 5.0 mils dry film thickness. Consult the following equipment recommendations or utilize suitable equal.
Tinting	Range of colors available from Chromascan. Most colors require that containers be slightly short filled to accommodate the addition of colorant. Actual coverage will depend upon amount of colorant added and should be taken into consideration when ordering. A limited number of Intertuf 262 tinted colors may require more than one coat for complete hiding.
Mixing	Material is supplied in 2 containers as a unit. Always mix a complete unit in the proportions supplied. (1) Agitate Part A with a power agitator, (2) Combine entire contents of Part A and B and mix thoroughly with the power agitator, (3) Allow the coating a 30 minute sweat-in period, at temperatures below 70°F.
Thinner	Not recommended. Use International GTA220 only in exceptional circumstances. DO NOT thin more than allowed by local environmental legislation.
Airless Spray	Minimum 30:1 ratio pump; 0.021"- 0.033" (534-838 microns) orifice tip; 3/8" (9.5 mm) ID high pressure material hose; 60 mesh tip filter
Conventional Spray	DeVilbiss MBC-510 gun E tip and 704 air cap; 3/8" (9.5mm) ID material hose; double regulated pressure tank with oil and moisture separator.
Brush	Use appropriate size China bristle brush.
Roller	Use All Purpose Roller cover with 3/8" (9.5mm) pile smooth to medium nap. Prewash roller cover to remove loose fibers prior to use.
Cleaner	International GTA220/GTA822
Work Stoppages and Cleanup	Clean all equipment immediately after use with International GTA220/GTA822. Spray equipment requires flushing with this solvent. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency will depend upon factors such as amount sprayed, temperature and elapsed time including work stoppages. Monitor material condition. Do not exceed pot life limitations. All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.
Welding	In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation. In North America do so in accordance with instruction in ANSI/ASC Z49.1 "Safety in Welding and Cutting."

SAFETY All work involving the application and use of this product should be performed in compliance with all relevant national Health, Safety & Environmental standards and regulations.

Prior to use, obtain, consult and follow the Material Safety Data Sheet for this product concerning health and safety information. Read and follow all precautionary notices on the Material Safety Data Sheet and container labels. If you do not fully understand these warnings and instructions or if you can not strictly comply with them, do not use this product. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic or oxygen deficient hazards. Take precautions to avoid skin and eye contact (ie. gloves, goggles, face masks, barrier creams etc.) Actual safety measures are dependant on application methods and work environment.

EMERGENCY CONTACT NUMBERS:

USA/Canada - Medical Advisory Number 1-800-854-6813

Europe - Contact (44) 191 4696111. For advice to Doctors & Hospitals only contact (44) 207 6359191

R.O.W. - Contact Regional Office



LIMITATIONS

Apply in good weather when air and surface temperatures are above 50°F. Surface temperature must be at least 5°F above dew point. For optimum application properties, bring material to 70-80 °F prior to mixing and application. Unmixed material (in closed containers) should be maintained in protected storage between 40 and 100°F. Ultra violet light may cause color variations if Intertuf 262 is used as a finish coat. For North America if overcoating Intertuf 262 with antifoulings, the first coat of antifouling must be applied while the Intertuf 262 is still tacky.

A low temperature version of this product is available, see low temperature version data sheet.

Exposure to unacceptably low temperatures and/or high humidities during, or immediately after application may result in development of a surface 'sweat' which must be washed off with fresh water prior to overcoating, so that subsequent intercoat adhesion is not affected.

Overcoating information is given for guidance only and is subject to regional variation depending upon local climate and environmental conditions. Consult your local International Paint representative for specific recommendations.

Technical and application data herein is for the purpose of establishing a general guideline of the coating and proper coating application procedures. Test performance results were obtained in a controlled laboratory environment and International Paint makes no claim that the exhibited published test results, or any other tests, accurately represent results actually found in all field environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection, verification of performance and use of the coating.

TINT BASE AVAILABILITY

KHA011 - Light, KHA044 - Ultra Deep

UNIT SIZE

Unit Size	Part A		Part B	
	Vol	Pack	Vol	Pack
1 US gal	0.8 US gal	1 US gal	0.2 US gal	1 US quart
5 US gal	4 US gal	5 US gal	1 US gal	1 US gal

For availability of other unit sizes consult International Paint

UNIT SHIPPING WEIGHT

Unit Size	Unit Weight
1 US gal	12.5 lb
5 US gal	61 lb

STORAGE


Shelf Life 24 months minimum from date of manufacture when maintained in protected storage at 40-100°F Subject to reinspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.

WORLDWIDE AVAILABILITY Consult International Paint.

IMPORTANT NOTE

The information in this data sheet is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at their own risk. All advice given or statements made about the product (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to the maximum extent permitted by law) any loss or damage arising out of the use of the product. We hereby disclaim any warranties or representations, express or implied, by operation of law or otherwise, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local International Paint representative that this data sheet is current prior to using the product.

This Technical Data Sheet is available on our website at www.international-marine.com or www.international-pc.com, and should be the same as this document. Should there be any discrepancies between this document and the version of the Technical Data Sheet that appears on the website, then the version on the website will take precedence.

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www.international-marine.com

PRODUCT DESCRIPTION

A <340g/l VOC light colored, abrasion resistant, aluminium pure epoxy coating giving excellent long term anticorrosive protection and low temperature application capability.

INTENDED USES

A universal primer which can be applied directly to mechanically prepared shop primer or suitably prepared bare steel. Suitable for use with controlled cathodic protection. A tank coating which is approved for the carriage of potable water.

For use at Newbuilding or Maintenance & Repair.



Certified to ANSI/NSF Standard 61.
NSF Certification is for tanks greater than 5,000 gallons

PRODUCT INFORMATION

Color	ENA310-Bronze, ENA311-Aluminium
Finish/Sheen	Matt
Part B (Curing Agent)	ENA313
Volume Solids	63% ±2% (ISO 3233:1998)
Mix Ratio	1.00 volume(s) Part A to 1 volume(s) Part B
Typical Film Thickness	6 mils dry (9.5 mils wet)
Theoretical Coverage	168 ft²/US gal at 6 mils dft, allow appropriate loss factors
Method of Application	Airless Spray, Brush, Roller
Flash Point	Part A 106°F; Part B 79°F; Mixed 88°F
Induction Period	Not required

Drying Information	23°F	41°F	77°F	95°F
Touch Dry [ISO 9117/3:2010]	6 hrs	4 hrs	3 hrs	60 mins
Hard Dry [ISO 9117-1:2009]	28 hrs	17 hrs	4 hrs	2 hrs
Pot Life	6 hrs	6 hrs	2 hrs	60 mins

Overcoating Data - see limitations	Substrate Temperature							
	23°F		41°F		77°F		95°F	
	Min	Max	Min	Max	Min	Max	Min	Max
Interline 979	30 hrs	5 days	18 hrs	5 days	6.5 hrs	3 days	4 hrs	3 days
Intergard 267	30 hrs	14 days	18 hrs	14 days	6.5 hrs	14 days	4 hrs	14 days
Intergard 268	30 hrs	7 days	18 hrs	7 days	6.5 hrs	7 days	4 hrs	7 days
Intergard 740	30 hrs	7 days	18 hrs	7 days	6.5 hrs	7 days	4 hrs	7 days
Intergard 755	30 hrs	3 days	18 hrs	3 days	6.5 hrs	3 days	4 hrs	3 days
Intershield 300V Immersed Areas	30 hrs	14 days	18 hrs	14 days	6.5 hrs	14 days	4 hrs	14 days
Intershield 300V Non Immersed Areas	30 hrs	6 mths	18 hrs	6 mths	6.5 hrs	5.5 mths	4 hrs	3 mths
Intershield 6GV	-	-	24 hrs	7 days	24 hrs	7 days	24 hrs	5 days
Interthane 990	30 hrs	3 days	18 hrs	3 days	6.5 hrs	3 days	4 hrs	3 days
Interthane 990HS	30 hrs	3 days	18 hrs	3 days	6.5 hrs	3 days	4 hrs	3 days

Note For Intergard 755, Intergard 740, Interthane 990 and Interthane 990HS a minimum temperature of 41°F is required to achieve full cure and specified performance.

REGULATORY DATA

VOC 326 g/lit (2.72 lb/US gal) as supplied (EPA Method 24)

Note: VOC values are typical and are provided for guidance purposes only. These may be subject to variation depending on factors such as differences in color and normal manufacturing tolerances.

CERTIFICATION

When used as part of an approved scheme, this product has the following certification:

- Food Contact - Carriage of Grain (NOHA)
- Tank Coatings - B1 Classification of Ballast Tank Coatings (DNV/Marintek tested)
- Fire Resistance - Marine Equipment Directive compliant
- Potable Water - Certification for tanks greater than 5,000 gallons (ANSI Standard 61)

Potable Water Certification issued by external bodies is dependent upon formulation and/or manufacturing site. Based on this, products supplied in different territories may not be approved to all of the standards listed above. Consult your International Paint representative for details.

SYSTEMS AND COMPATIBILITY

Consult your International Paint representative for the system best suited for the surfaces to be protected. If overcoating Intershield 300V with antifoulings or single pack finishes, the first coat of material must be applied while the Intershield 300V is soft to thumbprint or slightly tacky. When using in cargo holds, consult the Intershield 300V Cargo Hold Application Procedures. For tank coating, consult International Paint for the detailed coating procedures that should be followed.

SURFACE PREPARATIONS

Use in accordance with the standard Worldwide Marine Specifications. All surfaces to be coated should be clean, dry and free from contamination. High pressure fresh water wash or fresh water wash, as appropriate, and remove all oil or grease, soluble contaminants and other foreign matter in accordance with SSPC-SP1 solvent cleaning.

NEWBUILDING

Where necessary, remove weld spatter and smooth weld seams and sharp edges. Weld seams and areas of shop primer damage or breakdown should be blast cleaned to Sa2½ (ISO 8501-1:2007) or power tooled to Pt3 (JSRA SPSS:1984). Intact, approved, shop primers must be clean, dry and free from soluble salts and any other surface contaminants. Unapproved shop primers will require complete removal by blast cleaning to Sa2½ (ISO 8501-1:2007). In some cases sweep blasting to a defined International Paint standard (eg AS2 or AS3) may be acceptable. Consult your International Paint representative for specific recommendations.

MAJOR REFURBISHMENT

Abrasive blast clean to minimum Sa2 (ISO 8501-1:2007) or International Paint Hydroblasting Standard HB2M. If oxidation has occurred between blasting and application of Intershield 300V, the surface should be reblasted to the specified visual standard. Surface defects revealed by the blast cleaning process, should be ground, filled, or treated in the appropriate manner.

REPAIR

Consult International Paint.

Consult your International Paint representative for specific recommendations.

When full abrasive blasting is carried out, a sharp angular surface profile of 2-4 mils is recommended.

NOTE

For use in Marine situations in North America, the following surface preparation standards can be used:
SSPC-SP10 in place of Sa2½ (ISO 8501-1:2007)
SSPC-SP6 in place of Sa2 (ISO 8501-1:2007)
SSPC-SP11 in place of Pt3 (JSRA SPSS:1984)

APPLICATION

Mixing	Material is supplied in 2 containers as a unit. Always mix a complete unit in the proportions supplied. Once the unit has been mixed it must be used within the working pot life specified. (1) Agitate Base (Part A) with a power agitator. (2) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator.
Thinner	Use International GTA220 only in exceptional circumstances. DO NOT thin more than allowed by local environmental legislation.
Airless Spray	Recommended Tip Range 19-25 thou (0.48-0.64 mm) Total output fluid pressure at spray tip not less than 3000 psi (211 kg/cm ²) - Pump Ratio 40:1 minimum
Brush	Application by brush is recommended for small areas only. Multiple coats may be required to achieve specified film thickness.
Roller	Application by roller is recommended for small areas only. Multiple coats may be required to achieve specified film thickness.
Cleaner	International GTA822/GTA415
Work Stoppages and Cleanup	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA822/GTA415. Once units of paint have been mixed they should not be resealed and it is advised that after prolonged stoppages work recommences with freshly mixed units. Clean all equipment immediately after use with International GTA822/GTA415. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency of cleaning will depend upon amount sprayed, temperature and elapsed time, including any delays. Do not exceed pot life limitations. All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.
Welding	In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation. In North America do so in accordance with instruction in ANSI/ASC Z49.1 "Safety in Welding and Cutting."

SAFETY

All work involving the application and use of this product should be performed in compliance with all relevant national Health, Safety & Environmental standards and regulations.

Prior to use, obtain, consult and follow the Material Safety Data Sheet for this product concerning health and safety information. Read and follow all precautionary notices on the Material Safety Data Sheet and container labels. If you do not fully understand these warnings and instructions or if you can not strictly comply with them, do not use this product. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic or oxygen deficient hazards. Take precautions to avoid skin and eye contact (ie. gloves, goggles, face masks, barrier creams etc.) Actual safety measures are dependant on application methods and work environment.

EMERGENCY CONTACT NUMBERS:

USA/Canada - Medical Advisory Number 1-800-854-6813

Europe - Contact (44) 191 4696111. For advice to Doctors & Hospitals only contact (44) 207 6359191

R.O.W. - Contact Regional Office

LIMITATIONS

Intershield 300V should be high pressure fresh water washed and/or solvent washed prior to overcoating, where necessary, to ensure removal of any surface contamination that has accumulated.

Suitable for use on tanker decks subject to Classification Society Regulations.

Intershield 300V may be applied at substrate temperatures down to 23°F, however consideration should be given when overcoating at low temperatures as the remainder of the system may require higher temperatures to achieve full cure.

For North America: if overcoating Intershield 300V direct with antifoulings, the first coat of antifouling must be applied while the Intershield 300V is still tacky.

For use in potable water tank linings, as a two coat system with a 10 mils dft, nominal and cure of 30 days minimum at 77°F and 50% relative humidity.

Overcoating information is given for guidance only and is subject to regional variation depending upon local climate and environmental conditions. Consult your local International Paint representative for specific recommendations. Apply in good weather. Temperature of the surface to be coated must be at least 5°F above the dew point. For optimum application properties bring the material to 70°F-80°F, unless specifically instructed otherwise, prior to mixing and application. Unmixed material (in closed containers) should be maintained in protected storage in accordance with information given in the STORAGE Section of this data sheet. Technical and application data herein is for the purpose of establishing a general guideline of the coating application procedures. Test performance results were obtained in a controlled laboratory environment and International Paint makes no claim that the exhibited published test results, or any other tests, accurately represent results found in all field environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection, verification of performance and use of the coating.

UNIT SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	5 US gal	2.5 US gal	2.5 US gal	2.5 US gal	5 US gal
<i>For availability of other unit sizes consult International Paint</i>					
UNIT SHIPPING WEIGHT	Unit Size	Unit Weight			
	5 US gal	59 lb			
STORAGE	Shelf Life	12 months minimum at 77°F. Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.			

WORLDWIDE AVAILABILITY Consult International Paint.

IMPORTANT NOTE

The information in this data sheet is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at their own risk. All advice given or statements made about the product (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. THEREFORE, UNLESS WE SPECIFICALLY AGREE IN WRITING TO DO SO, WE DO NOT ACCEPT ANY LIABILITY AT ALL FOR THE PERFORMANCE OF THE PRODUCT OR FOR (SUBJECT TO THE MAXIMUM EXTENT PERMITTED BY LAW) ANY LOSS OR DAMAGE ARISING OUT OF THE USE OF THE PRODUCT. WE HEREBY DISCLAIM ANY WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local International Paint representative that this data sheet is current prior to using the product.

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PRODUCT DESCRIPTION A high performance, TBT free, polishing antifouling. Enhanced biocide release mechanism. Prevents coating build-up. At subsequent drydockings, it is only necessary to top up the system. Low VOC.

INTENDED USES As a TBT free, polishing antifouling. As a multiple coat system for extended in-service periods. For use at Newbuilding or Maintenance & Repair.

PRODUCT INFORMATION

Color	BRA640-Red, BRA641-Blue, BRA642-Black, BRA643-Ocean Green
Finish/Sheen	Not applicable
Part B (Curing Agent)	One pack
Volume Solids	62% \pm 2% (ASTM D2697-86)
Mix Ratio	One pack
Typical Film Thickness	4 mils dry (6.4 mils wet), 4 - 5 mils dry practical range equivalent to 6.4 - 8.1 mils wet
Theoretical Coverage	249 ft ² /US gal at 4 mils dft, allow appropriate loss factors
Method of Application	Airless Spray, Brush, Roller,
Flash Point	Single Pack 82°F (Setaflash) (ASTM D-3278)

Drying Information	41°F	50°F	77°F	95°F
Touch Dry [ASTM D1640 7.5.1]	12 hrs	6 hrs	4 hrs	2 hrs
Before Flooding	12 hrs	12 hrs	8 hrs	7 hrs

Note For Major Refurbishment and Repair if total dft is $>300\mu\text{m}$ or a single coat is $>150\mu\text{m}$ dft, the flooding times must be increased as follows:
24 hours at 50°F or less and 18 hours at 77°F or above.

Overcoating Data - see limitations	Substrate Temperature							
	41°F		50°F		77°F		95°F	
Overcoated By	Min	Max	Min	Max	Min	Max	Min	Max
Interspeed 640	24 hrs	ext	20 hrs	ext	6 hrs	ext	4 hrs	ext

REGULATORY DATA **VOC** 385 g/lit (3.21 lb/US gal) as supplied (EPA Method 24)

Note: VOC values are typical and are provided for guidance purposes only. These may be subject to variation depending on factors such as differences in color and normal manufacturing tolerances.

EPA Federal EPA Registration No. 2693-142
For specific state registrations contact your International Paint representative.
See Page 4 for additional Regulatory Data.

MIL SPEC MIL-PRF-24647C, Type I, CL IA & 3A, Gr A & B, Applications 1 & 2

This product does not contain organotin compounds acting as biocides and as such is in compliance with the International Convention on the Control of Harmful Anti-fouling Systems on ships as adopted by IMO in October 2001 (IMO document AFS/CONF/26).

CERTIFICATION

When used as part of an approved scheme, this product has the following certification:

Product recognised by the following classification societies as compliant with the International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001 (AFS 2001):

- Lloyds Register
- Det Norske Veritas
- Bureau Veritas
- Germanischer Lloyd

Consult your International Paint representative for details.

**SYSTEMS AND
COMPATIBILITY**

Consult your International Paint representative for the system best suited for the surfaces to be protected.

SURFACE PREPARATIONS

Use in accordance with the standard Worldwide Marine Specifications.

Paint only clean, dry surfaces. Remove all grease, oil, soluble contaminants and other foreign matter by "solvent cleaning" (SSPC-SP1).

NEWBUILDING

Dependent on yard procedures. Consult International Paint.

Unpainted surfaces:

Prepare surface and apply recommended primer. Apply one or more coats of Interspeed 640 as specified. (Consult the relevant primer data sheet for surface preparation and overcoating information.)

Recoating and Upgrading of approved systems:

Use controlled close high pressure fresh water washing (minimum 3,000 psi, 211kg/sq. cm.) to clean the entire area, and remove any leached layer at the surface of the existing antifouling system.

Repair corroded areas with the recommended anticorrosive primer and apply a spot coat of Interspeed 640 within the overcoating interval specified for the primer (consult the relevant primer data sheet for surface preparation and overcoating information).

Apply the specified number of full coats of Interspeed 640.

APPLICATION	Apply by airless spray only. Application by other methods, brush or roller, may require more than one coat. Strain material through a minimum 60 mesh screen before application. Apply at 6.5 mils wet which will yield 4.0 mils dry film thickness. Consult the following equipment recommendations and/or utilize suitable equal.
Mixing	This material is a one pack coating. Always mix thoroughly with a power agitator before application.
Thinner	DO NOT THIN BEYOND YOUR STATE'S COMPLIANCY. Material is supplied at spray viscosity and normally does not need thinning. If thinning is necessary, thin up to a maximum of 4 ounces/gal. with International GTA007 Thinner.
Airless Spray	Minimum 28:1 ratio pump; 0.021" - 0.026" (533-661 microns) orifice tip; 3/8" (9.5mm) ID high pressure material hose; 60 mesh tip filter
Brush	Use appropriate size China bristle brush.
Roller	Use All Purpose Roller cover with 3/8" (9.5mm) pile smooth to medium nap. Prewash roller cover to remove loose fibers prior to use.
Cleaner	International GTA007
Work Stoppages and Cleanup	Clean all equipment immediately after use with International GTA007. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency will depend upon factors such as amount sprayed, temperature and elapsed time including work stoppages. Monitor material condition. All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.
Welding	In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation. In North America do so in accordance with instruction in ANSI/ASC Z49.1 "Safety in Welding and Cutting."
SAFETY	<p>All work involving the application and use of this product should be performed in compliance with all relevant national Health, Safety & Environmental standards and regulations.</p> <p>Prior to use, obtain, consult and follow the Material Safety Data Sheet for this product concerning health and safety information. Read and follow all precautionary notices on the Material Safety Data Sheet and container labels. If you do not fully understand these warnings and instructions or if you can not strictly comply with them, do not use this product. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic or oxygen deficient hazards. Take precautions to avoid skin and eye contact (ie. gloves, goggles, face masks, barrier creams etc.) Actual safety measures are dependant on application methods and work environment.</p> <p>EMERGENCY CONTACT NUMBERS: USA/Canada - Medical Advisory Number 1-800-854-6813 Europe - Contact (44) 191 4696111. For advice to Doctors & Hospitals only contact (44) 207 6359191 China - Contact (86) 532 83889090 R.O.W. - Contact Regional Office</p>

LIMITATIONS

Apply in good weather when air and surface temperatures are above 35°F. Surface temperature must be at least 5° F above dew point. For optimum application properties, bring material to 70-80 °F prior to mixing and application. Unmixed material (in closed containers) should be maintained in protected storage between 40 and 100°F. Prolonged atmospheric exposure of this product may detract from antifouling performance. Recommended maximum exposure time before flooding:

Temperate conditions - 6 months

Tropical conditions - 3 months

These times may be extended under certain conditions. Contact your International Paint representative for advice. Overcoating information is given for guidance only and is subject to regional variation depending upon local climate and environmental conditions. Consult your local International Paint representative for specific recommendations. Technical and application data herein is for the purpose of establishing a general guideline of the coating and proper coating application procedures. Test performance results were obtained in a controlled laboratory environment and International Paint makes no claim that the exhibited published test results, or any other tests, accurately represent results actually found in all field environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection, verification of performance and use of the coating. In the overcoating data section 'ext' = extended overcoating period. Please refer to our Marine Painting Guide - Definitions and Abbreviations available on our website.

ADDITIONAL REGULATORY DATA

It is a violation of federal law to use this product in a manner inconsistent with its labelling. Refer to container label for information concerning Precautionary Statements, Directions for Use and Storage and Disposal.

UNIT SIZE

Unit Size	Vol	Pack
5 US gal	5 US gal	5 US gal

UNIT SHIPPING WEIGHT

Unit Size	Unit Weight
5 US gal	94 lb

STORAGE


Shelf Life 24 months minimum from date of manufacture when maintained in protected storage at 40-100°F. Subject to reinspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.

WORLDWIDE AVAILABILITY Consult International Paint.

IMPORTANT NOTE

The information in this data sheet is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at their own risk. All advice given or statements made about the product (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to the maximum extent permitted by law) any loss or damage arising out of the use of the product. We hereby disclaim any warranties or representations, express or implied, by operation of law or otherwise, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local International Paint representative that this data sheet is current prior to using the product.

This Technical Data Sheet is available on our website at www.international-marine.com or www.international-pc.com, and should be the same as this document. Should there be any discrepancies between this document and the version of the Technical Data Sheet that appears on the website, then the version on the website will take precedence.

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www.international-marine.com

STORMWATER POLLUTION PREVENTION PLAN

Prepared for:

Ice Floe, LLC (dba) Nichols Brothers Boat Builders
PO Box 580
5400 Cameron Road
Freeland, Washington 98249

Project No. 120229 • June 2020



e a r t h + w a t e r



STORMWATER POLLUTION PREVENTION PLAN

Project No. 120229 • June 2020

Aspect Consulting, LLC



06/04/2020

Thomas L. Atkins, PE, LG
Principal Water Resources Engineer
tatkings@aspectconsulting.com

\\aspect.local\dfs\Projects\Nichols Brothers Boat Builders\2020 Permit Renewal\Attachments\Attachment F_ Stormwater
Pollutions Prevention Plan\SWPPP 2020_NBBB.docx



Contents

Acronyms	iii
SWPPP Certification Form	iv
1 Introduction	1
1.1 Background	5
1.2 Stormwater Pollution Prevention Team	5
1.3 Implementation and Updates	6
2 Facility Information	7
2.1 Facility Description	7
2.2 Site Drainage	9
2.3 Materials Inventory	10
2.4 Spills and Leaks	12
3 Best Management Practices	12
3.1 Site Specific BMPS	12
3.1.1 Control of Large Solid Materials	12
3.1.2 Control and Cleanup of Paint Dust and Abrasive Blasting Debris	12
3.1.3 In-Water Vessel Maintenance - Surface Preparation BMPs	13
3.1.4 In-Water Vessel Maintenance - Paint and Coating Application BMPs	14
3.1.5 BMPs for Floats Used for In-Water Vessel Maintenance	14
3.1.6 Documentation Requirements for In-Water Vessel Maintenance BMPs	14
3.1.7 Oil, Grease, Paint, and Fuel Spills Prevention and Containment	15
3.1.8 Paint and Solvent Use and Containment	15
3.1.9 Contact Between Water and Debris	15
3.1.10 Maintenance of Hoses, Soil Chutes, and Piping	16
3.1.11 Chemical Storage	16
3.1.12 Recycling of Spilled Chemicals and Rinse Water	16
3.1.13 Sediment Traps	16
3.1.14 Education of Employees, Contractors, and Customers	17
3.2 Operational BMPS	17
3.2.1 Good Housekeeping	17
3.2.2 Routine Preventative Maintenance and Corrective Measures	17
3.2.3 Spill Prevention and Emergency Cleanup	18
3.2.4 Inspections, Reporting, and Record Keeping	19
3.2.5 Training	20
3.3 Structural BMPS	21
3.4 Treatment BMPS	21
4 Monitoring and Sampling Plan	24
4.1 Sample Collection and Handling	24
4.2 Sampling Parameters	25

4.3	Discharge Monitoring Report Submittals	25
4.4	Recording of Results	26
4.5	Additional Discharge Monitoring	26
4.6	Noncompliance Notification	26
5	Emergency Spill Response Procedures	27
6	Emergency Contacts	29
7	Inspections and Recordkeeping.....	29
8	References	30

List of Tables

1-1	Summary of Key Permit SWPPP Requirements.....	3
1-2	Plan Revision Record	5
1-3	Stormwater Pollution Prevention Team Members and Responsibilities.....	6
2-1	Facility Information	7
2-2	Facility Activities, Material Types, and Stormwater Pollutant Potential	11
4-1	Monitoring Schedule.....	24
4-2	Effluent Limits and Sampling Requirements	25
5-1	Spill Detection and Response Procedures	28
6-1	Emergency Contacts	29

List of Figures

1	Site Location Map	2
2	Facility Map and Surface Flow Direction	8
3	Stormwater Management System Schematic	10
4	Schematic Diagram of Water Quality Treatment System	23

Acronyms

ASTs	aboveground storage tanks
BMPs	best management practices
CFR	Code of Federal Regulations
DMR	Discharge Monitoring Report
EC	electrocoagulation
GAC	granular activated carbon
gpm	gallons per minute
MEK	methyl ethyl ketone
NBBB	Nichols Brothers Boat Builders
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	operations and maintenance
SWMM	Stormwater Management Manual
SPCCP	Spill Prevention Control and Countermeasure Plan
SWPPP	Stormwater Pollution Prevention Plan
SWPPT	Stormwater Pollution Prevention Team

SWPPP Certification Form

NBBB shall use this form to sign and certify that the Stormwater Pollution Prevention Plan (SWPPP) is complete, accurate, and in compliance with Special Conditions S3 and S9 of the NPDES Waste Discharge Permit No. WA-003216-6. Please update the certification page, and attach past certification pages, as needed. Records must be kept for five years.

Per General Condition G1.D of the Permit, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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.


Gavin Higgins

Chief Executive Officer

Facility Representative/Signatory

Title


Signature


Date

1 Introduction

Ice Floe, LLC, doing business as (dba) Nichols Brothers Boat Builders (NBBB) operates a fabrication facility located at 5400 S. Cameron Road in Freeland, Washington (Figure 1). All aspects of boat and ship construction and repair are performed at NBBB's Freeland Facility. NBBB works exclusively on vessels that are constructed of steel and/or aluminum. The vessels include passenger and car ferries, tugboats, barges, dinner cruise ships, high speed catamarans, and fishing vessels.

This Stormwater Pollution Prevention Plan (SWPPP) was developed to support the Freeland facility's National Pollution Discharge Elimination System (NPDES) Waste Discharge Permit (Permit), Number WA-0032166, issued by the Washington State Department of Ecology (Ecology). The SWPPP summarizes procedures that are employed to manage stormwater discharges from the facility and addresses the following elements:

- Planning and organization of the Pollution Prevention Team;
- Assessment and description of pollutant sources;
- Identification of best management practices (BMPs) to reduce or eliminate storm water contamination;
- Schedule for implementation of BMPs; and
- Ongoing water quality monitoring.

The industrial activities covered by the Permit are those activities identified in 40 Code of Federal Regulations (CFR) 122.26(b)(14). This SWPPP has been developed to comply with the terms of Special Conditions S3 and S9 of the Permit, and to aid the Facility in preventing industrial pollutants from discharging into stormwater runoff from the Facility. The current Permit expires on June 30, 2021. A summary of key stormwater Permit requirements is presented in Table 1-1.

This SWPPP will be modified whenever there is a change in design, construction, operation, or maintenance of any BMP which potentially could result in the SWPPP being less effective in controlling pollution. Whenever a self-inspection reveals that the description of pollutant sources or BMPs identified in the SWPPP are inadequate, due to the actual discharge of or potential to discharge a significant amount of any pollutant, the SWPPP shall be modified, as appropriate, within two (2) weeks of such determination (in accordance with Permit Special Condition S.9B.2). Table 1-2 will be used to track document corrections, revisions, or updates to the SWPPP as they occur.



Figure 1. Site Location Map

Table 1-1. Summary of Key Permit SWPPP Requirements

What	Purpose	Frequency	When	Form Used	Submit To
Visual stormwater inspection	<p>Inspections are to be conducted by <i>qualified personnel</i>. Personnel should make a judgment as to the compliance or lack of compliance with the Permit and SWPPP after each inspection.</p> <ul style="list-style-type: none"> • Observe discharge points • Note presence of floating material, visible oil sheen, discoloration, turbidity, odor, etc. • Identify potential pollutant sources • Verify site map is up to date • Assess BMPs • Inspect equipment for leaks and remove from service if maintenance is needed 	Weekly	Each week	Visual stormwater inspection	Retain on-site
Designated outfall sampling	Compare discharge quality to effluent limits	Minimum 1/month (if a discharge occurs during the month)	Concurrent with discharge event	Electronic Monthly Discharge Monitoring Report (DMR) form	Ecology using the Water Quality Permitting Portal
Non-compliance notification	Provide documentation and notification of non-compliance identified at any point during the reporting period	As needed	By telephone within 24 hours and written within 5 days of non-compliance event	Event-specific technical memo	Water Quality Permit Coordinator Department of Ecology Northwest Regional Office 3190 160th Avenue SE Bellevue, WA 98008-5452 (425) 649-7000

What	Purpose	Frequency	When	Form Used	Submit To
Electronic Discharge Monitoring Report (DMR)	Report monthly sample results to Ecology	Monthly, even if no sample was collected	Due to Ecology by the 28th day of the month following the monitoring period	DMR form provided by Ecology within the Water Quality Permitting Portal	Ecology using the Water Quality Permitting Portal AND file as part of SWPPP
Permit renewal application	Renew Permit per Special Condition S.5	One time	December 31, 2020	NOI	Water Quality Permit Coordinator Department of Ecology Northwest Regional Office 3190 160th Avenue SE Bellevue, WA 98008-5452

BMP – best management practice

DMR – discharge monitoring report

Ecology – Washington State Department of Ecology

NOI – Notice of Intent

SWPPP – stormwater pollution prevention plan

Table 1-2. Plan Revision Record

Date	Prepared By	Revision Made to Plan
November 2002	Tetra Tech	Not known (plan revisions not documented)
November 2005	Corporate Council, Nichols Brothers Boat Builders	Not known (plan revisions not documented)
December 2011	Windward Environmental, LLC	Updated to reflect new company ownership, new NPDES Permit, new water quality treatment system, new Level 1 and Level 2 source control practices, new Stormwater Pollution Prevention team members
June 2014	Aspect Consulting, LLC	Updated plan with new information as needed
June 2020	Aspect Consulting, LLC	Updated plan with new information as needed

1.1 Background

This document satisfies permit requirements issued by the federal regulations 40 CFR, Parts 122, 123, and 124 Subchapter D, which implements the Federal Clean Water Act of 1987, Section 402 (p).

1.2 Stormwater Pollution Prevention Team

The Stormwater Pollution Prevention Team (SPPT) meets regularly to discuss stormwater issues and review necessary changes to the SWPPP. The SPPT actively participates in the implementation of the SWPPP and employee training. The members of the SPPT and their contact information and responsibilities are as defined in Table 1-3.

Table 1-3. Stormwater Pollution Prevention Team Members and Responsibilities

Position and Contact Information	Responsibilities
CEO: Gavin Higgins 360-331-5186 (ext. 330) gavinh@nicholsboats.com	<ul style="list-style-type: none"> • Ensure personnel assigned are knowledgeable in the storm water pollution prevention plan and comply with all requirements • Primary contact with Washington State Department of Ecology.
Stormwater Management System Lead: Scott Statia 360-331-5500 (ext. 340) ssatia@nicholsboats.com	<ul style="list-style-type: none"> • Ensure all foremen are knowledgeable in the Stormwater Pollution Prevention Plan. • Coordinate preventive maintenance activities to prevent spills of significant materials and ensure proper inventory, storage, use, and disposal of hazardous materials. • Coordinate inspection and maintenance of yard, conveyance ditches, catch basins, sumps/vaults, detention tanks, and water quality treatment equipment • Notify responsible NBBB official of any deficiencies or required actions to maintain compliance with the storm water pollution prevention plan. • Train personnel in the storm water pollution prevention BMPs, the SWPPP, and complying with all requirements.
Stormwater Management System Staff: Shawn Hiday 360-331-5500 (ext. 326) shawnh@nicholsboats.com	<ul style="list-style-type: none"> • Coordinate inspection and maintenance of yard, conveyance ditches, catch basins, sumps/vaults, detention tanks, and water quality treatment equipment • Coordinate sampling required for monitoring. • Maintain all records relating to team administration including inspection reports, record of spills, and records of implementation of new facilities or procedures. • Notify responsible NBBB official of any deficiencies or required actions to maintain compliance with the storm water pollution prevention plan.

1.3 Implementation and Updates

The SWPPP is implemented to limit the potential for pollutants to reach state waters. The SWPPP requires implementation of several mandatory and recommended best management practices (BMPs), along with a sampling and monitoring plan. The SWPPP is a living document that requires periodic updates to reflect changes in industrial activities, pollutant sources, additional BMP requirements, and physical changes at the Facility.

Additional guidelines and elements used to implement the SWPPP include:

- Encouraging communication among the SPPT members
- Educating employees about the contents of the SWPPP, including spill prevention and response procedures, staff responsibilities, good housekeeping procedures, and material management practices
- Evaluating inspections and monitoring results

- Monitoring activities and managing materials and equipment at the Facility that have the potential to cause stormwater pollution
- Maintaining inspection records
- Developing and maintaining tracking and follow-up procedures to ensure adequate corrective actions are taken in response to inspections
- Periodically reviewing the SWPPP and updating it as necessary

A copy of this SWPPP will be kept at the Facility, or at a location within reasonable access of the Facility and will be made available immediately upon request to Ecology. Table 1-1 provides a summary of the submittals and information required to maintain an updated SWPPP.

2 Facility Information

Per the facility's NPDES Permit, the owner and operator of the property is required to have a SPCC Plan, which shall be implemented and followed. The owners and operators of the facility are expected to be provided a copy of the SPCC Plan and bear the responsibility to provide training, or ensure that training be conducted, for all appropriate personnel. General information for the NBBB facility is summarized in Table 2-1.

Table 2-1. Facility Information

Facility Name:	Nichols Brothers Boat Builders, Freeland Fabrication Facility		
Facility Representative/Signatory:	Gavin Higgins	Phone:	(360) 331-5186 Ext. 330
Title:	Chief Executive Officer		
Facility Location:	5400 Cameron Road, Freeland, Washington 98249		
Facility Operating Schedule:	Monday-Friday, 7:30 am – 4:30 pm		
Number of Employees On-Site:	Typically varies from 150 to 200		
Site Activities:	Fabrication facility for boat and ship construction and repair; typically consisting of ten to twenty steel or aluminum vessels per year.		
NPDES Permit No.:	WA-0032166		

2.1 Facility Description

A facility map is provided in Figure 2. The NBBB Freeland facility lies on a gently sloped (approximately 1 percent grade), semi-rectangular site with the highest point being the southwest corner; the lowest point is the northeast corner where the stormwater collection vault is located. The current facility grounds include a total of approximately 16 acres. The offices, fabrication yard, and associated buildings are located in the northern 6 acres of the site and to the east of Cameron Road. At the southwest corner of the site, 2.2 acres is a paved parking area. The southeastern 2.3 acres is a compacted gravel storage area for dry materials. Unpaved landscaping surrounds the facility, and a

stormwater infiltration basin and grass-lined swale are located east of the fabrication area boundary.

All aspects of boat and ship construction and repair are performed at this facility. All materials, supplies, and equipment are initially delivered to the completely enclosed warehouse, located in the approximate center of the yard near the west fence line, where they are stored until needed at other locations in the boat yard. Because the warehouse is completely enclosed, this area presents no stormwater pollution problems. Metal materials (primarily aluminum and steel) are generally stored uncovered in the southeast corner of the facility, east of the parking lot and south of the fabrication yard.

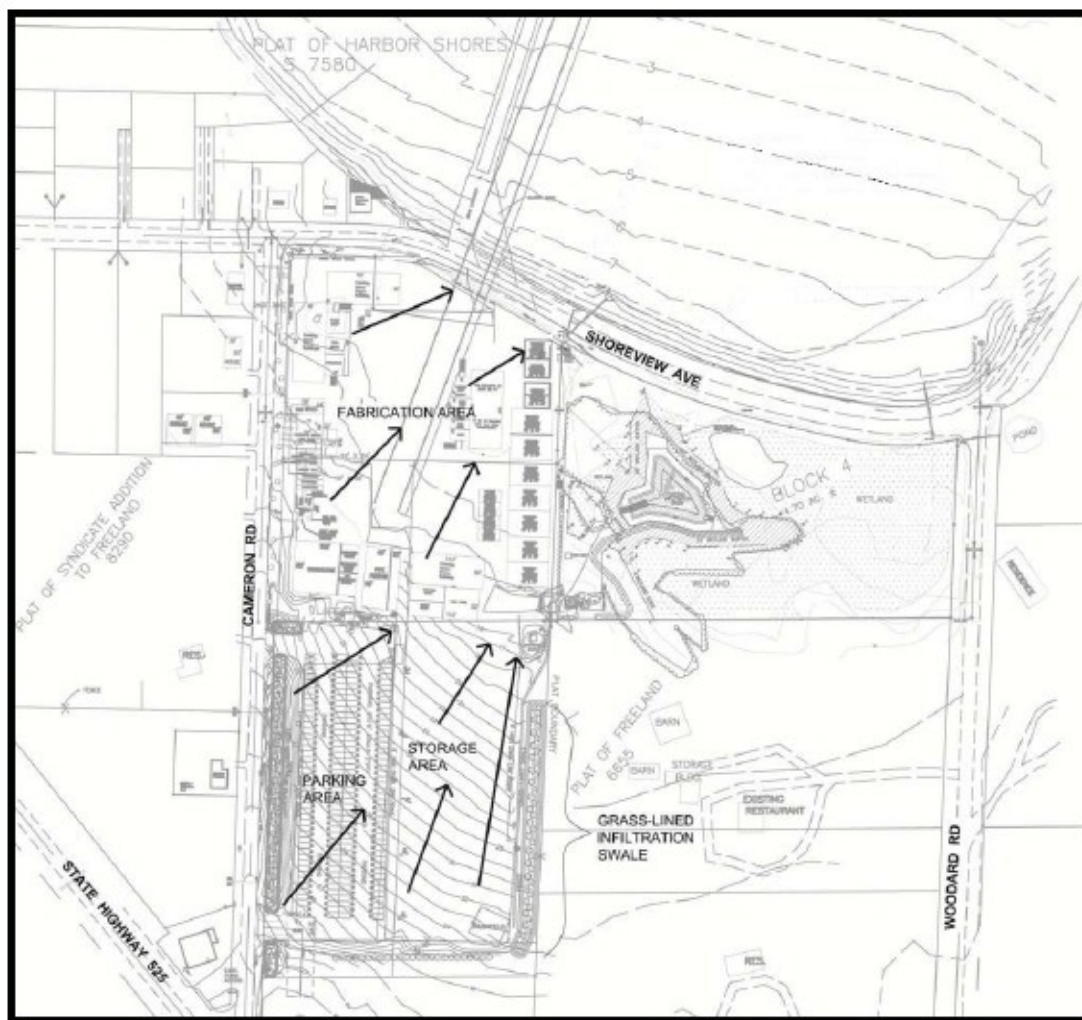


Figure 2. Facility Map and Surface Flow Direction

Metal cutting is performed either inside one of the fabrication buildings or over one of the paved areas. All trash is removed from the site through the main dumpster which is mobile and placed in different locations depending on the projects under construction.

Kleen Industries delivers sand blast grit and also picks up the spend grit. Wet sandblasting is performed by surrounding the end of the sandblasting hose with a water nozzle. As the sand passes through the sandblast hose, the water flows through a separate water hose and sprays through the attached nozzle to knock the sand or dust down rather than allowing it to go up into the atmosphere. Waste sandblast grit is stored in a portable bin. Waste grit is cleaned up immediately by a sweeper/vacuum and put into the portable bin supplied by Kleen Industries, then it is subsequently removed by Kleen Industries for proper off-site disposal. Wet sandblasting and painting are done either indoors or outdoors over the concreted areas at the north and east sides of the yard. If done outdoors, all paint is kept in its own containment and tarpaulins are used to catch paint from emitting particulates into the air.

Small vehicles are repaired and maintained inside the mechanic's shop which is located at the southwest corner of the lot. The mechanic's shop is too small for maintenance of large vehicles and equipment. Large vehicle maintenance occurs outdoors under cover of portable shelter roofs.

Aboveground storage tanks (ASTs) containing gasoline, diesel fuel, and heating oil are located on a concrete slab under a covered area along the west side of the yard, north of the warehouse. The fuel storage area has a low concrete berm that is capable of containing 110 percent of the largest tank volume in this area and it also has a 500-gallon sump. The portable heating oil tank has an external containment pan to catch spills or leaks from the tank.

Paint and other hazardous materials are stored in steel shipping containers, or under cover in the fuel storage area. All drums and cans are stored vertically. A methyl ethyl ketone (MEK) distillation unit is located under cover on the north side of the fuel storage area. MEK is stored in 55-gallon drums. Solids generated from MEK distillation are stored in 55-gallon drums until removed by an authorized hazardous waste hauler.

2.2 Site Drainage

The shipyard fabrication area slopes gently to the northeast, and a system of drains in the shipyard routes stormwater runoff to the north spillway and north spillway catch basin (Figure 2). The spillway catch basin leads to a 2,000-gal. vault (pump chamber) located at the northeast corner of the shipyard (Figure 3). To minimize the amount of contaminants contained in the surface water runoff that drains to the 2,000-gal. vault, source control BMPs (as described in Section 3) are actively practiced. If necessary, stormwater runoff can temporarily be detained in a topographic depression in the northeast corner of the shipyard prior to entering the vault. Stormwater from the pump chamber is pumped south (uphill) to a 120,000-gallon holding tank prior to entry into a proprietary electrocoagulation (EC) treatment system. Following treatment, the treated stormwater is pumped northeast to the existing stormwater infiltration basin.

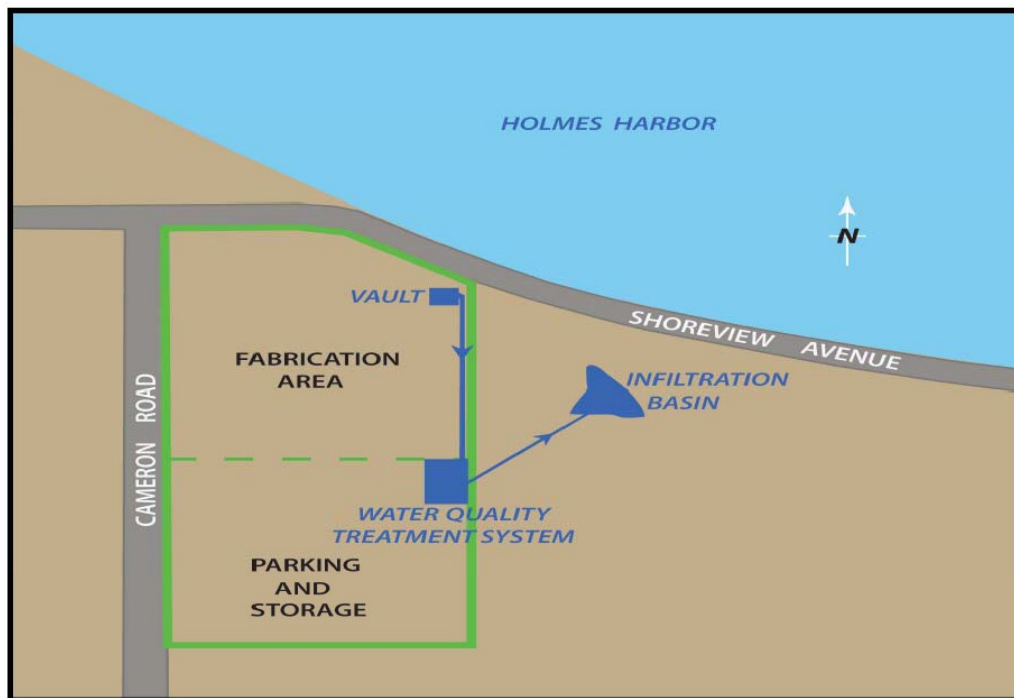


Figure 3. Stormwater Management System Schematic

2.3 Materials Inventory

The types of significant materials handled and/or stored at the Facility include: diesel fuel (on- and off-road), kerosene, gasoline (leaded and unleaded), engine and lubricating oils, greases, hydraulic fluids, antifreeze, cleaners and degreasers, paints, solvents (including MEK), epoxy resins and hardeners, as well as used oil and antifreeze, waste sandblast grit, and process wastewater.

Table 2-2 lists potential contaminants, locations, storage methods, and stormwater pollutant potential. The list of potential contaminants in Table 2-2 will be updated to reflect changes in material use or production changes at the Facility. However, this list will not be updated to reflect changes in brands of similar products, or the addition of small quantities of similar products, as those already represented in the list. The facility contracts with commercial suppliers to deliver products and supplies. Contractors also periodically replenish storage tanks on an as needed basis.

Table 2-2. Facility Activities, Material Types, and Stormwater Pollutant Potential

Facility Activity	Potential Pollutant-generating Activity/Situation	Potential Pollutant
Loading and unloading bulk materials	spills and leaks of liquids, dust, and residuals	TSS, petroleum hydrocarbons (diesel, gasoline, oil and grease, kerosene), organic solvents, metals
Outdoor storage of materials and processing	unprotected materials exposed to precipitation	highly variable – may include TSS, petroleum hydrocarbons, organic solvents, metals
Outdoor manufacturing and processing	dust or particulate generating processes (e.g., sandblasting)	TSS, metals
	welding and/or torch cutting	TSS, metals
Petroleum hydrocarbon storage and vehicle/equipment maintenance	parts cleaning and vehicle fueling	solvents, petroleum hydrocarbons, metals, acid/alkaline wastes
	overspray/runoff from vehicle washing	oil, detergents, metals, organics, TSS
	waste disposal of greasy rags, oil filters, batteries, hydraulic and other vehicle fluids, and degreasers	oil, metals, acid/alkaline wastes, organic solvents
	spills of oil, degreasers, hydraulic and other vehicle fluids	oil, metals, organics
Liquid storage in bulk storage tanks and containers	external corrosion, structural failure, leaks	petroleum hydrocarbons, organic solvents, paints, metals
	inadvertent spills and overfills	petroleum hydrocarbons, organic solvents, paints, metals
On-site waste treatment, storage or disposal	chemical and wastewater storage and transfer	caustic soda solution, wastewater
	transfer of waste product containers and load out	oil, grease, solvents, paints
	un-emptied and residual wastes exposed to precipitation	highly variable – may include TSS, petroleum hydrocarbons, organic solvents, metals
Outdoor equipment storage and parking	leaking vehicle fluids, including hydraulic lines and radiators	oil, hydraulic fluids, metals, organics (ethylene glycol antifreeze), fuels
	driving forklifts, loaders, and vehicles on-site	TSS, metals, oil and grease

The primary activities and situations under which there is a risk of contaminants coming into contact with facility stormwater include the following:

- Loading and unloading of bulk materials
- Outdoor storage of materials or products
- Outdoor manufacturing and processing (including welding and cutting)
- Dust or particulate generating processes (e.g., sandblasting)
- On-site waste treatment, storage or disposal

- Vehicle and equipment fueling, maintenance and/or cleaning (includes washing)
- Roofs or other surfaces composed of materials that may be mobilized by stormwater (e.g. unpainted metal, galvanized or copper roofs, etc.)

2.4 Spills and Leaks

Efforts are taken to conduct the majority of industrial processes at the facility under overhead cover, where practical. However, there are facility locations where industrial activities are conducted where spills and leaks could occur and potential impact stormwater quality. The facility Spill Prevention, Control, and Countermeasures Plan (SPCCP) (Aspect Consulting, 2014) and Solid Waste Control Plan (Aspect Consulting, 2020a) identify these areas, along with detailing spill response and reporting procedures at the facility, and providing records of historical spills and leaks.

3 Best Management Practices

The following sections cover the Permit-specific mandatory and/or recommended Best Management Practices (BMPs). Recommended BMPs are consistent with or derived from Ecology's Stormwater Management Manual (SWMM) for Western Washington (Ecology 2019). The Permit requires a description and implementation of operational source control BMPs and structural source control BMPs, as applicable to the Facility's industrial activities. Additionally, application of erosion and sediment control BMPs, flow control BMPs, and treatment BMPs is required as necessary to address an erosion, flow, or pollution problem. The following BMPs are implemented at the Facility to eliminate or reduce the potential of contaminated stormwater discharging from the Facility.

3.1 Site Specific BMPS

In accordance with Permit Special Condition S.10, recommended BMPs are identified below.

3.1.1 *Control of Large Solid Materials*

Floatable and low-density waste, such as wood, plastic, and miscellaneous trash, such as paper, insulation, and packaging, must be removed from the crawler/cradle prior to launching a vessel into marine waters.

3.1.2 *Control and Cleanup of Paint Dust and Abrasive Blasting Debris*

Dust and overspray must be confined to the shipyard repair and construction areas to the maximum extent feasible during abrasive blasting and spray painting of vessels and modules. Feasible methods of control include conducting the work in a sandblast/spray paint shed or installing plastic barriers around the vessel, including between the vessel hull and walls of the screw lift dry-dock and marine railways. Plastic barriers hung from the vessel or temporary structures around the vessel should be secure and arranged to prevent the fugitive emissions of abrasive grit and dust, as well as effectively capture

overspray from spray painting activities. The bottom edge of tarpaulins and plastic sheeting must be weighted or fastened to remain in place during windy conditions.

Consideration must also be given to other feasible innovative procedures, as appropriate, to improve the effectiveness of controlling dust emissions and paint overspray. Such innovative methods may include wet abrasive blasting (slurry blasting), product substitution for blasting media, for example, sodium bicarbonate, or overall waste minimization and recycling, for example, the use of vacuum return sandblasting heads or steel shot blast technology. No abrasive blasting or spray painting of vessels must be performed while vessels are docked pier-side such that material is discharged to the receiving water.

Daily cleanup of spent paint, paint chips, protective coating materials, and abrasive grit must be undertaken as part of the repair or production activities, to the extent maximally feasible, as to prevent their entry into state waters.

Mechanical cleanup may be accomplished by mechanical sweepers, front end loaders, vacuum cleaners, or other innovative equipment. Manual methods include the use of shovels and brooms. Those portions of the yard areas which are reasonably accessible must be "scraped or broomed clean or vacuumed" to remove spent abrasive.

The yard must be cleaned on a regular basis to minimize the possibility that stormwater runoff will carry sandblasting grit or other debris into the receiving water. Collected sandblasting debris must be stored under cover in a designated area with the spent abrasive grit. Innovations and procedures which improve the effectiveness of cleanup operations must be adopted where they are feasible, appropriate, and can be demonstrated as preventing the discharge of solids to water.

3.1.3 *In-Water Vessel Maintenance - Surface Preparation BMPs*

The cleaning of any portion of a vessel's hull below the waterline while the vessel is afloat is prohibited.

The following types of surface preparation activities are allowed to be conducted on a vessel's hull above the waterline while it is at a permitted shipyard facility. These activities are only allowed provided that containment and collection BMP measures are in effect to prevent the introduction of dust, dirt, debris, or any other pollutants generated from these surface preparation operations from being deposited on or entering into waters of the state:

- Mechanical hand preparation, such as scraping or wire brushing
- Conventional mechanical grinding or use of other powered mechanical abrading tools
- Conventional abrasive blasting on the vessel's hull while it is in the water is prohibited
- Innovative abrasive blasting systems or ultrahigh water pressure systems for surface preparation will be allowed to be conducted on a vessel's hull while it is in the water provided that it has been demonstrated beforehand to Department of Ecology's satisfaction that such methods do not release generated pollutants into waters of the state

- No abrasive blasting or spray painting of vessels must cause stormwater or surface water pollution

3.1.4 In-Water Vessel Maintenance - Paint and Coating Application BMPs

The following methods of paint and coating applications to a vessel's hull while in the water at an NPDES-permitted shipyard are allowed provided that all containment, collection, and spill prevention BMPs are in place before any such applications are made to a vessel's hull:

- Application by roller
- Application by brush
- Conventional spray-paint or spray-coating applications to a vessel's hull while that vessel is in the water are prohibited
- Innovative spray-paint or spray-coating application methods will be allowed to be conducted on a vessel's hull while it is in the water provided that it has been demonstrated beforehand to Department of Ecology's satisfaction that such methods do not release generated pollutants into waters of the state

3.1.5 BMPs for Floats Used for In-Water Vessel Maintenance

Floats are defined as free-floating, unattached work platforms capable of moving back and forth along the length of the ship and around its hull.

Floats must at all times maintain a minimum of 2" of freeboard at the float's lowest point during all phases of maintenance operations. The minimum 2" freeboard requirement must be maintained with all scaffolding configurations and number of persons onboard the float. All necessary precautions will be taken by personnel onboard the float to prevent paints, cleaning materials, petroleum products, all other liquids and unsecured materials from entering into the water from the float.

Any container of paint, marine coating, or any other liquid product for painting or surface preparation must be provided with secondary containment when used onboard a float. All roller pans used on a float must be provided with secondary spill containment. Secondary spill containment capacity is equal to the entire volume of the container plus 10% of the volume of that same container.

3.1.6 Documentation Requirements for In-Water Vessel Maintenance BMPs

Documentation requirements will be in effect for any in-water surface preparation operations of one hour or more in duration and any in-water coating or painting operation involving 1/2 gallon or more of paint or marine coating.

Documentation requirements will consist, at a minimum, of one or more representative photographs of all in-water vessel maintenance BMPs which are implemented for surface preparation operations and all painting and coating operations. All such photographs must be dated and maintained in a logbook with all necessary descriptive narrative of the in-water vessel maintenance BMPs being documented. These records must be made available to a Department of Ecology inspector upon request and will be retained on-site for at least three (3) years.

3.1.7 Oil, Grease, Paint, and Fuel Spills Prevention and Containment

No discharge of oil, other hazardous material, or paint to state waters is allowed, except as specifically authorized by this permit. Oil, grease, fuel, or paint spills must be prevented from reaching drainage systems or surface waters. Cleanup must be carried out promptly after an oil, grease, fuel, or paint spill is detected. Oil containment booms and absorbents must be conveniently stored so as to be immediately deployable in the event of a spill. All yard personnel that may participate in cleanup of spills must be trained in the use and deployment of cleanup equipment.

In the event of an accidental discharge of oil or hazardous material into waters of the state or onto land with a potential for entry into state waters, the Department's Northwest Regional Office Spill Response Section and the United States Coast Guard must be notified immediately, and:

- Cleanup efforts must commence immediately and be completed as soon as possible, taking precedence over normal work, and must include proper disposal of spilled material and used cleanup material
- Cleanup of oil or hazardous material spills must be in accordance with an approved Spill Control Plan or according to specific instructions of an on-scene coordinator
- No emulsifiers or dispersants are to be used in or upon the waters of the state without prior approval from the Director of the Department of Ecology. Drip pans or other protective devices must be required for all oil transfer operations to catch incidental spills and drips from hose nozzles, hose racks, drums, or barrels. Oils and fuel storage tanks must be provided with secondary containment.

3.1.8 Paint and Solvent Use and Containment

The mixing of paints and solvents must be carried out in locations and under conditions such that no spill must enter state waters:

- Drip pans or other protective devices must be required for all paint mixing and solvent transfer operations, unless the mixing operation is carried out in covered and controlled areas away from storm drains, surface waters, shorelines, and piers. Drip pans, drop cloths, or tarpaulins must be used wherever paints and solvents are mixed on wood docks. Paints and solvents must not be mixed on floats.
- When painting from the marine railways or screw lift drydock, paint must be in cans of five gallons or less. The paint containers must be kept in drip pans with drop cloths or tarpaulins underneath the drip pans.
- Paint and solvent spills must be treated as oil spills and must be prevented from reaching storm drains and subsequent discharge into the water.

3.1.9 Contact Between Water and Debris

Shipboard cooling and noncontact cooling water must be directed as to minimize contact with spent abrasives, paint chips, and other debris. Contact between spent abrasives or paint chips and water will be reduced by proper segregation and control of wastewater streams. Appropriate methods must be incorporated to prevent accumulation of debris in

drainage systems, and debris must be promptly removed to prevent its discharge with stormwater.

3.1.10 Maintenance of Hoses, Soil Chutes, and Piping

Leaking connections, valves, pipes, hoses, and soil chutes carrying either water or wastewater must be replaced or repaired immediately. Soil chute and hose connections to vessels and to receiving lines or containers must be tightly connected and as leak free as practicable.

3.1.11 Chemical Storage

Solid chemicals, chemical solutions, paints, oils, solvents, acids, caustic solutions and waste materials, including used batteries, must be stored in a manner which will prevent the inadvertent entry of these materials into waters of the state, including ground water. Storage must be in a manner that will prevent spills due to overfilling, tipping, or rupture. In addition, the following practices must be used:

- All liquid products must be stored on durable impervious surfaces and within bermed containment capable of containing 110 percent of the largest single container in the storage area.
- Waste liquids must be stored under cover, such as tarpaulins or roofed structures. All waste storage areas, whether for waste oil or hazardous waste, must be clearly designated as such and kept segregated from new product storage.
- Incompatible or reactive materials must be segregated and securely stored in separate containment areas that would prevent the inadvertent mixing and reaction of spilled chemicals.
- Concentrated waste or spilled chemicals must be transported off-site for disposal at a facility approved by the Department of Ecology or appropriate county health authority in accordance with the solid waste disposal requirements of Special Condition S8. These materials must not be discharged to any sewer or state waters.
- Collected sandblasting debris must be stored under cover in a contained bin.

3.1.12 Recycling of Spilled Chemicals and Rinse Water

All metal-finishing chemical solution, caustic wash, and rinse water tanks must be stored in bermed areas with drains to intercept overflows and spills. Any intercepted chemical spill must be recycled back to the appropriate chemical solution tank or cleaned up and properly disposed of. The spilled material must be handled, recycled, or disposed of in such a manner as to prevent its discharge into state waters. Rinse water from dip tank processes must not be allowed to enter storm drains or waters of the state.

3.1.13 Sediment Traps

The sediment traps in the storm water drainage systems for the yard must be inspected on a monthly basis and cleaned as necessary to ensure the interception and retention of solids entering the drainage system. Inspection logs and cleaning records must be maintained.

3.1.14 Education of Employees, Contractors, and Customers

To facilitate the consistent and effective implementation of the BMPs described above, NBBB must develop a program for training its employees, and all contractors who work at the facility, on BMPs, and the environmental concerns related to this permit. There are a variety of ways to accomplish this, and NBBB should determine the method that works best for the company. For example, regular safety meetings may be a convenient time to discuss BMP implementation successes or problems and get input on better ways of accomplishing pollution prevention. NBBB may consider providing similar information to its customers.

3.2 Operational BMPs

In addition to the operational BMPs listed below, site-specific recommended BMPs are summarized in Section 3.1 above.

3.2.1 Good Housekeeping

A good housekeeping program involves a common-sense approach to improve and maintain a clean and orderly work environment to reduce the risk of storm water contamination. In order to satisfy good housekeeping BMPs, NBBB will adhere to the following procedures:

- Properly store materials as stated in Routine Preventive Maintenance and Corrective Measures (see below).
- Improve operation and maintenance of machinery and processes as necessary.
- Vacuum paved surfaces with a vacuum sweeper (or a sweeper with a vacuum attachment) to remove accumulated pollutants, a minimum of once per week.
- Identify and control all on-site sources of dust to minimize stormwater contamination from the deposition of dust in areas exposed to precipitation.
- Store materials in a neat, orderly manner in appropriate containers.
- Whenever possible, use all of a product before its container is disposed.
- Follow manufacturer's recommendations for proper use and disposal of a product.
- Cover dumpsters with storm-resistant lids to limit potential stormwater contact with solid waste. Keep lids in place when dumpsters are not in use.
- If surplus products must be disposed of, follow the manufacturer's or local and state recommended methods for proper disposal.

3.2.2 Routine Preventative Maintenance and Corrective Measures

A good preventive maintenance program involves inspections and maintenance of storm water management devices and routine inspections of facility operations in order to detect faulty equipment.

- The Facilities Maintenance Supervisor shall be responsible for inspections, actions, and report writing.

- Facility drains, vaults, pumps, swales, and other storm water management devices will be inspected monthly at a minimum.
- Reports summarizing the scope of inspections, the personnel conducting the inspection, the date of the inspection, and major observations and actions taken shall be prepared and retained as part of the SWPPP.
- Storm water management devices will be cleaned and repaired whenever necessary to maintain proper function.
- Routine cleanup operations will be performed prior to the end of each day.
- Liquid wastes will not be discharged into the storm water system.
- Non-domestic waste will not be discharged into the septic system.
- Prior to use, all equipment will be checked for leaks, broken or damaged parts, or any irregularity that could result in contamination of storm water.
- Whenever possible, equipment will be stored indoors when not in use.
- All aboveground tanks shall be adequately contained.
- If a spill occurs, the Facilities Maintenance Supervisor will investigate and take actions to minimize the chances of a repeat occurrence.
- Proper containment materials and absorbance materials will be stored in easily accessible areas, and whenever possible, within the vicinity of the materials.
- Hazardous materials will be located within covered basins for spill prevention wherever possible.
- Preventive maintenance and corrective measures will be pre-scheduled and conducted as scheduled.
- Completion of maintenance and corrective measures will be documented.
- Work orders will be developed for identified problems.

This SWPPP will be reviewed and updated as needed to include corrective measures identified.

3.2.3 Spill Prevention and Emergency Cleanup

These BMPs are used to determine areas of the facility where spills are most likely to occur and to identify their drainage points. Employees will be made aware of response procedures, including handling and storage of materials, as well as the spill cleanup equipment that is available.

- Store all chemical liquids, fluids, and petroleum products on an impervious surface, surrounded by a containment berm or dike that is capable of containing 10% of the total enclosed tank volume, or 110% of the volume contained in the largest tank, whichever is greater. The Facility has a SPCCP (Aspect Consulting 2014) that specifically addresses issues pertaining to spillable materials stored on site.

- Prevent precipitation from accumulating in containment areas via a roof or equivalent structure. If a containment area cover is not practical, include a written plan on how Facility staff will manage and dispose of accumulated water.
- Locate spill kits within 25 ft of all stationary, fuel transfer stations, mobile fueling units, and chemical transfer stations. At a minimum, spill kits must include:
 - An oil absorbent, capable of absorbing 15 gal. of fuel
 - A storm drain plug or cover kit
 - A non-water containment boom, a minimum of 10 ft in length, with a 12-gal. absorbent capacity
 - A non-metallic shovel
 - Two 5-gal. buckets with lids
- Conduct fuel transfers properly. Do not lock shut-off or bypass any safety measures.
- Use drip pans or equivalent containment measures during all petroleum transfer operations.
- Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems; confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas.
- Use drip pans and absorbents under or around leaky vehicles and equipment, or store such vehicles and equipment indoors where feasible. Drain fluids from equipment and vehicles prior to on-site storage or disposal.
- Maintain a log of chemical and petroleum spills that includes the following information: date, time, amount, location, and reason for spill; date/time cleanup completed; and notifications made and staff involved.

3.2.4 Inspections, Reporting, and Record Keeping

Weekly inspections

All drains and catch basins, where accessible, will be inspected at least weekly. Any problems discovered during inspections will be disclosed to the Facilities Maintenance Supervisor. Corrective measures will be taken to maintain proper function of the storm water system.

Quarterly visual inspections

Visual monitoring shall be done at least quarterly and must include observations made at stormwater sampling locations at the time of sampling. The visual inspection will verify that the a) SWPPP accurately describes potential pollutant sources, b) that the site map has been updated to reflect current conditions, and c) that the controls to reduce pollutants in storm water discharges are being implemented and are adequate. The inspections will be conducted during a rainfall event. Observations of floating materials, visible sheen, color, oil and grease, turbidity, and odor in the storm water conveyances provide a basis for assessment of the adequacy of the SWPPP.

Annual dry weather inspection

The stormwater discharge will be inspected to determine the presence of non-stormwater discharges such as domestic wastewater or process wastewater to the storm water drainage system. This dry season inspection will be conducted between July 1 and September 30 by the Facilities Maintenance Supervisor or someone trained by the Facilities Maintenance Supervisor on a day without precipitation.

Visual inspection results will identify the a) discharge location, b) the method used to test or evaluate the discharge, c) the results from the test for presence of non-stormwater discharge, d) potential significant sources, e) who conducted the inspection, and f) the date of the inspection.

Inspection Record Keeping

A report summarizing the scope of the inspection, the personnel conducting the inspection, the date(s) of the inspection and major observations relating to the implementation of the SWPPP shall be prepared and retained as part of the SWPPP. Reports on incidents such as a discharge of a spill or other noncompliance notification shall also be included in the records.

Inspection sheets are contained in a binder located in the maintenance facility shop.

NBBB will retain all records for a minimum of 3 years. Such information will include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by the storm water permit, and records of all data used to complete the application for the permit. This period of retention will be extended during the course of any unresolved litigation regarding the discharge of pollutants by NBBB, or when requested by the Department of Ecology.

3.2.5 Training

Training is a mandatory BMP and is required to include SWPPP and SPCCP training for those employees with duties in areas of industrial activity subject to this Permit.

Employee meeting discussions

- Discuss any environmental/health and safety incidents.
- Notify employees of upcoming training sessions.
- Provide brief reminders on good housekeeping, spill prevention and response procedures, and material handling.
- Announce any changes to current plans and procedures.
- Announce any new management practices.

Refresher courses

Refresher courses will address:

- Good housekeeping practices,
- Spill prevention and response procedures, and
- Material handling and storage.

Employee training program topics

- Good housekeeping
 - Review and demonstrate basic cleanup procedures.

- Identify proper disposal locations.
- Identify locations of routine cleanup equipment.
- Spill prevention and response
 - Identify potential spill areas and drainage routes.
 - Familiarize employees with past spill events and their causes.
 - Identify spill cleanup equipment and operating procedures.
- Materials handling and storage
 - Identify hazardous materials and their use and storage locations.
 - Describe and/or show safe handling of all hazardous materials.
 - Explain disposal procedures for outdated materials and empty containers.
 - Identify vehicle and equipment fueling practices and avoid “topping off.”

Training records

Training activities will occur at least annually and will be recorded identifying the dates and who received training and included with the SWPPP.

3.3 Structural BMPs

Structural source control BMPs use constructed or mechanical features to prevent pollutants from entering stormwater. In addition to the mandatory structural BMPs listed below, site-specific recommended BMPs are summarized in Section 3.1 above.

- Use grading, berming, or curbing to control runoff of contaminated flows and divert run-on away from manufacturing, processing, and material storage areas (e.g., loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations areas).
- Perform all cleaning operations indoors, under cover, or in bermed areas that control stormwater runoff and run-on and that capture any overspray.
- Make sure that all wash water drains to a collection system that directs the wash water to further treatment or storage and not to the stormwater drainage system.

3.4 Treatment BMPs

Water quality treatment BMPs include the use of facilities that remove pollutants from stormwater by filtration, biological uptake, adsorption, and/or gravity settling of particulate pollutants. During 2007 through 2011 NBBB implemented significant upgrades to the stormwater management and treatment system at its Freeland facility. The system features a WaveIonics™ electrocoagulation (EC) treatment system, multi-media filtration unit, and granular activated carbon (GAC) filtration unit, which were designed and manufactured by Water Tectonics of Everett, Washington. The proposed system upgrades were originally described in the Engineering Report (Parametrix 2007), and an addendum (Windward 2011) that updated the original Engineering Report, was reviewed and approved by the Washington State Department of Ecology (Ecology) in 2011.

The shipyard fabrication area slopes gently to the northeast, and a system of drains in the shipyard routes stormwater runoff to the north spillway and north spillway catch basin (Figure 2). The spillway catch basin leads to a 2,000-gal. vault (pump chamber) located at the northeast corner of the shipyard (Figure 3). To minimize contaminants contained in the surface water runoff that drains to the 2,000-gal. vault, source control BMPs are actively practiced. If necessary, stormwater runoff can temporarily be detained in a topographic depression in the northeast corner of the shipyard prior to entering the vault.

The 2,000-gal. vault is the first of several components that make up NBBB's overall stormwater treatment system, which includes the following:

- 2,000-gal. influent vault (pump chamber)
- 5,000-gal. vault (pump chamber)
- 120,000-gal. source tank (detention tank)
- WaveIonics™ EC treatment system
- 60,000-gal. settling tank (detention tank)
- Multi-media filtration unit
- GAC filtration unit

Figure 4 presents a schematic diagram of the overall water quality treatment system. Initially stormwater is collected and held in a 2,000-gal. vault, which contains two 300-gal. per minute (gpm) pumps that are configured in a “lead/lag” control system. The first pump, pump #1, is set to engage at a water level of 44 inches. If pump #1 cannot keep up with the incoming water flow, then pump #2 is engaged once the water level reaches 56 inches in the 2,000-gal. vault. Water is then pumped to the nearby 5,000-gal. vault, which contains a 300-gpm pump and a 400-gpm pump. These two pumps operate on an “alternating relay” control system that resides in the power distribution box for the 5,000-gal. vault, with both pumps engaged by the same float switch. A weir tank is also located in the vicinity of the 2,000- and 5000-gal vaults.

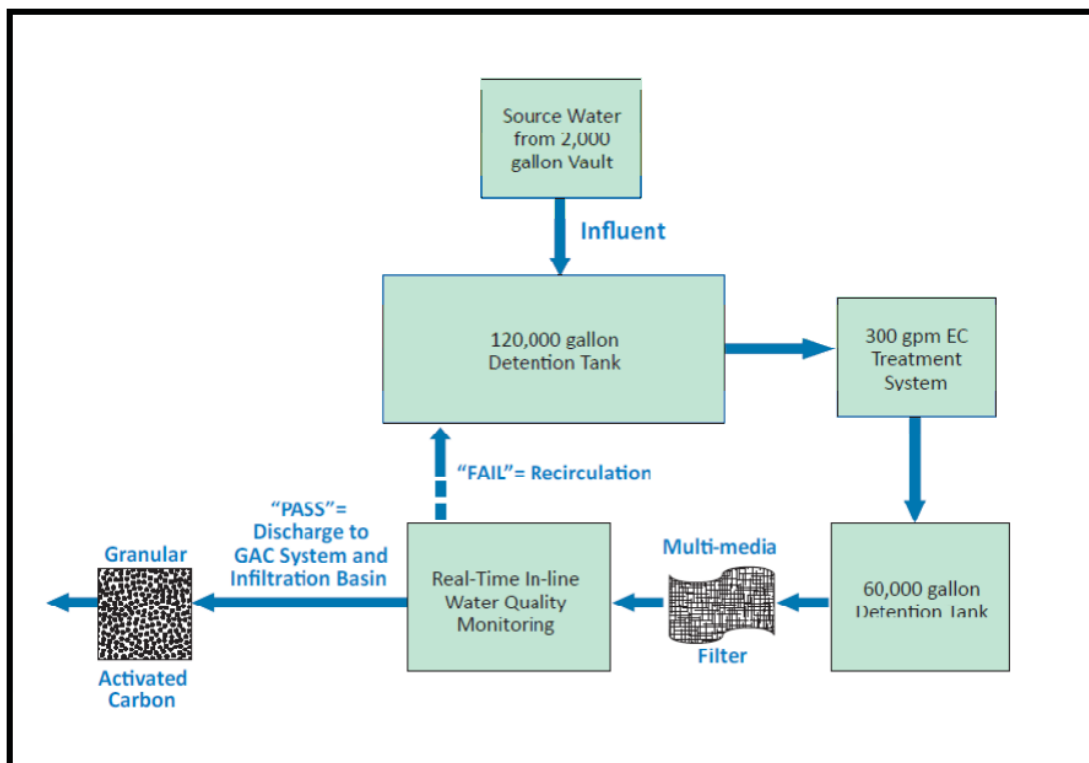


Figure 4. Schematic Diagram of Water Quality Treatment System

The weir tank is not part of the stormwater management system as it is used to collect water associated with hydroblasting activities. Hydroblast water, which is not allowed to comeingle with stormwater, is collected in the weir tank and periodically pumped to a tanker truck for off-site disposal at an approved disposal facility.

Water from the 5,000-gal. vault is pumped to a 120,000-gal. detention tank (referred to as the source tank), which is part of the multi-stage treatment train located in the southeast portion of the shipyard fabrication area.

The water in the source tank is then pumped through the 300-gpm WaveIonics™ EC system and into a 60,000-gal. detention tank (referred to as the settling tank). Finally, the water is pumped at a design flow rate that ranges from 150 to 300 gpm through the multi-media filtration unit, and, if it meets the real-time inline water quality monitoring requirements, through the GAC filtration unit before being discharged to the infiltration basin located east of the fabrication area (Figure 2).

Further details on the stormwater treatment system, including its operation and maintenance (O&M) procedures are provided in the facility's Treatment System Operating Plan (Aspect Consulting 2020b).

4 Monitoring and Sampling Plan

Stormwater discharge monitoring at the Freeland facility is administered through the facility's NPDES Permit (Number WA-0032166). According to Special Condition S2.A of the Permit, stormwater will be monitored at the designated Treated Stormwater, Outfall #001 (final effluent of the stormwater EC treatment unit), prior to discharge to the infiltration basin (see Figure 3). All monitoring will be conducted according to the schedule outlined in Table 4.1.

Table 4-1. Monitoring schedule

Location	Minimum Frequency ^a	Parameter	Sample Type
Outfall #001 (treatment system final effluent, prior to infiltration basin)	1/Month	Flow, GPD	Totalizing Flow Meter
	1/Month	Chromium, as Total, µg/L	Grab
	1/Month	Copper, as Total, µg/L	Grab
	1/Month	Lead, as Total, µg/L	Grab
	1/Month	Zinc, as Total, µg/L	Grab
	1/Month	Total Petroleum Hydrocarbons (TPH), mg/L	Grab
	1/Month	Turbidity (NTU)	Continuous online meter reading ^b
	1/Month	pH (standard units)	Continuous online meter reading ^c

^a Minimum frequency 1/month, which means one sample during each calendar month, with two or more samples being separated by one week at least. Minimum Sampling Frequency is contingent upon presence and duration of the flow at the time of the discharge.

^b Report the turbidity maximum daily average value, calculated based on continuous online turbidimeter readings.

^c Report the instantaneous maximum and minimum pH values monthly. Do not average pH values.

4.1 Sample Collection and Handling

The following collection and handling methods will be used during sampling:

- Samples will be taken by the Facilities Maintenance Supervisor, or an individual trained and directed by the Facilities Maintenance Supervisor.
- Grab samples will be collected by hand directly into pre-cleaned sample containers provided by the analytical laboratory. Sample bottles containing preservative will be filled from an unpreserved sample bottle first, and the unpreserved sample(s) will be collected.
- Sample bottles will not be pre-rinsed or overfilled. Approximately one-half inch of headspace will be left at the top of each bottle.
- Once the sample has been collected, the bottle will be capped and labeled. Labels will include:
 - Outfall name or number, e.g., Outfall #001

- Testing parameter (see Table 4-2)
- Sample collection date and time
- Initials of sampling personnel
- Facility identifier (e.g., NBBB-Freeland)
- Samples will be kept cool but not frozen and shipped to the laboratory in a cooler, on ice, within 24 hours of collection.

4.2 Sampling Parameters

All analyses required under the Permit will be conducted by an Ecology- accredited commercial laboratory. The sample parameters, effluent limits, holding times, preservatives, reporting limits, and analytical methods applicable to the Freeland facility monitoring are presented in Table 4-2.

Table 4-2. Effluent limits and sampling requirements

Parameter	Unit	Effluent Limit ^{a,b}	Analytical Method	Reporting Limit	Preservative	Holding Time
Flow	GPD	NA	NA	NA	NA	NA
pH	standard units	6.0-9.0	Online meter	NA	NA	NA
Turbidity	NTU	5	Online meter	NA	NA	NA
TPH	mg/L	5	NWTPH-Dx	0.5	cool, 0-6°C	7 days
Chromium, total	µg/L	50	EPA 200.8	5.0	nitric acid	6 months
Copper, total	µg/L	5.8	EPA 200.8	1.0	nitric acid	6 months
Lead, total	µg/L	14	EPA 200.8	0.5	nitric acid	6 months
Zinc, total	µg/L	95.1	EPA 200.8	2.5	nitric acid	6 months

^a Indicates the range of permitted pH values. Report the instantaneous maximum and minimum pH monthly. Do not average pH values. Any excursions below 5.0 and above 10.0 at any time are violations; excursions between 5.0 and 6.0, or 9.0 and 10.0 are not considered violations if no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month.

^b The turbidity limit is the maximum daily average calculated based on continuous online turbidimeter readings.

GPD – gallons per day

NA – not applicable

4.3 Discharge Monitoring Report Submittals

Monitoring results for the stormwater treatment system effluent shall be submitted monthly. Per Permit Special Condition S.3.A, monitoring results are due to Ecology the 28th day of the month following the monitoring period.

Discharge monitoring reports (DMRs) shall electronically be submitted to Ecology using the Water Quality Permitting Portal. DMRs shall be submitted monthly whether or not

the facility was discharging. If no discharge occurs in a given month, sampling is not required and it must be clearly stated in the monthly DMR as “No Discharge.” The monthly DMR must also indicate the total contaminated stormwater processed during each calendar month together with the number of events.

4.4 Recording of Results

For each measurement or sample taken, NBBB will record the following information:

1. The date, exact place, method, and time of sampling or measurement;
2. The individual who performed the sampling or measurement;
3. The dates the analyses were performed;
4. The individual who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of all analyses.

4.5 Additional Discharge Monitoring

If NBBB monitors any pollutant more frequently than required by the Special Condition S.2 of the Permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the quarterly DMR.

4.6 Noncompliance Notification

In the event that NBBB is unable to comply with any of the terms and conditions of the Permit due to any cause, NBBB shall:

- Immediately take action to stop, contain, and clean up unauthorized discharges or otherwise stop the noncompliance and correct the problem.
- Immediately (within 24 hours) notify by telephone (425.649.7000) the appropriate Ecology regional office of the failure to comply.
- Submit a detailed written report to Ecology within five (5) unless requested earlier by Ecology, describing the nature of the violation, corrective action taken and/or planned steps to be taken to prevent a recurrence, results of the re-sampling, and any other pertinent information.

Compliance with these requirements does not relieve NBBB from responsibility to maintain continuous compliance with the terms and conditions of the State Waste Discharge permit or the resulting liability for failure to comply.

5 Emergency Spill Response Procedures

All employees with duties in areas of industrial activity at the Facility should review and be familiar with the spill response procedures outlined in this section, as well as the Facility SPCCP (Aspect Consulting 2014).

Spills of any volume should be responded to as quickly as possible. Spill prevention practices and quick response are critical in reducing or preventing the impacts of oil spills.

Factors involved in spill response include the following:

- The quantity of the spill.
- The potential for discharge to surface waters.
- The time involved responding to and cleaning up spills.
- The cost of cleaning up spills, particularly when the assistance of a spill response contractor is required.
- The potential involvement of regulatory agencies (Ecology, EPA, U.S. Coast Guard).

Oil/petroleum and other material spills should be responded to with the following priorities: (1) personnel safety, (2) fire prevention, (3) environmental protection, and (4) equipment protection.

Cleanup efforts must be completed as soon as possible, taking precedence over normal work, and must include proper disposal of spilled material and used cleanup material. Spill response contacts and emergency evacuation procedures are posted throughout the facility (Main Administration Office, Foreman's trailer, Tool Room, and at each project in the Fabrication Yard. All spills, no matter the size are to be reported to the facility spill response team. Spill response is conducted in accordance with the procedures outlined in Table 5-1. A spill response report form is included in Appendix B of the facility SPCCP (Aspect Consulting 2014).

Table 5-1. Spill Detection and Response Procedures

Action	Personnel	Procedure
Spill detection	All employees	Upon detection of a spill, immediate measures will be taken by on-site personnel to localize spill within the immediate area using all available spill response methods and materials. The onsite coordinator will contact the facility spill response team and remain until they arrive
Spill response and cleanup	Spill response team	<p>Evacuate personnel from the spill area and obtain medical attention for injured, if necessary</p> <p>Mobilize spill response equipment to the spill area</p> <p>Put on personal protective equipment (PPE) as required</p> <p>If no personal danger exists, shut off and contain the source of the spill; contact spill response contractor if additional help/resources are required</p> <p>Clean up spill and place materials into appropriately labeled containers</p> <p>Correctly characterize, label, and store spill cleanup materials</p> <p>Arrange for disposal of collected spill material</p> <p>Clean, maintain, and replenish spill response equipment as required</p>
Agency reporting	Spill response coordinator	<p>Any oil or hazardous materials spilled to state waters, the ground, or the air, must be reported to:</p> <ul style="list-style-type: none"> ◆ The Washington Emergency Management Division (1-800-258-5990 OR 1-800-OILS-911) ◆ The National Response Center (1-800-424-8802) ◆ The Ecology Northwest Regional Office (1-425-649-7000) ◆ Local emergency responders (911)
Spill report form	Safety and Environmental Manager	Fill out spill report form in Appendix B as soon as possible after the spill. Record all spill events, including minor spills
Follow up	Safety and Environmental Manager	Review SPCC Plan and spill response procedures and update if necessary
	Spill response team	Implement corrective actions, if appropriate, to reduce the potential for recurrence of the spill

6 Emergency Contacts

The following telephone numbers shall be used in the event of a spill or other emergency at the Facility.

Table 6-1. Emergency Contacts

Name	Primary Phone Number	Alternate Phone Number	Email
Facility Personnel			
FLOOD			
Shawn Hiday	360.331.5500x326	360.298.6045	shawnh@nicholsboats.com
Scott Statia	360.331.5500x340	360.914.2915	sstatia@nicholsboats.com
HAZARDOUS WASTE LEAK			
Scott Statia	360.331.5500x340	360.914.2915	sstatia@nicholsboats.com
Shawn Hiday	360.331.5500x326	360.298.6045	shawnh@nicholsboats.com
Emergency Responders			
Fire Department	911		
Police Department	911		
State and Federal Agencies			
Washington Emergency Management Division	1-800-258-5990		
National Response Center	1-800-424-8802		
Ecology – Northwest Regional Office	1-425-649-7000		
Spill Response Contractor			
NRC Environmental Services, Inc.	1-800-337-7455		

7 Inspections and Recordkeeping

- In order to assure compliance with permit requirements for inspections and recordkeeping, the Facilities Maintenance Supervisor will assure that designated equipment and stormwater facilities are inspected and monitored as required.
- Inspection logs will be maintained documenting each inspection of the facility.
- Any samples collected for laboratory analysis will be recorded on a Chain of Custody record submitted to the analytical testing facility.
- Visual monitoring inspections, reports and certifications shall be maintained and included in a binder located in the maintenance facility shop.
- Each year the SWPPP shall be reviewed and updated as necessary.

8 References

- Aspect Consulting. 2014. Spill prevention, control, and countermeasures plan. Prepared for Nichols Brothers Boat Builders. Aspect Consulting LLC, Seattle, WA.
- Aspect Consulting. 2020a. Solid waste control plan. Prepared for Nichols Brothers Boat Builders. Aspect Consulting LLC, Seattle, WA.
- Aspect Consulting. 2020b. Stormwater treatment system operating plan. Prepared for Nichols Brothers Boat Builders. Aspect Consulting LLC, Seattle, WA.
- Ecology. 2019. Stormwater management manual for Western Washington. Water Quality Program, Washington State Department of Ecology, Olympia, WA.
- Parametrix. 2007. Engineering report: Nichols Brothers Boat Builders, Inc. Freeland, Washington site. Parametrix, Inc., Bellevue, WA.
- Windward. 2011. Nichols Brothers Boat Builders engineering report addendum. August 2, 2011. Windward Environmental LLC, Seattle, WA.

ATTACHMENT A

Facility Operations Information and Information on the Water Quality Treatment System

Facility Operation Information

Ice Floe, LLC, doing business as (dba) Nichols Brothers Boat Builders (NBBB) operates a fabrication facility located at 5400 S. Cameron Road in Freeland, Washington (Figure 1). All aspects of boat and ship construction and repair are performed at NBBB's Freeland Facility. NBBB primarily works on vessels that are constructed of steel and/or aluminum. The vessels include passenger and car ferries, tug boats, barges, dinner cruise ships, high speed catamarans, and fishing vessels.



Figure 1. Site location map

A facility map is provided in Figure 2. The NBBB Freeland facility lies on a gently sloped (approximately 1 percent grade), semi-rectangular site with the highest point being the southwest corner; the lowest point is the northeast corner where the stormwater collection vault is located. The current facility grounds include a total of approximately 16 acres. The offices, fabrication yard, and associated buildings are located in the northern 6 acres of the site and to the west of Cameron Road. At the southwest corner of the site, 2.2 acres is a paved parking area. The southeastern 2.3 acres is a compacted gravel storage area for dry materials. Unpaved landscaping surrounds the facility, and a stormwater infiltration basin and grass-lined swale are located east of the fabrication area boundary.

All aspects of boat and ship construction and repair are performed at this facility. All materials, supplies, and equipment are initially delivered to the completely enclosed warehouse, located at the southwest corner of the yard, where they are stored until needed at other locations in the

boat yard. Because the warehouse is completely enclosed, this area presents no stormwater pollution problems. Metal materials (primarily aluminum and steel) are generally stored uncovered in the southeast corner of the facility, east of the parking lot and south of the fabrication yard.

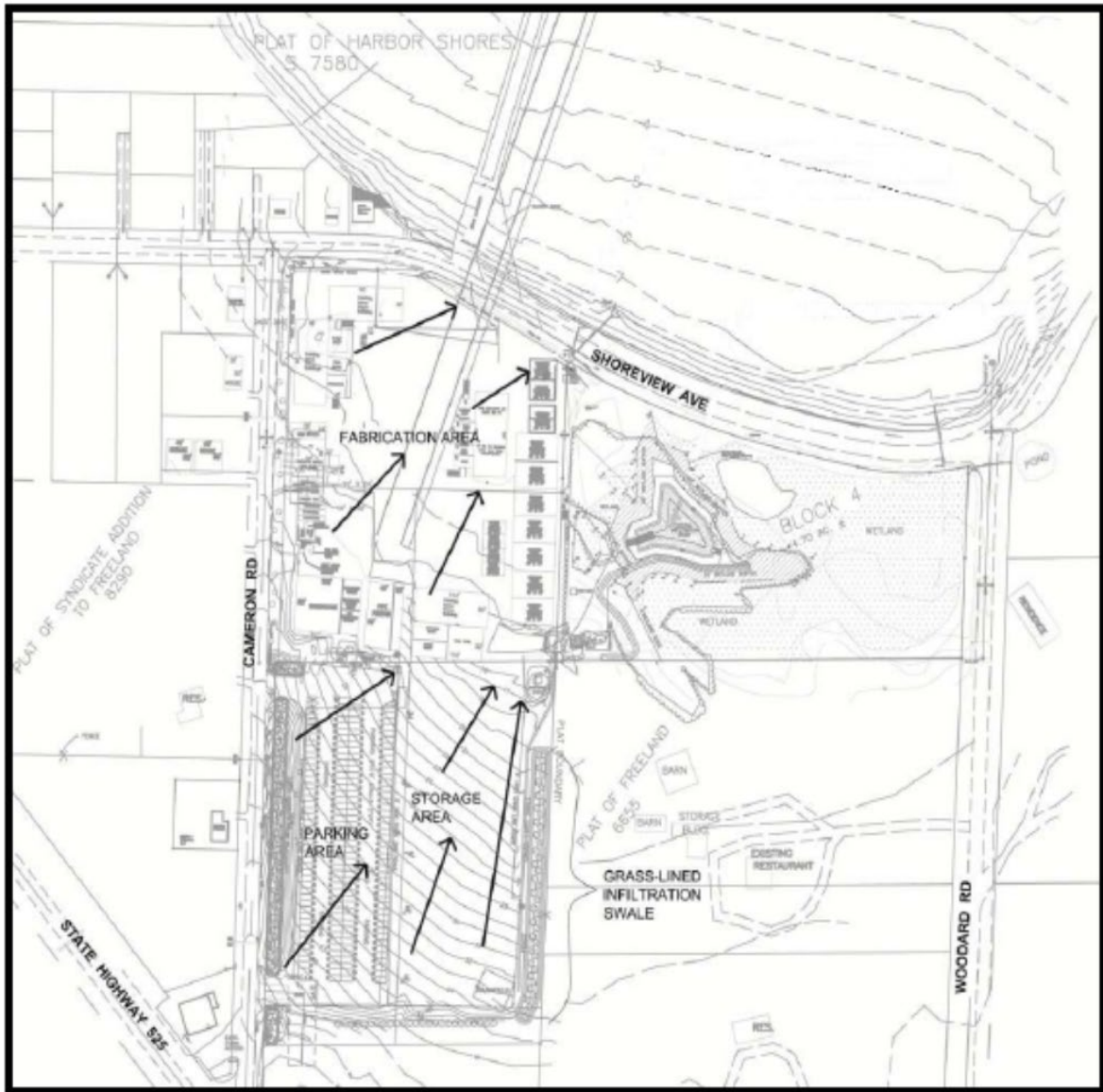


Figure 2. Facility map and surface flow direction

Metal cutting is performed either inside one of the fabrication buildings or over one of the paved areas. All trash is removed from the site through the main dumpster which is mobile and placed in different locations depending on the projects under construction.

Wet sandblasting and painting are done either indoors or outdoors over the concreted areas at the north and east sides of the yard. If done outdoors, all paint is kept in its own containment and tarpaulins are used to catch paint from emitting particulates into the air. Waste sandblast

grit is stored in a metal-covered, concrete-lined shelter at the southeast corner of the fabrication yard until removed by an authorized hazardous waste hauler.

Small vehicles are repaired and maintained inside the mechanic's shop which is located at the southwest corner of the lot. The mechanic's shop is too small for maintenance of large vehicles and equipment. Large vehicle maintenance occurs outdoors under cover of portable shelter roofs.

Aboveground storage tanks (ASTs) containing gasoline, diesel fuel, and heating oil are located on a concrete slab under a covered area along the west side of the yard, north of the warehouse. The fuel storage area has a low concrete berm that is capable of containing 110 percent of the largest tank volume in this area. The portable heating oil tank has an external containment pan to catch spills or leaks from the tank.

Paint and other hazardous materials are stored in steel shipping containers, or under cover in the fuel storage area. All drums and cans are stored vertically. A methyl ethyl ketone (MEK) distillation unit is located under cover on the north side of the fuel storage area. MEK is stored in 55-gallon drums. Solids generated from MEK distillation are stored in 55-gallon drums until removed by an authorized hazardous waste hauler.

The types of significant materials handled and/or stored at the Facility include: diesel fuel (on- and off-road), kerosene, gasoline (leaded and unleaded), engine and lubricating oils, greases, hydraulic fluids, antifreeze, cleaners and degreasers, paints, solvents (including MEK), epoxy resins and hardeners, as well as used oil and antifreeze, waste sandblast grit, and process wastewater.

Table 1 lists potential contaminants, locations, storage methods, and stormwater pollutant potential. The facility contracts with commercial suppliers to deliver products and supplies. Contractors also periodically replenish storage tanks on an as needed basis.

The primary activities and situations under which there is a risk of contaminants coming into contact with facility stormwater include the following:

- Loading and unloading of bulk materials
- Outdoor storage of materials or products
- Outdoor manufacturing and processing (includes welding and cutting)
- Dust or particulate generating processes (e.g., sandblasting)
- On-site waste treatment, storage or disposal
- Vehicle and equipment fueling, maintenance and/or cleaning (includes washing)
- Roofs or other surfaces composed of materials that may be mobilized by stormwater (e.g. unpainted metal, galvanized or copper roofs, etc.).

Table 1. Facility activities, material types, and stormwater pollutant potential

Facility Activity	Potential Pollutant-generating Activity/Situation	Potential Pollutant
Loading and unloading bulk materials	spills and leaks of liquids, dust, and residuals	TSS, petroleum hydrocarbons (diesel, gasoline, oil and grease, kerosene), organic solvents, metals
Outdoor storage of materials and processing	unprotected materials exposed to precipitation	highly variable – may include TSS, petroleum hydrocarbons, organic solvents, metals
Outdoor manufacturing and processing	dust or particulate generating processes (e.g., sandblasting)	TSS, metals
	welding and/or torch cutting	TSS, metals
Petroleum hydrocarbon storage and vehicle/equipment maintenance	parts cleaning and vehicle fueling	solvents, petroleum hydrocarbons, metals, acid/alkaline wastes
	overspray/runoff from vehicle washing	oil, detergents, metals, organics, TSS
	waste disposal of greasy rags, oil filters, batteries, hydraulic and other vehicle fluids, and degreasers	oil, metals, acid/alkaline wastes, organic solvents
	spills of oil, degreasers, hydraulic and other vehicle fluids	oil, metals, organics
Liquid storage in bulk storage tanks and containers	external corrosion, structural failure, leaks	petroleum hydrocarbons, organic solvents, paints, metals
	inadvertent spills and overfills	petroleum hydrocarbons, organic solvents, paints, metals
On-site waste treatment, storage or disposal	chemical and wastewater storage and transfer	caustic soda solution, wastewater
	transfer of waste product containers and load out	oil, grease, solvents, paints
	un-emptied and residual wastes exposed to precipitation	highly variable – may include TSS, petroleum hydrocarbons, organic solvents, metals
Outdoor equipment storage and parking	leaking vehicle fluids, including hydraulic lines and radiators	oil, hydraulic fluids, metals, organics (ethylene glycol antifreeze), fuels
	driving forklifts, loaders, and vehicles on-site	TSS, metals, oil and grease

Water Quality Treatment System Information

During 2007 through 2011 NBBB implemented significant upgrades to the stormwater management and treatment system at its Freeland facility. The system features a WaveIonics™ electrocoagulation (EC) treatment system, multi-media filtration unit, and granular activated carbon (GAC) filtration unit, which were designed and manufactured by Water Tectonics of Everett, Washington. The proposed system upgrades were originally described in the 2007 Engineering Report and in the 2011 Engineering Report Addendum that was reviewed and approved by the Washington State Department of Ecology (Ecology).

The shipyard fabrication area slopes gently to the northeast, and a system of drains in the shipyard routes stormwater runoff to the north spillway and north spillway catch basin (Figure 2). The spillway catch basin leads to a 2,000-gallon vault (pump chamber) located at the northeast corner of the shipyard (Figure 3). To minimize the amount of contaminants contained in the surface water runoff that drains to the 2,000-gallon vault, source control Best Management Practices (BMPs) (as described in NBBB's Stormwater Pollution Prevention Plan) are actively practiced. If necessary, stormwater runoff can temporarily be detained in a topographic depression in the northeast corner of the shipyard prior to entering the vault. Stormwater from the pump chamber is pumped south (uphill) to a 120,000-gallon holding tank prior to entry into a proprietary EC treatment system. Following treatment, the treated stormwater is pumped northeast to the existing stormwater infiltration basin.

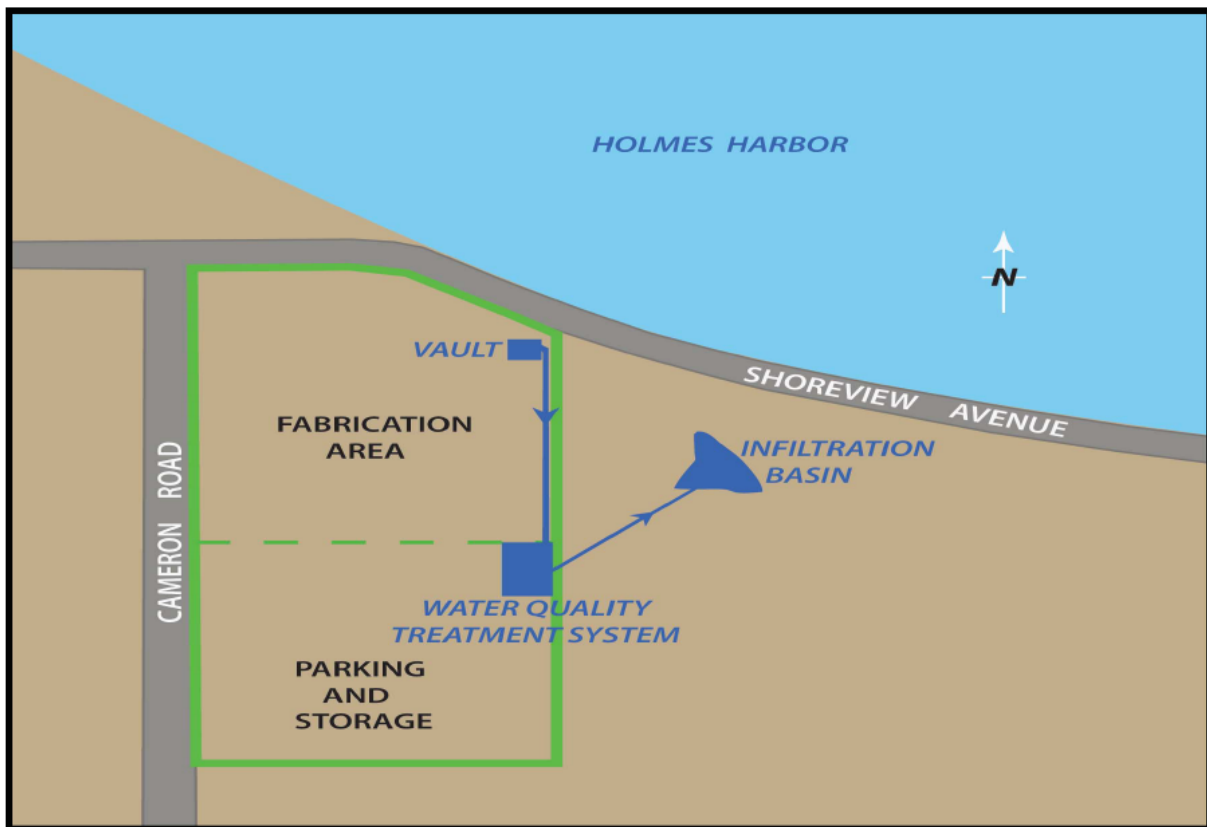


Figure 3. Stormwater management system overview

The 2,000-gallon vault is the first of several components that make up NBBB's overall stormwater treatment system, which includes the following:

- 2,000-gallon influent vault (pump chamber)
- 5,000-gallon vault (pump chamber)
- 120,000-gallon source tank (detention tank)
- WaveIonics™ EC treatment system
- 60,000-gallon settling tank (detention tank)

- Multi-media filtration unit
- GAC filtration unit

Figure 4 presents a schematic diagram of the overall water quality treatment system. Initially stormwater is collected and held in a 2,000-gallon vault, which contains two 300-gallon per minute (gpm) pumps that are configured in a “lead/lag” control system. The first pump, pump #1, is set to engage at a water level of 44 inches. If pump #1 cannot keep up with the incoming water flow, then pump #2 is engaged once the water level reaches 56 inches in the 2,000-gallon vault. Water is then pumped to the nearby 5,000-gallon vault, which contains a 300-gpm pump and a 400-gpm pump. These two pumps operate on an “alternating relay” control system that resides in the power distribution box for the 5,000-gallon vault, with both pumps engaged by the same float switch. A weir tank is also located in the vicinity of the 2,000- and 5000-gallon vaults.

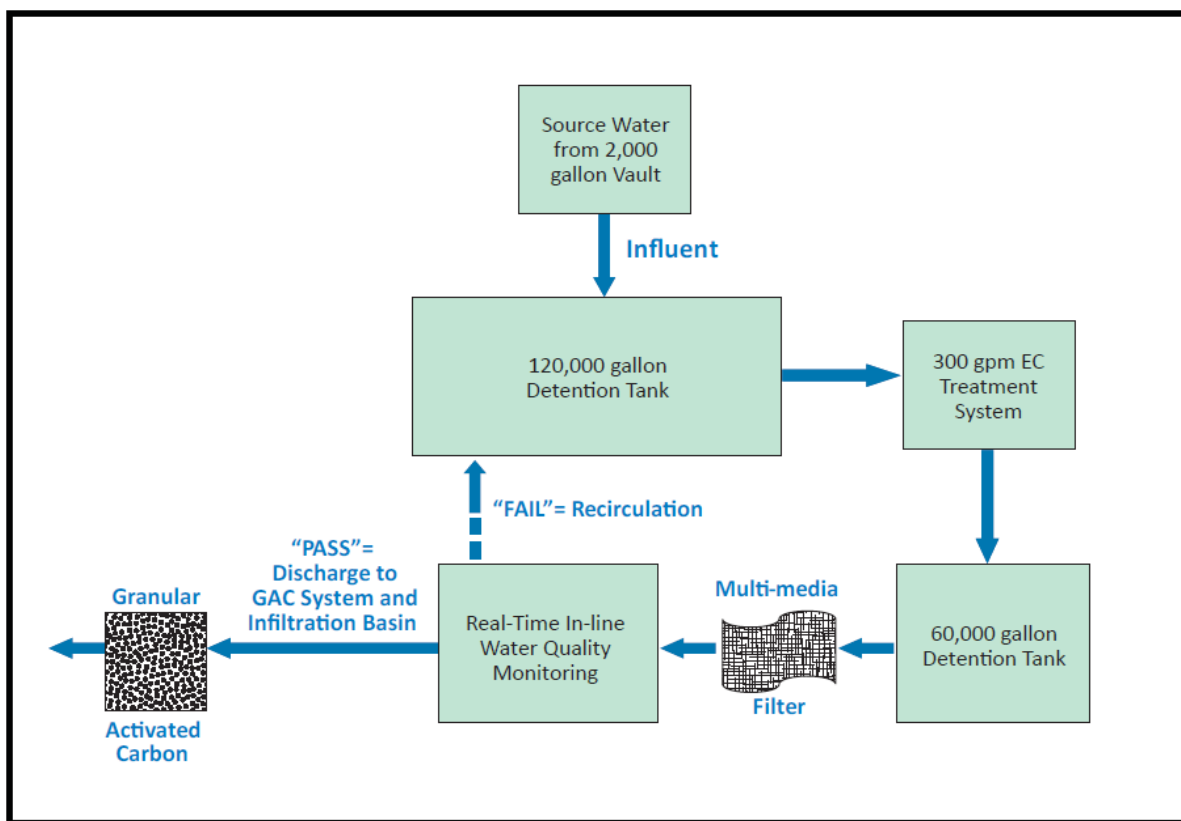


Figure 4. Schematic diagram of NBBB stormwater treatment system

The weir tank is not part of the stormwater management system as it is used to collect water associated with hydroblasting activities. Hydroblast water, which is not allowed to come in contact with stormwater, is collected in the weir tank and periodically pumped to a tanker truck for off-site disposal at an approved disposal facility. Water from the 5,000-gallon vault is pumped to a 120,000-gallon detention tank (referred to as the source tank), which is part of the multi-stage treatment train located in the southeast portion of the shipyard fabrication area.

The water in the source tank is then pumped through the 300-gpm WaveIonics™ EC system and into a 60,000-gallon detention tank (referred to as the settling tank). Finally, the water is pumped at a design flow rate that ranges from 150 to 300 gpm through the multi-media filtration unit, and, if it meets the real-time inline water quality monitoring requirements, through the GAC filtration unit before being discharged to the infiltration basin located east of the fabrication area. Further details on the stormwater treatment system, including its operation and maintenance (O&M) procedures are provided in the Facility's Treatment System Operating Plan.

ATTACHMENT B

**Water Quality Data Summary – Monthly DMR Data
January 2017 Through March 2020**

Table 1. Water Quality Data Summary – Monthly DMR Data January 2017 Through March 2020

Month	Flow GPD	Chromium ug/L	Copper ug/L	Lead ug/L	Zinc ug/L	TPH mg/L	Turbidity NTU	pH Minimum SU	pH Maximum SU
Jan 2017	127,300	7.4	3.1	0	61	0	2.71	7.89	7.89
Feb 2017	147,231	0	3.2	0	36	0	3	7.99	7.99
Mar 2017	140,872	0	4.1	0	26	0	1.01	7.42	8.09
Apr 2017	144,669	6.6	3	0	17	0	2.62	7.22	7.8
May 2017	82,879	4.6	4.8	0	23	0	1.14	6.87	7.63
Jun 2017	32,267	0	0	0	150	0	0.34	6.79	7.92
Jul 2017	ND	--	--	--	--	--	--	--	--
Aug 2017	ND	--	--	--	--	--	--	--	--
Sep 2017	34,112	22	9.7	0	85	0	1.75	7.45	7.81
Oct 2017	124,622	9.3	0	0	23	0	3.65	6.51	8.35
Nov 2017	386,775	0	0	0	6.7	0	3.71	6.95	7.17
Dec 2017	113,623	0	3.2	0	16	0	2.65	7.74	8.1
Jan 2018	237,647	6.7	0	0	12	0	3.79	7.63	8.1
Feb 2018	73,798	17	2.8	0	9.6	0	4.31	6.79	7.5
Mar 2018	139,016	40	2.2	0	31	0	2.49	7.01	8.34
Apr 2018	296,773	36	0	0	37	0	1.33	7.57	7.83
May 2018	12,431	27	0	0	160	0	0.43	7.21	8.7
May 2018	15,988	25	4.1	0	330	0	1.09	7.21	8.47
Jun 2018	ND	--	--	--	--	--	--	--	--
Jul 2018	ND	--	--	--	--	--	--	--	--
Aug 2018	ND	--	--	--	--	--	--	--	--
Sep 2018	9,130	7.2	3.7	0	4.4	0	4.05	7.32	8.5
Oct 2018	70,165	5.5	0	0	25	0	4.4	6.86	8.84
Nov 2018	112,647	36	0	0	120	0	1.76	7.57	8.51
Dec 2018	97,055	9.5	0	0	29	0	0.8	6.59	7.21
Jan 2019	137,526	0	0	0	27	0	3.21	6.86	7.1
Feb 2019	154,715	9.8	3	0	34	0	4.78	6.96	7.45
Mar 2019	151,470	0	0	0	91	0	3.4	6.79	6.93
Apr 2019	119,841	0	0	0	58	0	3.18	6.85	6.86
May 2019	58,605	0	0	0	54	0	2.11	6.71	7.04
Jun 2019	47,246	0	9	0	49	0	1.73	6.73	7.52
Jul 2019	ND	--	--	--	--	--	--	--	--
Aug 2019	ND	--	--	--	--	--	--	--	--
Sep 2019	109,553	0	2.8	0	17	0	2.34	6.7	6.79
Oct 2019	132,567	0	0	0	8.9	0	2.45	6.35	7.06
Nov 2019	46,683	0	0	0	23	0	2.68	6.09	6.7
Dec 2019	50,697	0	0	0	11	0	2.87	6.33	6.61
Jan 2020	260,274	0	2.8	0	18	0	1.33	6.17	6.85
Feb 2020	218,279	0	0	0	20	0	2.25	6.65	6.69
Mar 2020	104,712	0	0	0	18	0	3.35	6.01	6.32

Notes: ND = No Discharge
GPD = Gallons Per Day
NTU = Nephelometric Turbidity Units
SU = Standard Units
TPH = Total Petroleum Hydrocarbons
mg/L = milligrams per liter
ug/L = micrograms per liter