



Application Form 2A

New and Existing Publicly Owned Treatment Works

NPDES Permitting Program

Note: Complete this form if your facility is a new or existing publicly owned treatment works.

Paperwork Reduction Act Notice

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Responses to this collection of information are mandatory (40 CFR 122.21). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for Form 2A is estimated to average between 4.7 and 24.7 hours, depending on the number of sections the applicant must complete. 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 on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

General Instructions

Who Must Complete Form 2A?

All new and existing publicly owned treatment works (POTWs) and other dischargers designated by the National Pollutant Discharge Elimination System (NPDES) permitting authority must complete Form 2A. If your facility is a federally owned or privately owned treatment works that primarily treats domestic sewage, contact your permitting authority to determine the appropriate form(s) to submit (see [64 FR 42436](#)). Note that you may wish to consult the “General Instructions” of NPDES Application Form 1 to determine if your treatment works is required to submit any additional NPDES application forms.

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 2A 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 2A–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>.

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 2A–1).

When to File Your Completed Form

Form 2A must be submitted at least 180 days before your present NPDES permit expires or, if you are a new discharger, at least 180 days before the date on which the discharge is to commence, unless the NPDES permitting authority has granted permission for a later date.

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 2A (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 2A. 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 its business confidentiality regulations at Part 2 of Title 4 of the *Code of Federal Regulations* (CFR).

Completion of Forms

Form 2A is divided into six major sections. It also contains five effluent monitoring tables (Tables A through E) and an industrial discharge information table (Table F), all located at the end of the form. Note that not all applicants are required to complete each section of the form or all of the tables. The questions on the form will direct you to the items and tables you must complete.

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.

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.

If you have previously submitted information that answers a specific question to EPA or an approved state NPDES agency, you may either repeat the information in the space provided or attach a copy of the previous submission.

Note for New Dischargers

Provide all information available to you at the time you complete Form 2A. If you do not have information to respond to an item because your facility has yet to discharge, write or type “data are not available” next to the item on the form. Note that you are required to submit *actual* data no later than 24 months after your facility commences to discharge.

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 the various NPDES application forms are included in the “Glossary” at the end of these instructions.

FORM 2A—INSTRUCTIONS (CONTINUED)

Exhibit 2A–1. Addresses of EPA Regional Contacts and Covered States

<p>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</p>	<p>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</p>
<p>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</p>	<p>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</p>
<p>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</p>	<p>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</p>
<p>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</p>	<p>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</p>
<p>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</p>	<p>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</p>

Line-By-Line Instructions

EPA Identification Number, NPDES Permit Number, Facility Name, and Outfall Number

Provide your EPA Identification Number from the Facility Registry Service, NPDES permit number, and facility name at the top of each page of Form 2A 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 permit number. If you do not know your EPA Identification Number, contact your NPDES permitting authority. See Exhibit 2A–1 for contact information. Additionally, for Tables A through E, provide the applicable outfall number at the top of each page.

**Section 1. Basic Application Information for All Applicants
Facility Information**

Item 1.1. Enter the facility’s official or legal name. Do not use a colloquial name. Provide the *mailing address* of the facility. Next, 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.

Include a complete *location address* for the facility if different from the mailing address. 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”).

Item 1.2. Indicate whether the application is for a facility that has not yet commenced discharge. If yes, be advised that you are required to submit *actual* data no later than 24 months after your facility commences to discharge.

Applicant Information

Item 1.3. Indicate if the applicant is different from the entity listed under Item 1.1. If so, specify the applicant name and address. Provide the name (first and last) of a contact, including his/her title, telephone number, and email address.

Item 1.4. Indicate if the applicant is the facility’s owner, operator, or both.

Item 1.5. Specify whether the NPDES permitting authority should send correspondence to the facility or the applicant.

Existing Environmental Permits

Item 1.6. Indicate all environmental permits or construction approvals received or applied for (including dates) under the noted programs. Print or type the corresponding permit number for each.

Collection System and Population Served

Item 1.7. Specify the municipalities served by the treatment works, including unincorporated connector districts. For each municipality, indicate the population served, the percentage of each collection system type if known (e.g., separate sanitary or combined storm and sanitary), and collection system ownership

status. Finally, indicate the total percentage of sewer line each type comprises.

Do not report privately owned collection systems discharging industrial waste to the treatment works in Item 1.7. Those facilities must be reported in Table F.

Indian Country

Item 1.8. Indicate if the POTW is located in Indian Country.

Item 1.9. Note whether the treatment works discharges to a receiving stream that flows through Indian Country.

Design and Actual Flow Rates

Item 1.10. Provide the facility’s *design* flow rate in million gallons per day (mgd). Next, specify the facility’s *actual* annual average daily flow rate and maximum daily flow rate for each of the previous three years (in mgd).

Discharge Points by Type

Item 1.11. Provide the facility’s total number of effluent discharge points to waters of the United States by type (e.g., treated effluent, untreated effluent, combined sewer overflows, bypasses, and constructed emergency overflows).

Outfalls and Other Discharge or Disposal Methods

Outfalls Other Than to Waters of the United States

Item 1.12. Indicate whether the POTW discharges wastewater to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the United States. If yes, continue to Item 1.13. If no, skip to Item 1.14.

Item 1.13. Specify the location of each surface impoundment, the average daily volume discharged to each surface impoundment in gallons per day (gpd), and whether the discharge is continuous or intermittent.

Item 1.14. Indicate if the facility applies wastewater to land. If yes, continue to Item 1.15. If no, skip to Item 1.16.

Item 1.15. Provide the location of each land application site; the size of each land application site (in acres); the average daily volume applied to each land application site (in gpd), and whether the land application is continuous or intermittent.

Item 1.16. Note whether the facility’s effluent is transported to another facility for treatment prior to discharge. If yes, continue to Item 1.17. If no, skip to Item 1.21.

Item 1.17. Describe the means by which the effluent is transported, such as by tank truck or pipe.

Item 1.18. Specify whether the facility’s effluent is transported by a party other than the applicant. If yes, continue to Item 1.19. If no, skip to Item 1.20.

Item 1.19. Provide the name, mailing address, contact person, phone number, and email address of the entity that transports the discharge.

Item 1.20. Provide the name, mailing address, contact person, phone number, email address, and NPDES permit number (if any) of the receiving facility. Also specify the average daily flow rate from the facility into the receiving facility in mgd.

Item 1.21. Indicate if wastewater is disposed of in a manner other than those already mentioned in Items 1.14 through 1.21 that do not have outlets to waters of the United States, such as underground percolation and underground injections. If yes, continue to Item 1.22. If no, skip to Item 1.23.

Item 1.22. Provide a description of the disposal method, including the location and size of each disposal site; the annual average daily discharge volume (in gpd), and whether disposal through this method is continuous or intermittent.

Variance Requests

Item 1.23. 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.

Contractor Information

Item 1.24. Indicate if any of the operational or maintenance activities associated with wastewater treatment and effluent quality of the POTW are the responsibility of a contractor. If yes, continue to Item 1.25. If no, skip to Section 2.

Item 1.25. Provide a listing of all contractors (by company name). For each, specify the mailing address, a contact name, telephone number, and email address. Also summarize the operational and maintenance responsibilities of each contractor.

Section 2. Additional Information

Outfalls to Waters of the United States

Design Flow

Item 2.1. Indicate whether the treatment works has a design flow greater than or equal to 0.1 mgd. If yes, continue to Item 2.2. If no, skip to Section 3.

Inflow and Infiltration

Item 2.2. Specify the POTW's current average daily volume of inflow and infiltration (in gpd) and steps the facility is taking to minimize inflow and infiltration.

Topographic Map

Item 2.3. Prepare a topographic map (or other map if a topographic map is unavailable) extending at least one mile beyond property boundaries of the treatment plant, including all unit processes and showing the following: (1) treatment plant area and unit processes; (2) major pipes or other structures through which wastewater enters the treatment plant and the pipes or other structures through which treated wastewater is discharged from the treatment plant (include outfalls from bypass piping, if applicable); (3) each well where fluids from the treatment plant are injected underground; (4) wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within ¼ mile of the treatment works' property boundaries; (5) sewage sludge management facilities

(including onsite treatment, storage, and disposal sites); and (6) location at which waste classified as hazardous under the Resource Conservation and Recovery Act (RCRA) enters the treatment plant by truck, rail, or dedicated pipe.

On each map, include the map scale, a meridian arrow showing north, and latitude and longitude to the nearest second or equivalent decimal degrees (e.g., 38.893829, -77.029289). 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, geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., U.S. Geological Survey or 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 2A–2 at the end of these instructions. **Note:** Exhibit 2A–2 is provided for illustration only; it does not show an actual facility. Note that you have completed your topographic map and attached it to the application.

Flow Diagram

Item 2.4. Provide a process flow diagram or schematic showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. This includes a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination), and showing daily average flow rates at influent and discharge points, and approximate daily flow rates between treatment units. Also provide a narrative description of the diagram/schematic. An example of an acceptable flow diagram is shown as Exhibit 2A–3 at the end of these instructions. **Note:** Exhibit 2A–3 is provided for illustration only; it does not represent an actual facility. Answer "Yes" to Item 2.4 once you have completed and attached your diagram to the application.

Scheduled Improvements and Schedules of Implementation

Item 2.5. Indicate whether any improvements to the facility are scheduled. If yes, list and briefly describe each scheduled improvement and continue to Item 2.6. If no, skip to Section 3.

Item 2.6. For each scheduled improvement, indicate the outfall number of each outfall affected and the scheduled or actual dates of completion for the following: (1) commencement of construction, (2) completion of construction, (3) commencement of discharge, and (4) attainment of operational level.

Item 2.7. Note whether the appropriate permits/clearances concerning other federal/state requirements have been obtained and briefly explain your response.

General Instructions for Reporting, Sampling, and Analysis

Important note: Read these instructions before completing Tables A through E and Section 3 of Form 2A.

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 page of the tables 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 E 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 E. For example, you may be able to print a report in a compatible format from the data system used in your analysis of metals completed under Table C.

Note for new dischargers. Provide all information available to you at the time you complete Form 2A. If you do not have information to respond to an item because your facility has yet to discharge, write or type “data are not available” next to the item on the form. Note that you are required to submit *actual* data no later than 24 months after your facility commences discharge.

Reporting of Effluent Data

Where effluent data are requested, do not provide information on CSOs. The latter information is requested instead under Section 5 of Form 2A.

Provide data for each outfall through which effluent is discharged. When an applicant has two or more outfalls with substantially identical effluents, the NPDES permitting authority may allow the applicant to test only one outfall and report those quantitative data as applying to the substantially identical outfall. If the permitting authority grants your request, attach a separate sheet to the application form identifying the outfall tested and describing why the other outfall(s) are substantially identical.

At a minimum, effluent testing data must be based on at least three samples taken within 4.5 years prior to the date of the permit application. Samples must be representative of the seasonal variation in the discharge from each outfall. Existing data may be used, if available, in lieu of sampling done solely for the purpose of this application.

All existing data for pollutants specified in Tables A through D that are collected within 4.5 years of the application must be included in the pollutant data summary that you submit. If, however, you sampled for a specific pollutant on a monthly or more frequent basis, it is only necessary, for such pollutant, to summarize all data collected within 1 year of the application.

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.
- 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; or 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, you may consider other factors, such as a method’s precision, accuracy, or resolution.

Effluent monitoring data must comply with the QA/QC requirements of 40 CFR 136 (and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR 136).

Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and volatile organic compounds. For all other pollutants, 24-hour composite samples must be used. For a composite sample, only one analysis of the composite of aliquots is required.

The effluent monitoring data provided must include at least the following for each parameter: (1) the maximum daily discharge based upon actual sample values, (2) average daily discharge for all samples, expressed as concentration or mass, and the number of samples used to obtain this value, (3) the analytical method used, and (4) the threshold level (i.e., method detection limit, minimum level, or other designated method endpoints) for the analytical method used.

Metals must be reported as “total recoverable metal,” unless all approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium) or otherwise directed by the NPDES permitting authority.

Units of Measure

Clearly specify the units of measure in Tables A through E for each parameter/pollutant analyzed. Values should be reported as

General Instructions for Reporting, Sampling, and Analysis Continued

concentration or mass, except for flow, temperature, pH, color, and fecal coliform organisms, unless otherwise requested or required by the NPDES permitting authority. Flow, temperature, pH, color, and fecal coliform organisms must be reported as 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 D.

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)

Sampling

The collection of samples for the reported analyses should be supervised by a person experienced in performing sampling of domestic wastewater. You may contact your NPDES permitting authority for detailed guidance on sampling techniques and for answers to specific questions. See Exhibit 2A–1 for contact information. Any specific requirements in the analytical methods—for example, for 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 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.

Further Requirements for Table E, Whole Effluent Toxicity Testing

Each applicant required to perform WET testing must provide results of a minimum of four quarterly tests for a year, from the year preceding the permit application, or the results from four tests performed at least annually in the 4.5-year period prior to the application, provided the results show no appreciable toxicity using a safety factor determined by the NPDES permitting authority.

Applicants must conduct tests with multiple species (no less than two species; e.g., fish, invertebrate, plant) and test for acute or chronic toxicity, depending on the range of receiving water dilution. See 40 CFR 122.21(j)(5)(v) for further details.

WET testing must be conducted using methods approved under 40 CFR 136. West Coast facilities in Washington, Oregon, California, Alaska, Hawaii, and the Pacific Territories are exempted from 40 CFR 136 chronic methods and must use alternative guidance as directed by the NPDES permitting authority.

Section 3. Information on Effluent Discharges

Description of Outfalls

Item 3.1. Provide a description of each of the POTW’s wastewater discharge outfalls. The application form provides reporting space for three outfalls. If your facility has more than this number, attach additional sheets as necessary.

For each outfall, provide the outfall number. Indicate the state, county, and city or town where each outfall is located. Note the distance from shore in feet and the depth below the surface in feet. Specify the average daily flow rate through the outfall in mgd. Also specify the latitude and longitude of each outfall to the nearest second or equivalent decimal degrees (e.g., 38.893829, -77.029289). 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, geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., USGS). The location of each outfall (i.e., where the coordinates are collected) shall be the point where the discharge is released into a water of the United States. For further guidance, refer to <http://www.epa.gov/geospatial/latitudeandlongitude-data-standard>.

Seasonal or Periodic Discharge Data

Item 3.2. Indicate whether any of the outfalls described under Item 3.1 have seasonal or periodic discharges. If yes, continue to Item 3.3. If no, skip to Item 3.4.

Item 3.3. Specify the following for each applicable outfall: (1) number of times per year discharge occurs, (2) average duration of each discharge, (3) average flow of each discharge in mgd, and (4) months in which discharge occurs.

Diffuser Type

Item 3.4. Note whether any of the outfalls listed under Item 3.1 are equipped with a diffuser. If yes, continue to Item 3.5. If no, skip to Item 3.6.

Item 3.5. Briefly describe the diffuser type at each applicable outfall.

Waters of the United States

Item 3.6. Note whether the POTW discharges or plans to discharge wastewater to waters of the United States from one or more discharge points. If yes, continue to Item 3.7. If no, skip to Section 6.

Receiving Water Description

Item 3.7. Provide receiving water and related information in the table provided on the form (if known): (1) name of receiving water, (2) name of watershed/river/stream system and Natural

Resources Conservation Service (formerly U.S. Soil Conservation Service) 14-digit watershed code, (3) name of state management/river basin and USGS 8-digit hydrologic unit code, (4) acute and chronic critical low flow in cubic feet per second (cfs) and total hardness of receiving stream at critical low flow, in milligrams per liter (mg/L) of calcium carbonate, if applicable.

The watershed/hydrologic unit codes can be found at USGS's Watershed Boundary Dataset website at <https://www.usgs.gov/core-science-systems/ngp/national-hydrography/watershed-boundary-dataset>.

Treatment Description

Item 3.8. Specify the highest level of treatment provided for discharges from each outfall (e.g., primary, equivalent to secondary, secondary, or advanced). Also indicate the following design removals (in percent) for the following parameters for each outfall: (1) biochemical oxygen demand (BOD₅ or CBOD₅), (2) total suspended solids (TSS), (3) phosphorus (if applicable), (4) nitrogen (if applicable), and (5) any other removals that an advanced treatment system is designed to achieve.

Item 3.9. Provide a description of the type(s) of disinfection used for wastewater discharged through each outfall. Indicate the seasons when the disinfection type is used. Note whether the POTW dechlorinates if disinfection is accomplished through chlorination. Otherwise, check "Not Applicable."

Effluent Testing Data and Tables A through E

Items 3.10 to 3.26. These items require you to collect and report data for the parameters and pollutants listed in Tables A through E, located at the end of Form 2A. The instructions for completing the tables are table-specific, as are the criteria for determining who should complete them.

Important note: Read the "General Instructions for Reporting, Sampling, and Analysis" later in these instructions before completing Items 3.10 to 3.26 and Tables A through E.

Item 3.10 and Table A. All applicants that discharge wastewater to waters of the United States must provide effluent data for Table A parameters. Respond "Yes" to Item 3.10 when you have completed Table A and attached it to your application.

Item 3.11. Answer whether the POTW has conducted any whole effluent toxicity (WET) tests during the 4.5 years prior to the date of the application on any of the facility's discharges or on any receiving water near the discharge points. If yes, continue to Item 3.12. If no, skip to Item 3.13.

Item 3.12. For each applicable outfall, note the number of acute and chronic WET tests conducted since the last permit reissuance of the facility's discharges or of the receiving water near the discharge points.

Item 3.13. Note whether the POTW has a design flow greater than or equal to 0.1 mgd. If yes, continue to Item 3.14. If no, skip to Item 3.16.

Item 3.14 and Table B. Answer whether the treatment works uses chlorine for disinfection, uses it elsewhere in the treatment process, or otherwise has reasonable potential to discharge chlorine in its effluent. If yes, complete Table B including chlorine. If no, complete Table B, omitting chlorine.

Item 3.15. Answer "Yes" when you have completed monitoring for all applicable Table B parameters and attached the results to your application.

Item 3.16 and Screen for Tables C through E. Indicate whether one or more of the conditions apply to your POTW. If yes, continue to Item 3.17. If no, skip to Section 4.

Item 3.17 and Table C. Answer "Yes" to indicate you have completed monitoring for all Table C pollutants and attached the results to your application package.

Item 3.18 and Table D. Answer "Yes" to indicate you have completed monitoring for all Table D pollutants required by your NPDES permitting authority and attached the results to your application package, or "No" if the NPDES permitting authority has not required additional sampling for the pollutants in Table D.

Item 3.19 and Additional Screen for Table E. Answer whether the POTW conducted either (1) a minimum of four quarterly WET tests for one year preceding this permit application or (2) at least four annual WET tests in the past 4.5 years. If yes, continue to Item 3.20. If no, complete tests and Table E and then skip to Item 3.26.

Item 3.20 and Additional Screen for Table E. Report whether you have previously submitted the results of the WET tests indicated in Item 3.19 to your NPDES permitting authority. If yes, continue to Item 3.21. If no, provide the results in Table E and skip to Item 3.26.

Item 3.21. Report the dates the testing data were submitted to your NPDES permitting authority and provide a summary of the results.

Item 3.22. Regardless of how you may have provided the results of previously conducted WET analyses to your NPDES permitting authority, indicate if any of the tests resulted in toxicity. If yes, continue to Item 3.23. If no, skip to Item 3.26.

Item 3.23. Describe the cause(s) of toxicity.

Item 3.24. Indicate if the POTW has conducted a toxicity reduction evaluation. If yes, continue to Item 3.25. If no, skip to Item 3.26.

Item 3.25. Provide details of any toxicity reduction evaluations performed.

Item 3.26. Answer "Yes" when you have completed Table E for all applicable outfalls and attached the results to the application package, or answer "No" if the item is not applicable because you previously submitted WET data to your NPDES permitting authority.

Section 4. Industrial Discharges, Table F, and Hazardous Wastes

Item 4.1. Indicate if the POTW receives discharges from significant industrial users (SIUs) or non-significant categorical industrial users (NSCIUs), including SIUs and NSCIUs that truck or haul waste. If yes, continue to Item 4.2. If no, skip to Item 4.7.

1. SIUs are defined as:
 - a. All industrial users subject to categorical pretreatment standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N (CIUs); and
 - b. Any other industrial user per 40 CFR 403.3 that:
 - i. Discharges an average of 25,000 gpd or more of process wastewater to the treatment works (with certain exclusions); or
 - ii. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - iii. Is designated as an SIU by the control authority.
2. The control authority may determine that an Industrial User subject to categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N is a NSCIU rather than a SIU on a finding that the Industrial User never discharges more than 100 gpd of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:
 - a. The Industrial User, prior to the control authority's finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements;
 - b. The Industrial User annually submits the certification statement required in 40 CFR 403.12(q) together with any additional information necessary to support the certification statement; and
 - c. The Industrial User never discharges any untreated concentrated wastewater.

Item 4.2. Indicate the number of SIUs and NSCIUs that discharge to the POTW.

Item 4.3. Answer whether the POTW has an approved pretreatment program, which is defined at 40 CFR 403.3 as a program administered by a POTW that meets the criteria established in 40 CFR 403.8 and 403.9 and that has been approved by the NPDES permitting authority.

Item 4.4. Answer whether you have submitted either of the following to the NPDES permitting authority that contains information substantially identical to that required in Table F: (1) a pretreatment program annual report submitted within one year of the application or (2) a pretreatment program. If yes, continue to Item 4.5. If no, skip to Item 4.6.

Item 4.5. Identify the title and date of the pretreatment program annual report or pretreatment program referenced in Item 4.4 and skip to Item 4.7.

Item 4.6 and Table F. Complete Table F by providing the following information for each SIU that discharges to the POTW: (1) name and mailing address; (2) description of all industrial processes that affect or contribute to each SIU's discharge; (3) a list of the principal products and raw materials that affect or contribute to the SIU's discharge; (4) average daily volume of wastewater discharged by each SIU, indicating the amount attributable to process flow and non-process flow; (5) whether the SIU is subject to local limits; (6) whether the SIU is subject to categorical standards and the categories/subcategories under which the SIU is subject; and (7) whether any problems (e.g., upsets, pass-through interference) have occurred at the POTW that can be attributed to the SIU in the past 4.5 years. Answer "Yes" to Item 4.6 when you have completed and attached Table F to the application package.

Note: SIUs include users that truck or haul industrial waste to the POTW. Information for these users must be provided in Table F.

Item 4.7. Indicate if the POTW receives or has been notified that it will receive by truck, rail, or dedicated pipe any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR 261. If yes, continue to Item 4.8. If no, skip to Item 4.9.

Item 4.8. For each hazardous waste received, provide the hazardous waste number, the method by which the waste is received (e.g., by truck, dedicated pipe, rail, etc.), and the amount of waste received annually (specify units).

Item 4.9. Answer whether the POTW receives, or has been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Sections 3004(u) or 3008(h) of RCRA. If yes, continue to Item 4.10. If no, skip to Section 5.

Item 4.10. Answer whether the POTW receives (or expects to receive) less than 15 kilograms per month of non-acute hazardous wastes as specified at 40 CFR 261.30(d) and 261.33(e). If yes, skip to Section 5. If no, continue to Item 4.11.

Item 4.11. In an attachment to the application, provide an identification and description of the site(s) or facility(ies) at which the wastewater originates; the identities of the wastewater's hazardous constituents, as listed in Appendix VII of 40 CFR 261, if known; and the extent of treatment, if any, the wastewater receives or will receive before entering the POTW. Answer "Yes" to Item 4.11 when you have completed and attached the information to the application package.

**Section 5. Combined Sewer Overflows
CSO Map and Diagram**

Item 5.1. Indicate if the treatment works has a combined sewer system. If yes, continue to Item 5.2. If no, skip to Section 6.

Item 5.2. Attach a CSO system map to the application. The map should indicate: (1) all CSO discharge points, (2) sensitive use areas potentially affected by CSOs (e.g., beaches, drinking

water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding national resource waters), and (3) waters supporting threatened and endangered species potentially affected by CSOs. Answer “Yes” to Item 5.2 when you have completed the map and attached it to the application package.

Item 5.3. Prepare a diagram of the CSO collection system. The diagram should show the following: (1) the location of major sewer trunk lines, both combined and separate sanitary; (2) the locations of points where separate sanitary sewers feed into the combined sewer system; (3) in-line and off-line storage structures; (4) the locations of flow-regulating devices; and (5) the locations of pump stations. Answer “Yes” to Item 5.3 when you have completed the diagram and attached it to the application package.

CSO Outfall Description

Item 5.4. Provide the following information for each CSO outfall: (1) outfall number; (2) state, county, city or town, and ZIP code in which the outfall is located; (3) latitude and longitude of the outfall, to the nearest second or equivalent decimal degrees (e.g., 38.893829, -77.029289); and (4) distance of the outfall from shore and depth of the outfall below water surface. 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, geographic information systems (e.g., ArcView), or paper maps from trusted sources (e.g., USGS). The location of each CSO outfall (i.e., where the coordinates are collected) shall be the point where the discharge is released into a water of the United States.

CSO Monitoring

Item 5.5. Indicate whether the POTW has monitored any of the following items in the past year for each of its CSO outfalls: (1) rainfall, (2) CSO flow volume, (3) CSO pollutant concentrations, (4) receiving water quality, (5) CSO frequency, and (6) number of storm events.

CSO Events in Past Year

Item 5.6. For each CSO outfall, record (1) the number of CSO events in the past year, (2) the average duration in hours per event, (3) the average volume per CSO event in million gallons, and (4) the minimum rainfall that caused a CSO event in inches of rainfall in the past year. Note whether your responses for sub-items (2) through (4) above are based on actual or estimated data.

CSO Receiving Waters

Item 5.7. For each CSO outfall, record the following receiving water information: (1) name of receiving water; (2) name of watershed/stream system and the Natural Resources Conservation Service (formerly U.S. Soil Conservation Service) watershed (14-digit) code, if known; (3) name of the state management/river basin and the USGS 8-digit hydrologic cataloging unit code, if known; and (4) a description of any known water quality impacts on the receiving water caused by the CSO (e.g., permanent or intermittent beach closings,

permanent or intermittent shellfish bed closings, fish kills, fish advisories, other recreational loss, or exceedance of any applicable state water quality standard).

Section 6. Checklist and Certification Statement

Item 6.1. Review the checklist provided. In Column 1, mark the sections of Form 2A that you have completed and are submitting with your application. In Column 2, indicate for each section whether you are submitting attachments.

Item 6.2. 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).

END

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

Exhibit 2A-2. Example Topographic Map

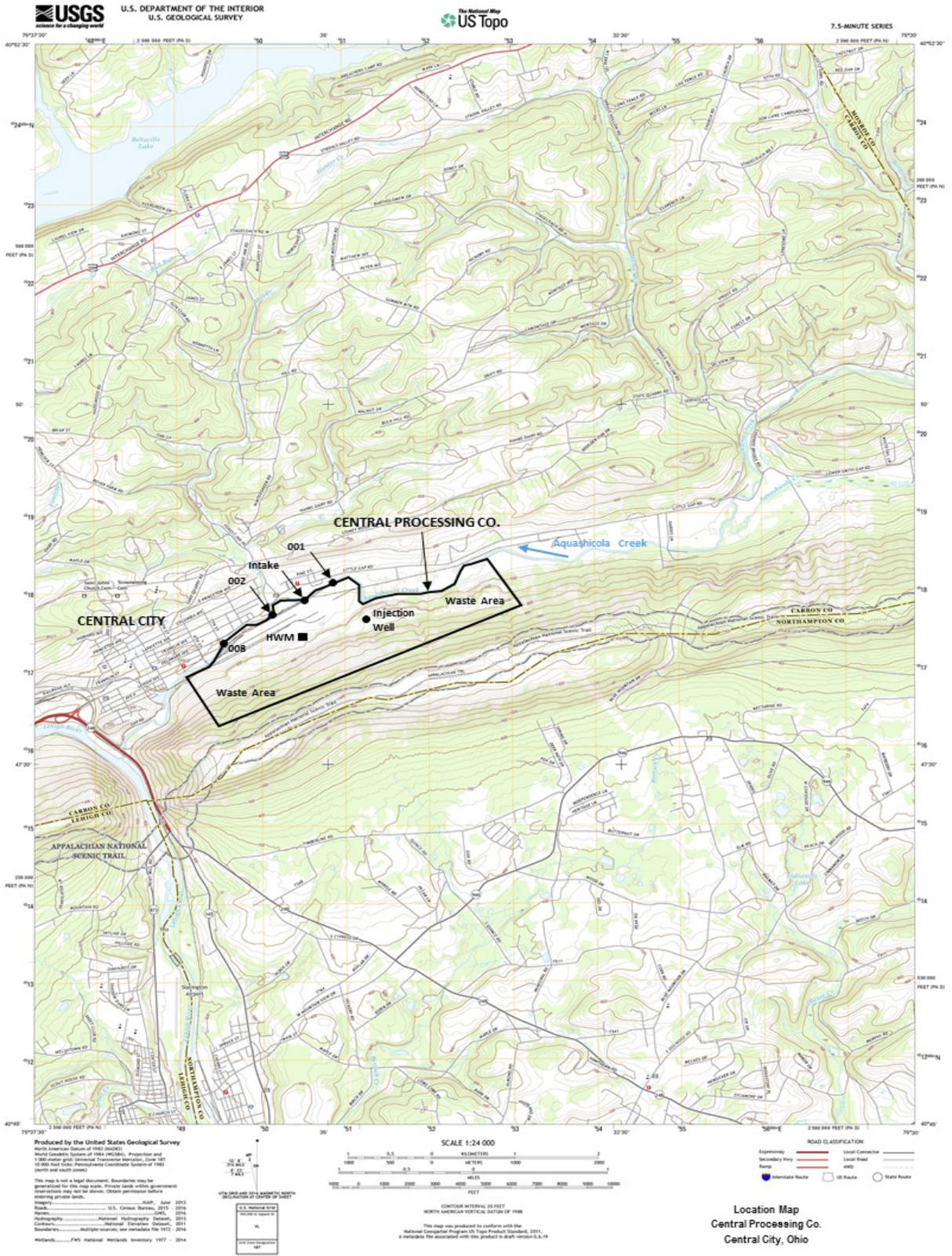
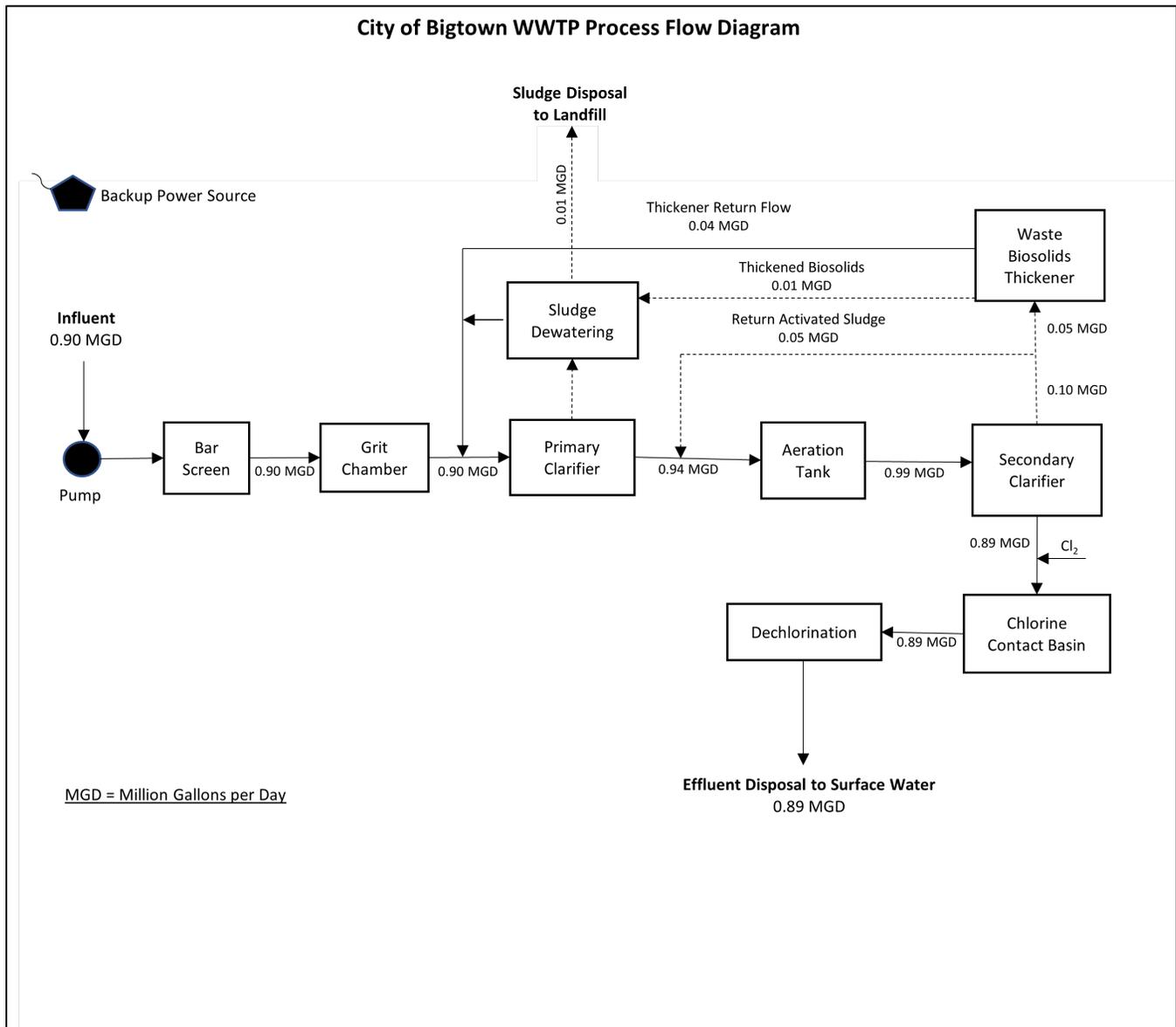


Exhibit 2A-3. Example Flow Diagram



Note: This glossary includes terms used in the various NPDES application forms, including Form 2A. 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;

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); or
 - 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.

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.

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

(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

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 an 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.

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

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 WA0029556	Facility Name Birch Bay WWTP
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Form 2A NPDES		U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater NEW AND EXISTING PUBLICLY OWNED TREATMENT WORKS
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SECTION 1. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS (40 CFR 122.21(J)(1) AND (9))

Facility Information	1.1	Facility name Birch Bay Water and Sewer District Wastewater Treatment Plant
		Mailing address (street or P.O. box) 7096 Point Whitehorn Rd
		City or town Blaine
		State WA
		ZIP code 98230
		Contact name (first and last) Mike Kim
		Title Operations Manager
	Phone number (360) 371-7100	
	Email address mikekim@bbwsd.com	
	Location address (street, route number, or other specific identifier) <input checked="" type="checkbox"/> Same as mailing address	
	City or town	
	State	
	ZIP code	
	1.2	Is this application for a facility that has yet to commence discharge? <input type="checkbox"/> Yes → See instructions on data submission requirements for new dischargers. <input checked="" type="checkbox"/> No
Applicant Information	1.3	Is applicant different from entity listed under Item 1.1 above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No → SKIP to Item 1.4.
		Applicant name
		Applicant address (street or P.O. box)
		City or town
		State
		ZIP code
	Contact name (first and last)	
	Title	
	Phone number	
	Email address	
	1.4	Is the applicant the facility's owner, operator, or both? (Check only one response.) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Both
	1.5	To which entity should the NPDES permitting authority send correspondence? (Check only one response.) <input type="checkbox"/> Facility <input type="checkbox"/> Applicant <input checked="" type="checkbox"/> Facility and applicant (they are one and the same)
Existing Environmental Permits	1.6	Indicate below any existing environmental permits. (Check all that apply and print or type the corresponding permit number for each.)
		Existing Environmental Permits
		<input checked="" type="checkbox"/> NPDES (discharges to surface water)
		<input type="checkbox"/> RCRA (hazardous waste)
		<input type="checkbox"/> UIC (underground injection control)
	<input type="checkbox"/> PSD (air emissions)	
	<input type="checkbox"/> Nonattainment program (CAA)	
	<input type="checkbox"/> NESHAPs (CAA)	
	<input type="checkbox"/> Ocean dumping (MPRSA)	
	<input type="checkbox"/> Dredge or fill (CWA Section 404)	
	<input type="checkbox"/> Other (specify)	

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Outfalls and Other Discharge or Disposal Methods

Outfalls Other Than to Waters of the United States

[1.12](#) Does the POTW discharge wastewater to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the United States?
 Yes No → SKIP to Item 1.14.

[1.13](#) Provide the location of each surface impoundment and associated discharge information in the table below.

Surface Impoundment Location and Discharge Data		
Location	Average Daily Volume Discharged to Surface Impoundment	Continuous or Intermittent (check one)
	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

[1.14](#) Is wastewater applied to land?
 Yes No → SKIP to Item 1.16.

[1.15](#) Provide the land application site and discharge data requested below.

Land Application Site and Discharge Data			
Location	Size	Average Daily Volume Applied	Continuous or Intermittent (check one)
	acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
	acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
	acres	gpd	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

[1.16](#) Is effluent transported to another facility for treatment prior to discharge?
 Yes No → SKIP to Item 1.21.

[1.17](#) Describe the means by which the effluent is transported (e.g., tank truck, pipe).

[1.18](#) Is the effluent transported by a party other than the applicant?
 Yes No → SKIP to Item 1.20.

[1.19](#) Provide information on the transporter below.

Transporter Data		
Entity name	Mailing address (street or P.O. box)	
City or town	State	ZIP code
Contact name (first and last)	Title	
Phone number	Email address	

SECTION 3. INFORMATION ON EFFLUENT DISCHARGES (40 CFR 122.21(J)(3) TO (5))

Description of Outfalls	3.1	Provide the following information for each outfall. (Attach additional sheets if you have more than three outfalls.)		
		Outfall Number _____	Outfall Number _____	Outfall Number _____
	State			
	County			
	City or town			
	Distance from shore	ft.	ft.	ft.
	Depth below surface	ft.	ft.	ft.
	Average daily flow rate	mgd	mgd	mgd
	Latitude			
	Longitude			
Seasonal or Periodic Discharge Data	3.2	Do any of the outfalls described under Item 3.1 have seasonal or periodic discharges? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.4.		
	3.3	If so, provide the following information for each applicable outfall.		
		Outfall Number _____	Outfall Number _____	Outfall Number _____
	Number of times per year discharge occurs			
	Average duration of each discharge (specify units)			
	Average flow of each discharge	mgd	mgd	mgd
Months in which discharge occurs				
Diffuser Type	3.4	Are any of the outfalls listed under Item 3.1 equipped with a diffuser? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.6.		
	3.5	Briefly describe the diffuser type at each applicable outfall.		
		Outfall Number _____	Outfall Number _____	Outfall Number _____
Waters of the U.S.	3.6	Does the treatment works discharge or plan to discharge wastewater to waters of the United States from one or more discharge points? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 6.		

Receiving Water Description	<u>3.7</u>	Provide the receiving water and related information (if known) for each outfall.		
		Outfall Number _____	Outfall Number _____	Outfall Number _____
	Receiving water name			
	Name of watershed, river, or stream system			
	Natural Resources Conservation Service 14-digit watershed code			
	Name of state management/river basin			
	U.S. Geological Survey 8-digit hydrologic cataloging unit code			
	Critical low flow (acute)	cfs	cfs	cfs
	Critical low flow (chronic)	cfs	cfs	cfs
	Total hardness at critical low flow	mg/L of CaCO ₃	mg/L of CaCO ₃	mg/L of CaCO ₃
Treatment Description	<u>3.8</u>	Provide the following information describing the treatment provided for discharges from each outfall.		
		Outfall Number _____	Outfall Number _____	Outfall Number _____
	Highest Level of Treatment (check all that apply per outfall)	<input type="checkbox"/> Primary <input type="checkbox"/> Equivalent to secondary <input type="checkbox"/> Secondary <input type="checkbox"/> Advanced <input type="checkbox"/> Other (specify) _____	<input type="checkbox"/> Primary <input type="checkbox"/> Equivalent to secondary <input type="checkbox"/> Secondary <input type="checkbox"/> Advanced <input type="checkbox"/> Other (specify) _____	<input type="checkbox"/> Primary <input type="checkbox"/> Equivalent to secondary <input type="checkbox"/> Secondary <input type="checkbox"/> Advanced <input type="checkbox"/> Other (specify) _____
	Design Removal Rates by Outfall			
	BOD ₅ or CBOD ₅	%	%	%
	TSS	%	%	%
	Phosphorus	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %
	Nitrogen	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %
Other (specify) _____	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	<input type="checkbox"/> Not applicable %	

Treatment Description Continued	3.9	Describe the type of disinfection used for the effluent from each outfall in the table below. If disinfection varies by season, describe in the table below.					
			Outfall Number _____	Outfall Number _____	Outfall Number _____		
		Disinfection type					
		Seasons used					
	Dechlorination used?	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No	
Effluent Testing Data	3.10	Have you completed monitoring for all Table A parameters and attached the results to the application package? <input type="checkbox"/> Yes					
	3.11	Have you conducted any WET tests during the 4.5 years prior to the date of the application on any of the facility's discharges or on any receiving water near the discharge points? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.13.					
	3.12	Indicate the number of acute and chronic WET tests conducted since the last permit reissuance of the facility's discharges by outfall number or of the receiving water near the discharge points.					
			Outfall Number _____	Outfall Number _____	Outfall Number _____		
			Acute	Chronic	Acute	Chronic	Acute Chronic
		Number of tests of discharge water					
		Number of tests of receiving water					
	3.13	Does the treatment works have a design flow greater than or equal to 0.1 mgd? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.16.					
	3.14	Does the POTW use chlorine for disinfection, use chlorine elsewhere in the treatment process, or otherwise have reasonable potential to discharge chlorine in its effluent? <input type="checkbox"/> Yes → Complete Table B, including chlorine. <input type="checkbox"/> No → Complete Table B, omitting chlorine.					
	3.15	Have you completed monitoring for all applicable Table B pollutants and attached the results to this application package? <input type="checkbox"/> Yes					
3.16	Does one or more of the following conditions apply? <ul style="list-style-type: none"> The facility has a design flow greater than or equal to 1 mgd. The POTW has an approved pretreatment program or is required to develop such a program. The NPDES permitting authority has informed the POTW that it must sample for the parameters in Table C, must sample other additional parameters (Table D), or submit the results of WET tests for acute or chronic toxicity for each of its discharge outfalls (Table E). <input type="checkbox"/> Yes → Complete Tables C, D, and E as applicable. <input type="checkbox"/> No → SKIP to Section 4.						
3.17	Have you completed monitoring for all Table C pollutants and attached the results to this application package? <input type="checkbox"/> Yes						
3.18	Have you completed monitoring for all Table D pollutants required by your NPDES permitting authority and attached the results to this application package? <input type="checkbox"/> Yes <input type="checkbox"/> No additional sampling required by NPDES permitting authority.						

Effluent Testing Data Continued	3.19	Has the POTW conducted either (1) minimum of four quarterly WET tests for one year preceding this permit application or (2) at least four annual WET tests in the past 4.5 years? <input type="checkbox"/> Yes <input type="checkbox"/> No → Complete tests and Table E and SKIP to Item 3.26.				
	3.20	Have you previously submitted the results of the above tests to your NPDES permitting authority? <input type="checkbox"/> Yes <input type="checkbox"/> No → Provide results in Table E and SKIP to Item 3.26.				
	3.21	Indicate the dates the data were submitted to your NPDES permitting authority and provide a summary of the results.				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Date(s) Submitted (MM/DD/YYYY)</th> <th style="width: 50%; text-align: center;">Summary of Results</th> </tr> </thead> <tbody> <tr> <td style="height: 40px;"></td> <td></td> </tr> </tbody> </table>	Date(s) Submitted (MM/DD/YYYY)	Summary of Results		
	Date(s) Submitted (MM/DD/YYYY)	Summary of Results				
	3.22	Regardless of how you provided your WET testing data to the NPDES permitting authority, did any of the tests result in toxicity? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.26.				
	3.23	Describe the cause(s) of the toxicity:				
3.24	Has the treatment works conducted a toxicity reduction evaluation? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 3.26.					
3.25	Provide details of any toxicity reduction evaluations conducted.					
3.26	Have you completed Table E for all applicable outfalls and attached the results to the application package? <input type="checkbox"/> Yes <input type="checkbox"/> Not applicable because previously submitted information to the NPDES permitting authority.					

SECTION 4. INDUSTRIAL DISCHARGES AND HAZARDOUS WASTES (40 CFR 122.21(J)(6) AND (7))

Industrial Discharges and Hazardous Wastes	4.1	Does the POTW receive discharges from SIUs or NSCIUs? (See instructions for definitions of SIUs and NSCIUs.) <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 4.7.				
	4.2	Indicate the number of SIUs and NSCIUs that discharge to the POTW.				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Number of SIUs</th> <th style="width: 50%; text-align: center;">Number of NSCIUs</th> </tr> </thead> <tbody> <tr> <td style="height: 40px;"></td> <td></td> </tr> </tbody> </table>	Number of SIUs	Number of NSCIUs		
	Number of SIUs	Number of NSCIUs				
	4.3	Does the POTW have an approved pretreatment program? <input type="checkbox"/> Yes <input type="checkbox"/> No				
	4.4	Have you submitted either of the following to the NPDES permitting authority that contains information substantially identical to that required in Table F: (1) a pretreatment program annual report submitted within one year of the application or (2) a pretreatment program? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 4.6.				
4.5	Identify the title and date of the annual report or pretreatment program referenced in Item 4.4. SKIP to Item 4.7.					
4.6	Have you completed and attached Table F to this application package? <input type="checkbox"/> Yes					

Industrial Discharges and Hazardous Wastes Continued	4.7	Does the POTW receive, or has it been notified that it will receive, by truck, rail, or dedicated pipe, any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR 261? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Item 4.9.				
	4.8	If yes, provide the following information:				
		Hazardous Waste Number	Waste Transport Method (check all that apply)	Annual Amount of Waste Received	Units	
		<input type="checkbox"/>	Truck	<input type="checkbox"/>	Rail	
		<input type="checkbox"/>	Dedicated pipe	<input type="checkbox"/>	Other (specify) _____ _____	
		<input type="checkbox"/>	Truck	<input type="checkbox"/>	Rail	
	<input type="checkbox"/>	Dedicated pipe	<input type="checkbox"/>	Other (specify) _____ _____		
	<input type="checkbox"/>	Truck	<input type="checkbox"/>	Rail		
	<input type="checkbox"/>	Dedicated pipe	<input type="checkbox"/>	Other (specify) _____ _____		
	4.9	Does the POTW receive, or has it been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to CERCLA and Sections 3004(7) or 3008(h) of RCRA? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 5.				
	4.10	Does the POTW receive (or expect to receive) less than 15 kilograms per month of non-acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e)? <input type="checkbox"/> Yes → SKIP to Section 5. <input type="checkbox"/> No				
	4.11	Have you reported the following information in an attachment to this application: identification and description of the site(s) or facility(ies) at which the wastewater originates; the identities of the wastewater's hazardous constituents; and the extent of treatment, if any, the wastewater receives or will receive before entering the POTW? <input type="checkbox"/> Yes				
SECTION 5. COMBINED SEWER OVERFLOWS (40 CFR 122.21(J)(8))						
CSO Map and Diagram	5.1	Does the treatment works have a combined sewer system? <input type="checkbox"/> Yes <input type="checkbox"/> No → SKIP to Section 6.				
	5.2	Have you attached a CSO system map to this application? (See instructions for map requirements.) <input type="checkbox"/> Yes				
	5.3	Have you attached a CSO system diagram to this application? (See instructions for diagram requirements.) <input type="checkbox"/> Yes				

CSO Outfall Description	5.4	For each CSO outfall, provide the following information. (Attach additional sheets as necessary.)		
		CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
	City or town			
	State and ZIP code			
	County			
	Latitude			
	Longitude			
	Distance from shore	ft.	ft.	ft.
Depth below surface	ft.	ft.	ft.	
CSO Monitoring	5.5	Did the POTW monitor any of the following items in the past year for its CSO outfalls?		
		CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
	Rainfall	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	CSO flow volume	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	CSO pollutant concentrations	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Receiving water quality	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	CSO frequency	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Number of storm events	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
CSO Events in Past Year	5.6	Provide the following information for each of your CSO outfalls.		
		CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
	Number of CSO events in the past year	events	events	events
	Average duration per event	hours <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	hours <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	hours <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated
	Average volume per event	million gallons <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	million gallons <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	million gallons <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated
Minimum rainfall causing a CSO event in last year	inches of rainfall <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	inches of rainfall <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	inches of rainfall <input type="checkbox"/> Actual or <input type="checkbox"/> Estimated	

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WA0029556

Birch Bay WWTP

5.7

Provide the information in the table below for each of your CSO outfalls.

CSO Receiving Waters

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
Receiving water name			
Name of watershed/ stream system			
Natural Resources Conservation Service 14- digit watershed code (if known)	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
Name of state management/river basin			
U.S. Geological Survey 8-Digit Hydrologic Unit Code (if known)	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
Description of known water quality impacts on receiving stream by CSO (see instructions for examples)			

SECTION 6. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))**6.1**

In Column 1 below, mark the sections of Form 2A 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.

Checklist and Certification Statement

Column 1	Column 2
<input checked="" type="checkbox"/> Section 1: Basic Application Information for All Applicants	<input type="checkbox"/> w/ variance request(s) <input type="checkbox"/> w/ additional attachments
<input checked="" type="checkbox"/> Section 2: Additional Information	<input checked="" type="checkbox"/> w/ topographic map <input checked="" type="checkbox"/> w/ process flow diagram <input type="checkbox"/> w/ additional attachments
<input checked="" type="checkbox"/> Section 3: Information on Effluent Discharges	<input checked="" type="checkbox"/> w/ Table A <input type="checkbox"/> w/ Table D <input checked="" type="checkbox"/> w/ Table B <input checked="" type="checkbox"/> w/ Table E <input checked="" type="checkbox"/> w/ Table C <input type="checkbox"/> w/ additional attachments
<input checked="" type="checkbox"/> Section 4: Industrial Discharges and Hazardous Wastes	<input type="checkbox"/> w/ SIU and NSCIU attachments <input type="checkbox"/> w/ Table F <input type="checkbox"/> w/ additional attachments
<input checked="" type="checkbox"/> Section 5: Combined Sewer Overflows	<input type="checkbox"/> w/ CSO map <input type="checkbox"/> w/ additional attachments <input type="checkbox"/> w/ CSO system diagram
<input checked="" type="checkbox"/> Section 6: Checklist and Certification Statement	<input type="checkbox"/> w/ attachments

6.2

Provide the following certification. (See instructions to determine the appropriate person to sign the application.)

Certification Statement

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.

Name (print or type first and last name)

Sandi McMillan

Official title

General Mgr

Signature

Sandi McMillan

Date signed

5/16/25

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TABLE A. EFFLUENT PARAMETERS FOR ALL POTWS							
Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Biochemical oxygen demand <input type="checkbox"/> BOD ₅ or <input type="checkbox"/> CBOD ₅ (report one)							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Fecal coliform							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Design flow rate							
pH (minimum)							
pH (maximum)							
Temperature (winter)							
Temperature (summer)							
Total suspended solids (TSS)							<input type="checkbox"/> ML <input type="checkbox"/> MDL

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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TABLE B. EFFLUENT PARAMETERS FOR ALL POTWS WITH A FLOW EQUAL TO OR GREATER THAN 0.1 MGD

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Ammonia (as N)							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Chlorine (total residual, TRC) ²							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Dissolved oxygen							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Nitrate/nitrite							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Kjeldahl nitrogen							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Oil and grease							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Phosphorus							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Total dissolved solids							<input type="checkbox"/> ML <input type="checkbox"/> MDL

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).

² Facilities that do not use chlorine for disinfection, do not use chlorine elsewhere in the treatment process, and have no reasonable potential to discharge chlorine in their effluent are not required to report data for chlorine.

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Metals, Cyanide, and Total Phenols							
Hardness (as CaCO ₃)							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Antimony, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Arsenic, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Beryllium, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Cadmium, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Chromium, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Copper, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Lead, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Mercury, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Nickel, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Selenium, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Silver, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Thallium, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Zinc, total recoverable							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Cyanide							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Total phenolic compounds							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Volatile Organic Compounds							
Acrolein							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Acrylonitrile							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Benzene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Bromoform							<input type="checkbox"/> ML <input type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Carbon tetrachloride							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Chlorobenzene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Chlorodibromomethane							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Chloroethane							<input type="checkbox"/> ML <input type="checkbox"/> MDL
2-chloroethylvinyl ether							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Chloroform							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Dichlorobromomethane							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,1-dichloroethane							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,2-dichloroethane							<input type="checkbox"/> ML <input type="checkbox"/> MDL
trans-1,2-dichloroethylene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,1-dichloroethylene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,2-dichloropropane							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,3-dichloropropylene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Ethylbenzene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Methyl bromide							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Methyl chloride							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Methylene chloride							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,1,2,2-tetrachloroethane							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Tetrachloroethylene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Toluene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,1,1-trichloroethane							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,1,2-trichloroethane							<input type="checkbox"/> ML <input type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Trichloroethylene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Vinyl chloride							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Acid-Extractable Compounds							
p-chloro-m-cresol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
2-chlorophenol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
2,4-dichlorophenol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
2,4-dimethylphenol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
4,6-dinitro-o-cresol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
2,4-dinitrophenol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
2-nitrophenol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
4-nitrophenol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Pentachlorophenol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Phenol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
2,4,6-trichlorophenol							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Base-Neutral Compounds							
Acenaphthene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Acenaphthylene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Anthracene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Benzidine							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Benzo(a)anthracene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Benzo(a)pyrene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
3,4-benzofluoranthene							<input type="checkbox"/> ML <input type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Benzo(ghi)perylene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Benzo(k)fluoranthene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Bis (2-chloroethoxy) methane							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Bis (2-chloroethyl) ether							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Bis (2-chloroisopropyl) ether							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Bis (2-ethylhexyl) phthalate							<input type="checkbox"/> ML <input type="checkbox"/> MDL
4-bromophenyl phenyl ether							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Butyl benzyl phthalate							<input type="checkbox"/> ML <input type="checkbox"/> MDL
2-chloronaphthalene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
4-chlorophenyl phenyl ether							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Chrysene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
di-n-butyl phthalate							<input type="checkbox"/> ML <input type="checkbox"/> MDL
di-n-octyl phthalate							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Dibenzo(a,h)anthracene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,2-dichlorobenzene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,3-dichlorobenzene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,4-dichlorobenzene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
3,3-dichlorobenzidine							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Diethyl phthalate							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Dimethyl phthalate							<input type="checkbox"/> ML <input type="checkbox"/> MDL
2,4-dinitrotoluene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
2,6-dinitrotoluene							<input type="checkbox"/> ML <input type="checkbox"/> MDL

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method ¹	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
1,2-diphenylhydrazine							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Fluoranthene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Fluorene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Hexachlorobenzene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Hexachlorobutadiene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Hexachlorocyclo-pentadiene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Hexachloroethane							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Indeno(1,2,3-cd)pyrene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Isophorone							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Naphthalene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Nitrobenzene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
N-nitrosodi-n-propylamine							<input type="checkbox"/> ML <input type="checkbox"/> MDL
N-nitrosodimethylamine							<input type="checkbox"/> ML <input type="checkbox"/> MDL
N-nitrosodiphenylamine							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Phenanthrene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
Pyrene							<input type="checkbox"/> ML <input type="checkbox"/> MDL
1,2,4-trichlorobenzene							<input type="checkbox"/> ML <input type="checkbox"/> MDL

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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TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

Test Information

	Test Number _____	Test Number _____	Test Number _____
Test species			
Age at initiation of test			
Outfall number			
Date sample collected			
Date test started			
Duration			

Toxicity Test Methods

Test method number			
Manual title			
Edition number and year of publication			
Page number(s)			

Sample Type

Check one:	<input type="checkbox"/> Grab <input type="checkbox"/> 24-hour composite	<input type="checkbox"/> Grab <input type="checkbox"/> 24-hour composite	<input type="checkbox"/> Grab <input type="checkbox"/> 24-hour composite
------------	---	---	---

Sample Location

Check one:	<input type="checkbox"/> Before disinfection <input type="checkbox"/> After disinfection <input type="checkbox"/> After dechlorination	<input type="checkbox"/> Before disinfection <input type="checkbox"/> After disinfection <input type="checkbox"/> After dechlorination	<input type="checkbox"/> Before disinfection <input type="checkbox"/> After disinfection <input type="checkbox"/> After dechlorination
------------	--	--	--

Point in Treatment Process

Describe the point in the treatment process at which the sample was collected for each test.			
--	--	--	--

Toxicity Type

Indicate for each test whether the test was performed to assess acute or chronic toxicity, or both. (Check one response.)	<input type="checkbox"/> Acute <input type="checkbox"/> Chronic <input type="checkbox"/> Both	<input type="checkbox"/> Acute <input type="checkbox"/> Chronic <input type="checkbox"/> Both	<input type="checkbox"/> Acute <input type="checkbox"/> Chronic <input type="checkbox"/> Both
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TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number _____	Test Number _____	Test Number _____
Test Type			
Indicate the type of test performed. (Check one response.)	<input type="checkbox"/> Static <input type="checkbox"/> Static-renewal <input type="checkbox"/> Flow-through	<input type="checkbox"/> Static <input type="checkbox"/> Static-renewal <input type="checkbox"/> Flow-through	<input type="checkbox"/> Static <input type="checkbox"/> Static-renewal <input type="checkbox"/> Flow-through
Source of Dilution Water			
Indicate the source of dilution water. (Check one response.)	<input type="checkbox"/> Laboratory water <input type="checkbox"/> Receiving water	<input type="checkbox"/> Laboratory water <input type="checkbox"/> Receiving water	<input type="checkbox"/> Laboratory water <input type="checkbox"/> Receiving water
If laboratory water, specify type.			
If receiving water, specify source.			
Type of Dilution Water			
Indicate the type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.	<input type="checkbox"/> Fresh water <input type="checkbox"/> Salt water (specify)	<input type="checkbox"/> Fresh water <input type="checkbox"/> Salt water (specify)	<input type="checkbox"/> Fresh water <input type="checkbox"/> Salt water (specify)
Percentage Effluent Used			
Specify the percentage effluent used for all concentrations in the test series.			
Parameters Tested			
Check the parameters tested.	<input type="checkbox"/> pH <input type="checkbox"/> Salinity <input type="checkbox"/> Temperature	<input type="checkbox"/> Ammonia <input type="checkbox"/> Dissolved oxygen	<input type="checkbox"/> pH <input type="checkbox"/> Salinity <input type="checkbox"/> Temperature
		<input type="checkbox"/> Ammonia <input type="checkbox"/> Dissolved oxygen	<input type="checkbox"/> pH <input type="checkbox"/> Salinity <input type="checkbox"/> Temperature
		<input type="checkbox"/> Ammonia <input type="checkbox"/> Dissolved oxygen	<input type="checkbox"/> pH <input type="checkbox"/> Salinity <input type="checkbox"/> Temperature
		<input type="checkbox"/> Ammonia <input type="checkbox"/> Dissolved oxygen	<input type="checkbox"/> pH <input type="checkbox"/> Salinity <input type="checkbox"/> Temperature
Acute Test Results			
Percent survival in 100% effluent	%	%	%
LC ₅₀			
95% confidence interval	%	%	%
Control percent survival	%	%	%

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TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number _____	Test Number _____	Test Number _____			
Acute Test Results Continued						
Other (describe)						
Chronic Test Results						
NOEC	%	%	%			
IC ₂₅	%	%	%			
Control percent survival	%	%	%			
Other (describe)						
Quality Control/Quality Assurance						
Is reference toxicant data available?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Was reference toxicant test within acceptable bounds?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
What date was reference toxicant test run (MM/DD/YYYY)?						
Other (describe)						

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EPA Identification Number	NPDES Permit Number	Facility Name
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TABLE F. INDUSTRIAL DISCHARGE INFORMATION			
Response space is provided for three SIUs. Copy the table to report information for additional SIUs.			
	SIU ____	SIU ____	SIU ____
Name of SIU			
Mailing address (street or P.O. box)			
City, state, and ZIP code			
Describe all industrial processes that affect or contribute to the discharge.			
List the principal products and raw materials that affect or contribute to the SIU's discharge.			
Indicate the average daily volume of wastewater discharged by the SIU.	gpd	gpd	gpd
How much of the average daily volume is attributable to process flow?	gpd	gpd	gpd
How much of the average daily volume is attributable to non-process flow?	gpd	gpd	gpd
Is the SIU subject to local limits?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is the SIU subject to categorical standards?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

EPA Identification Number	NPDES Permit Number	Facility Name
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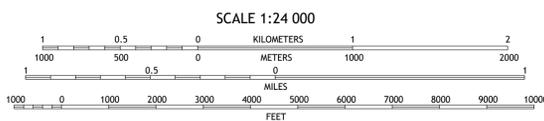
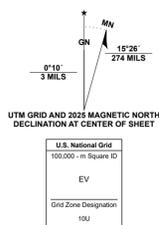
TABLE F. INDUSTRIAL DISCHARGE INFORMATION

Response space is provided for three SIUs. Copy the table to report information for additional SIUs.

	SIU ____	SIU ____	SIU ____
Under what categories and subcategories is the SIU subject?			
Has the POTW experienced problems (e.g., upsets, pass-through interferences) in the past 4.5 years that are attributable to the SIU?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, describe.			



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid: UNIVERSAL TRANSVERSE MERCATOR, ZONE 10U
Data is provided by The National Map (TNM), is the best available at the time of map
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Hydrography, Geographic Names, Boundaries, Transportation, Structures, Land Cover,
and Orthoimagery. Refer to associated Federal Geographic Data Committee (FGDC)
Metadata for additional source data information.
This map is not a legal document. Boundaries may be generalized for this map scale.
Private lands within government reservations may not be shown. Obtain permission
before entering private lands. Temporal changes may have occurred since these data
were collected and some data may no longer represent actual surface conditions.
Learn About The National Map: <https://nationalmap.gov>

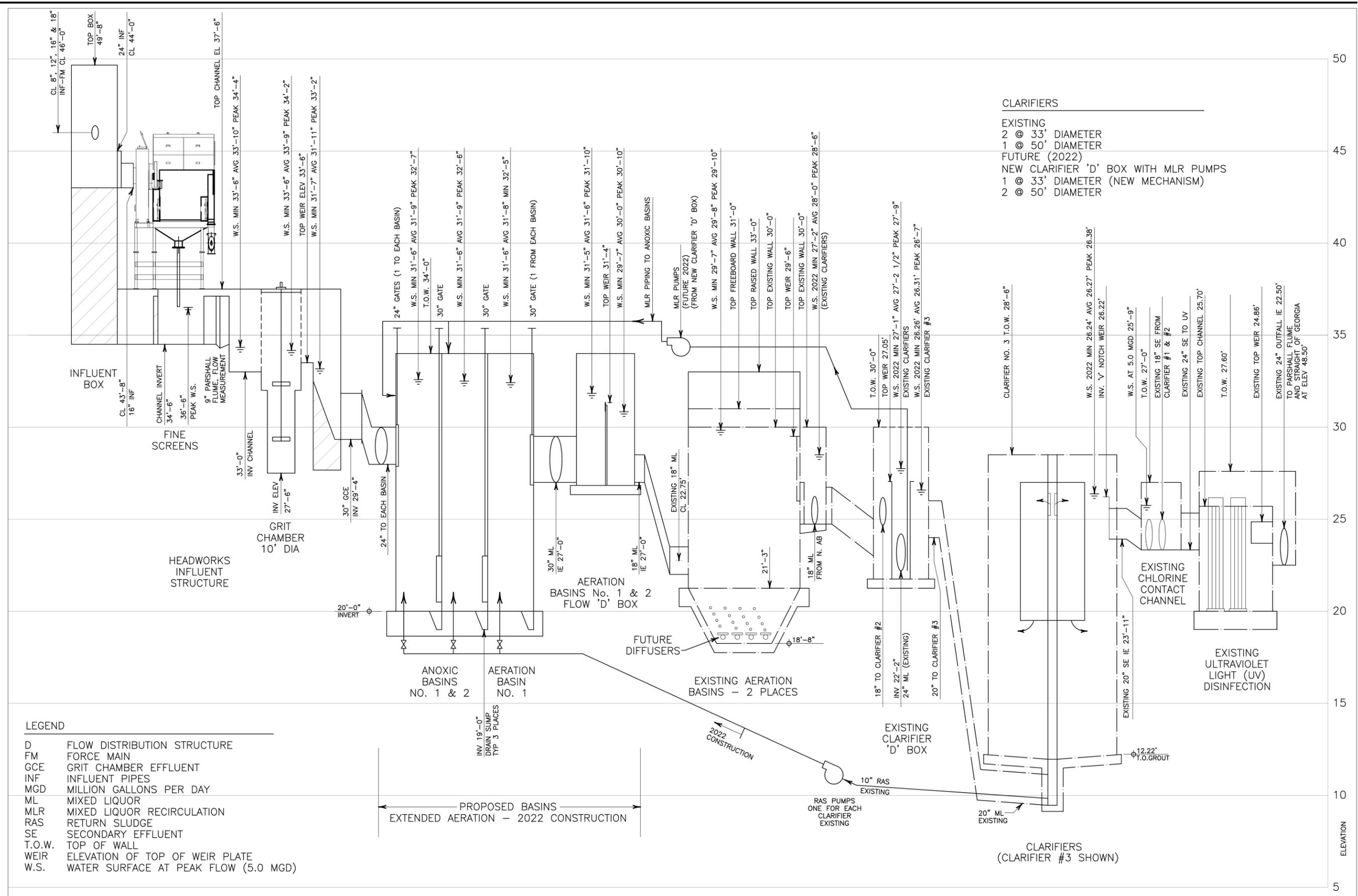


CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
CONTOUR SMOOTHNESS = Medium

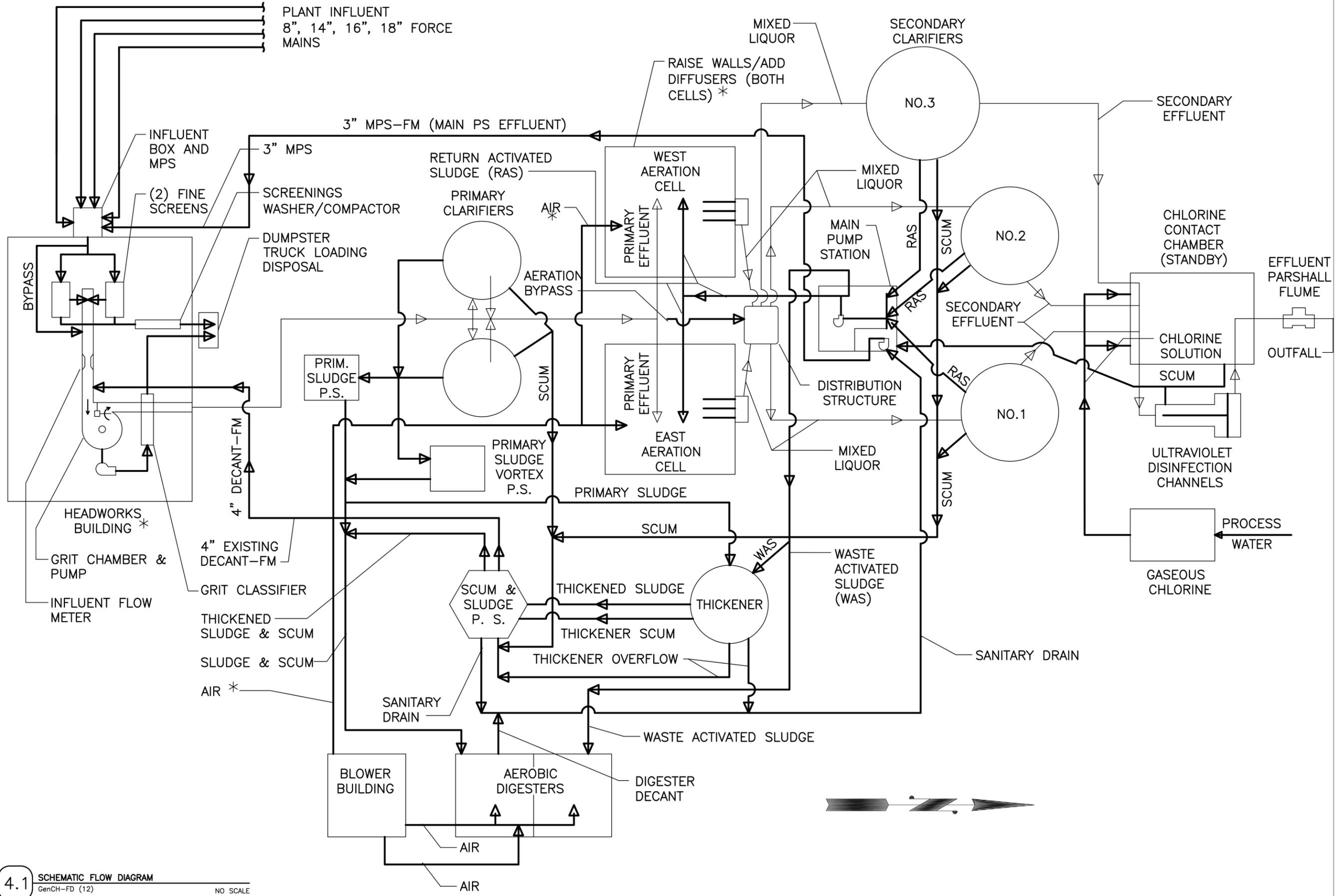


7.5-MINUTE TOPO, WA
2025





4.1 HYDRAULIC PROFILE
 GenCH-HP (30) NO SCALE



4.1 SCHEMATIC FLOW DIAGRAM
GenCH-FD (12) NO SCALE

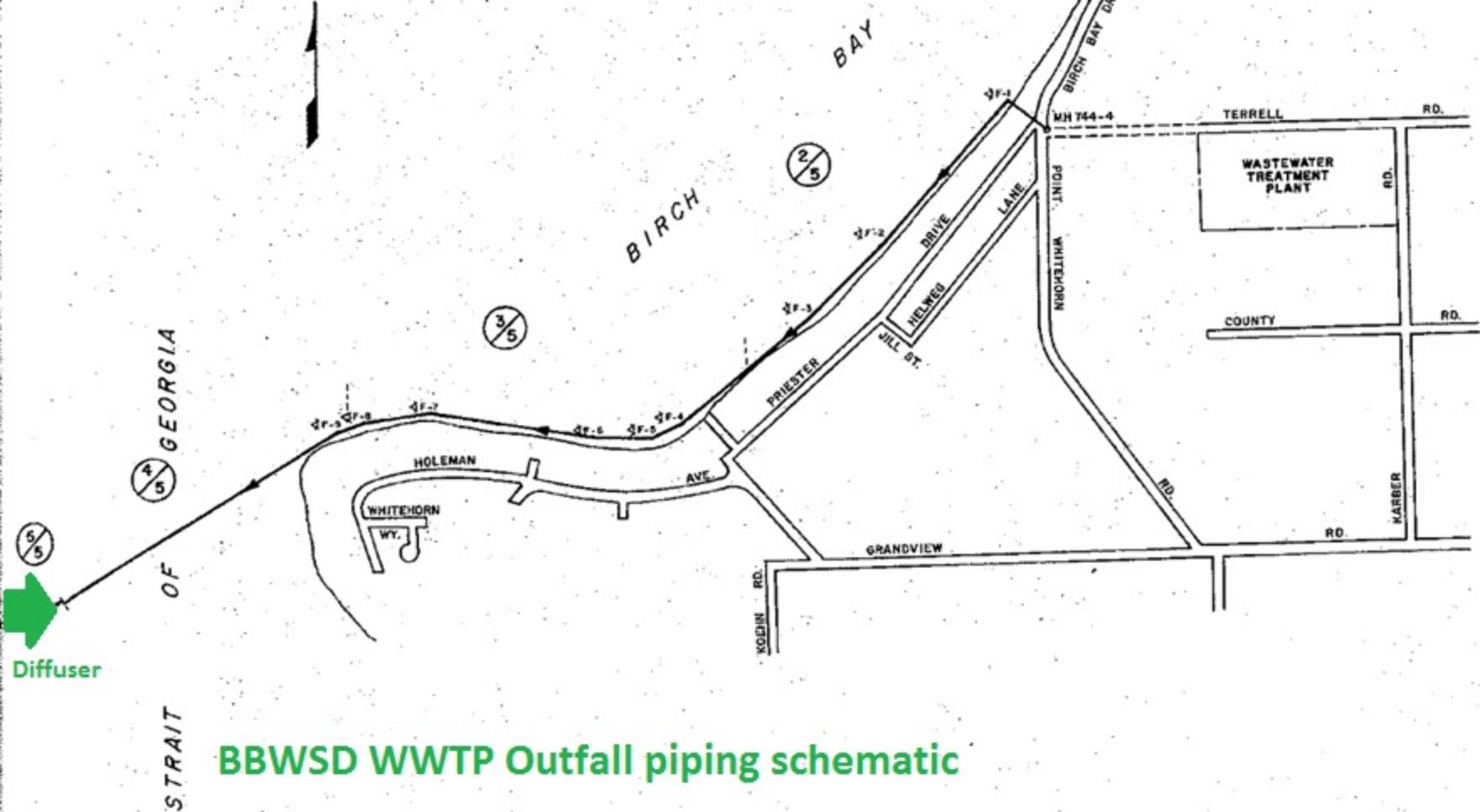


5/10/13
H-R-Esveit ENGINEERING
ENVIRONMENTAL ENGINEERING
6450 N.E. Brigham Rd. Bainbridge Island, WA. 98110
(206) 842-7988 FAX (206) 780-0811

SCHEMATIC FLOW DIAGRAM

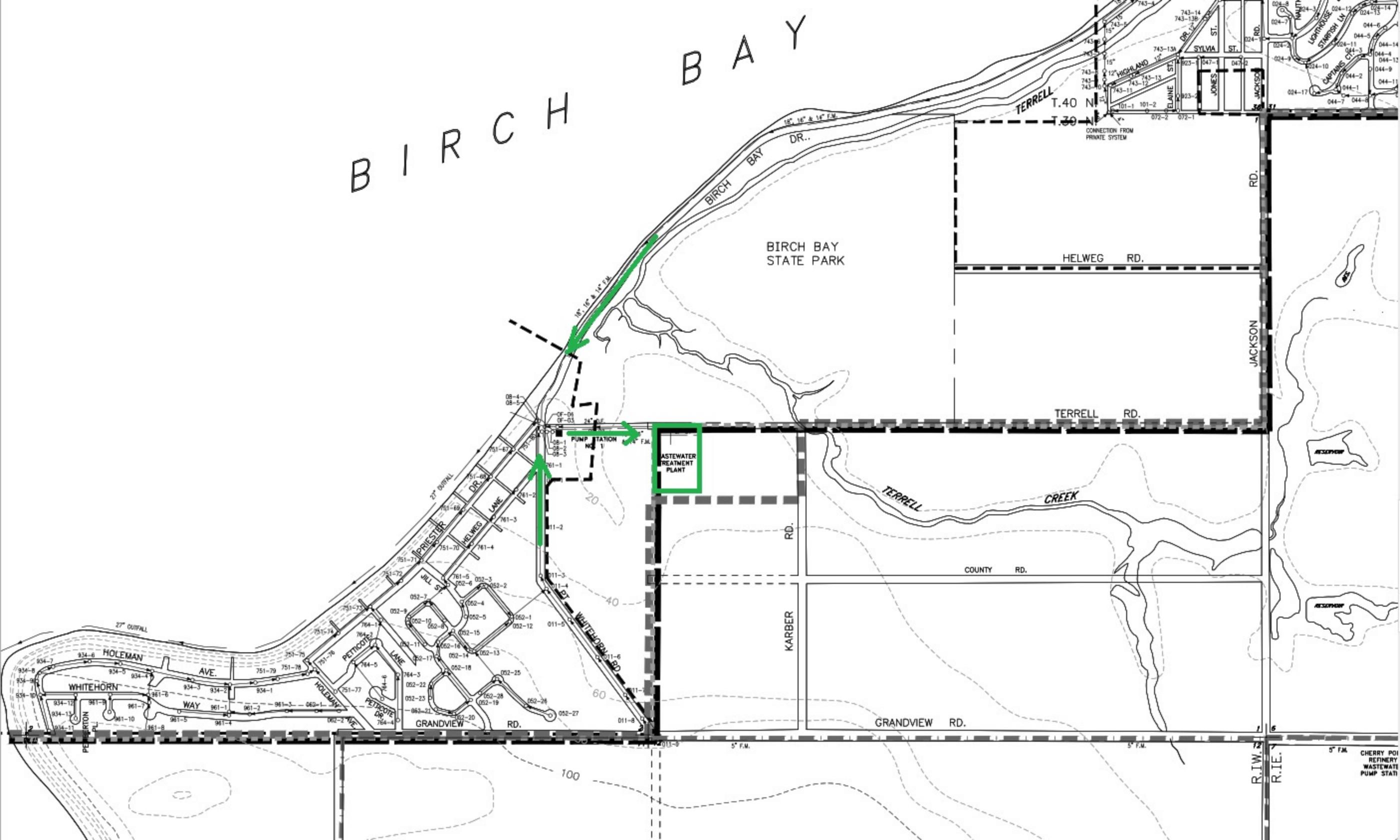
Wastewater Treatment Plant Headworks Replacement
Birch Bay Water & Sewer District
7096 Pt Whitehorn Rd, Blaine, WA 98230

revisions
drawing status final
released for bid
release date 5/10/2013
sheet



BBWSD WWTP Outfall piping schematic

BIRCH BAY



BIRCH BAY STATE PARK

WASTEWATER TREATMENT PLANT

PUMP STATION NO. 1

HELWEG RD.

TERRELL RD.

COUNTY RD.

GRANDVIEW RD.

KARBER RD.

5' F.M.

5' F.M.

R.I.E.

5' F.M.

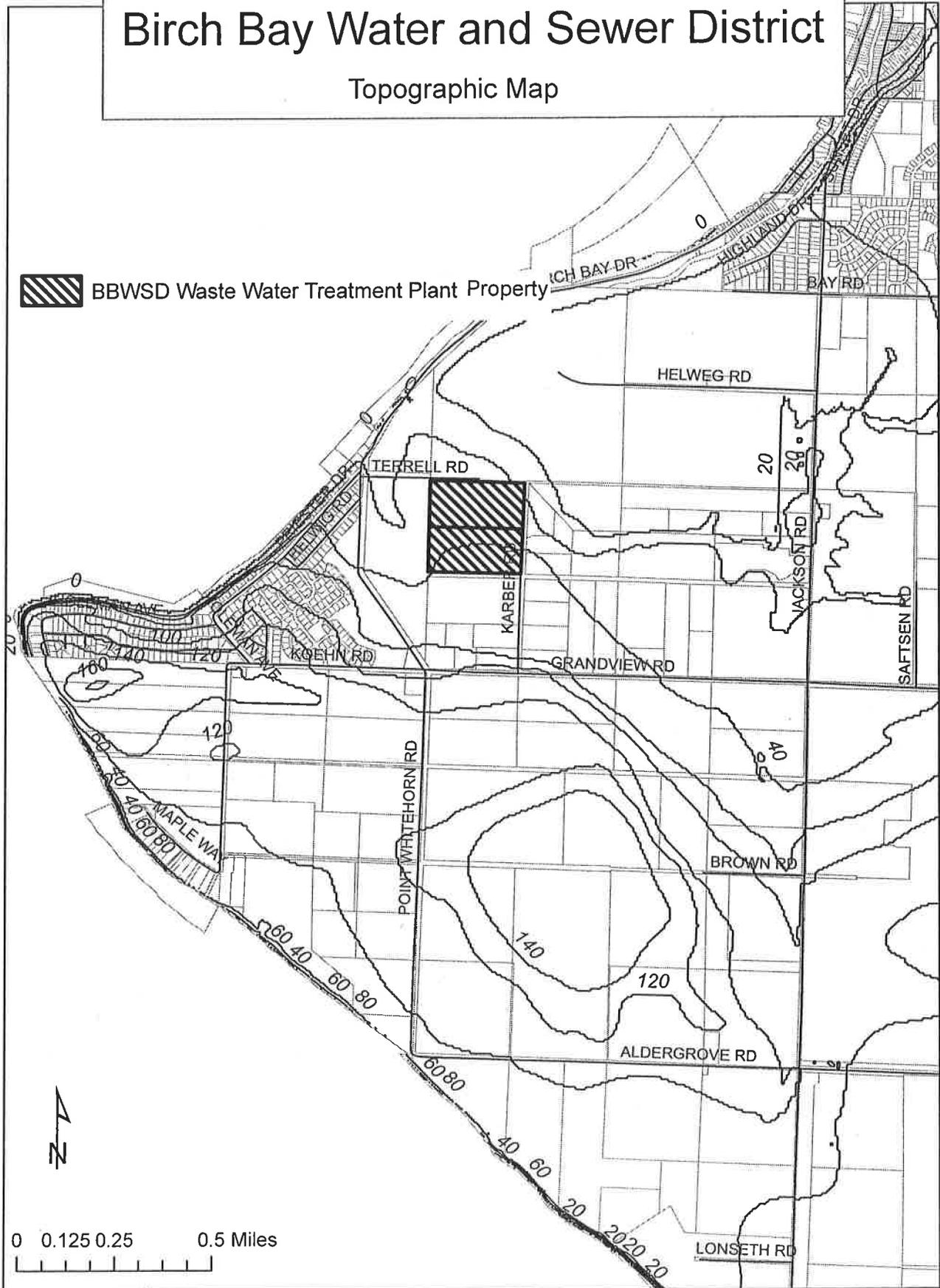
CHERRY POINT REFINERY WASTEWATER PUMP STATION

Birch Bay Water and Sewer District

Topographic Map



BBWSD Waste Water Treatment Plant Property



2025 NPDES Renewal Application

Item 2.3

Narrative Description of Treatment Process

Wastewater is pumped into the treatment plant through an 8 inch diameter force main from a small collection system lift station and via 14 and/or 16 inch diameter force mains from a larger collection system pump station. The wastewater passes through magnetic flowmeters as it exits each lift station, measuring the flow rates and daily volumes specifically from the collection system pump stations. The flows are combined into one collection box at the inlet to the headworks building, along with flows from a small lift station which serves the district offices, before it then passes through one or both of two 3 mm rotary fine screens. The screen removes trash and large solids from the system and conveys, compacts and dewateres the removed material. The supernatant from the compacted solids is returned to the WWTP process stream for further treatment

The combined influent flow from all sources is measured via a Parshall flume at the discharge of the rotary screens. This flow meter also includes all sources of wastewater from within the plant, including a small sanitary lift station and minimal amounts of recycled water and/or supernatant. If necessary, the wastewater can be bypassed around both screens if the mechanical screens need to be bypassed for maintenance or repair.

A continuous flow proportional sample of the influent is taken at the inlet of the headworks structure, just prior to where flow enters the drum screens. The sample is analyzed in the laboratory for various physical and chemical parameters.

The wastewater then enters a large vortex grit chamber. The low velocity allows inorganic solids such as sand, glass and gravel to settle at the bottom of the grit chambers while lighter organic solids continue to remain suspended in the wastewater. The settled inorganic solids are automatically pumped at designated intervals into a grit classifier, which cleans and dewateres the grit. The grit is then hauled off for disposal.

The wastewater then flows to two circular primary clarifiers; where the settleable organic solids settle and form a sludge and scum, which includes grease, seeds and floatable trash, remains on the surface and is removed by skimming devices. The sludge is scraped into a central sludge collection pit and pumped to the thickener where it is further dewatered and then pumped to the digester. In 2021, return activated sludge (RAS) flow was re-routed to the inlet of the primary clarifiers as a pilot for enhanced nutrient removal. The product of mixing influent and RAS is called "mixed liquor". Mixers were also added. These changes converted the primary clarifiers into anoxic selector basins. The new RAS line retrofit included a valve, which provides the option to pump RAS to either

primary/anoxic clarifiers or aeration basins. These changes have significantly improved nitrification, denitrification, and overall nitrogen removal.

From the primary clarifiers, the mixed liquor flows to the aeration basins. The mixed liquor is aerated by fine bubble diffusers. Aerobic bacteria contained in the liquor utilize the dissolved oxygen during the consumption of finely divided and dissolved organic matter. The waste products of this biological treatment are settleable solids, but these solids remain in suspension while in the aeration cell due to the aerators, which continually stir the liquor.

Treated liquor containing well-mixed settleable solids flows from the aeration cells to the secondary clarifiers. The mixed liquor in the secondary clarifiers separates into scum, clarified wastewater and sludge. Scum rises to the surface of Secondary Clarifier Nos. 1 and 2 and is removed by skimming devices. Scum and floatables from Clarifier No. 3 are discharged with the sludge. The clarified wastewater, or secondary effluent, flows over a weir and into the inlet channel of the UV disinfection channels. The sludge settles to the bottom of the secondary clarifiers and is collected by a rotating collection pipe.

Disinfection occurs by passing flow past UV light sources altering the microorganisms so they are unable to reproduce. The UV disinfection channels provide sufficient exposure time to ensure proper disinfection. Scum/floatable may be collected from the disinfection channels by rotating pipe skimming devices. Chlorine is used to treat water that is returned and re-used within the plant, such as for hoses, sprays, and pumps, and for filament control as necessary.

The disinfected wastewater then flows into the contact chamber outlet channel and into the effluent Parshall Flume, where its flow rate is metered and a continuous flow-proportioning sample is collected. From the Parshall Flume, the treated wastewater is channeled into the outfall.

The sludge from the secondary clarifiers (RAS), is biologically active. Most of this sludge is "recycled", or returned to the aeration cells to consume the organic matter in the wastewater. This is accomplished by three recycle sludge pumps, which pump sludge withdrawn from the secondary clarifiers back to the primary/anoxic clarifiers.

The sludge from the primary clarifiers, and a portion of the sludge from the secondary clarifiers, flows to the gravity thickener where it is combined with sludge from the primary clarifiers. In this process scum is removed and the waste sludge settles to the bottom of the tank. This consolidation results in a thickened sludge and provides a reduction in sludge volume. The decant is recycled back into the process in the headworks (Screenings) building,

The sludge from the gravity thickener is pumped into the aerobic digester. The sludge is aerated with coarse bubble diffusers and hybrid blowers. The aerobic bacteria continue to

utilize the dissolved oxygen and reduce the volatile organic matter. The digested sludge is then withdrawn into a truck for hauling to land disposal (permitted site managed by others). The water, or filtrate, that is removed from the digested sludge, is returned to the influent end of the treatment plant.

Laboratory, control and administrative facilities are located in the laboratory office building. The laboratory is equipped to run all necessary laboratory tests to control the process and show that the treatment plant is meeting regulatory agency requirements. The treatment plant alarms, controls, and telemetry are located in the office, allowing centralized supervision of the facility via an updated SCADA system. Normally, the plant receives its primary power from a utility connection. An onsite standby generator provides power to support all critical treatment processes, the laboratory, and the District office building if primary power is lost.

A snapshot of the SCADA display is shown below (Figure 1) to highlight the process areas and direction of flow.

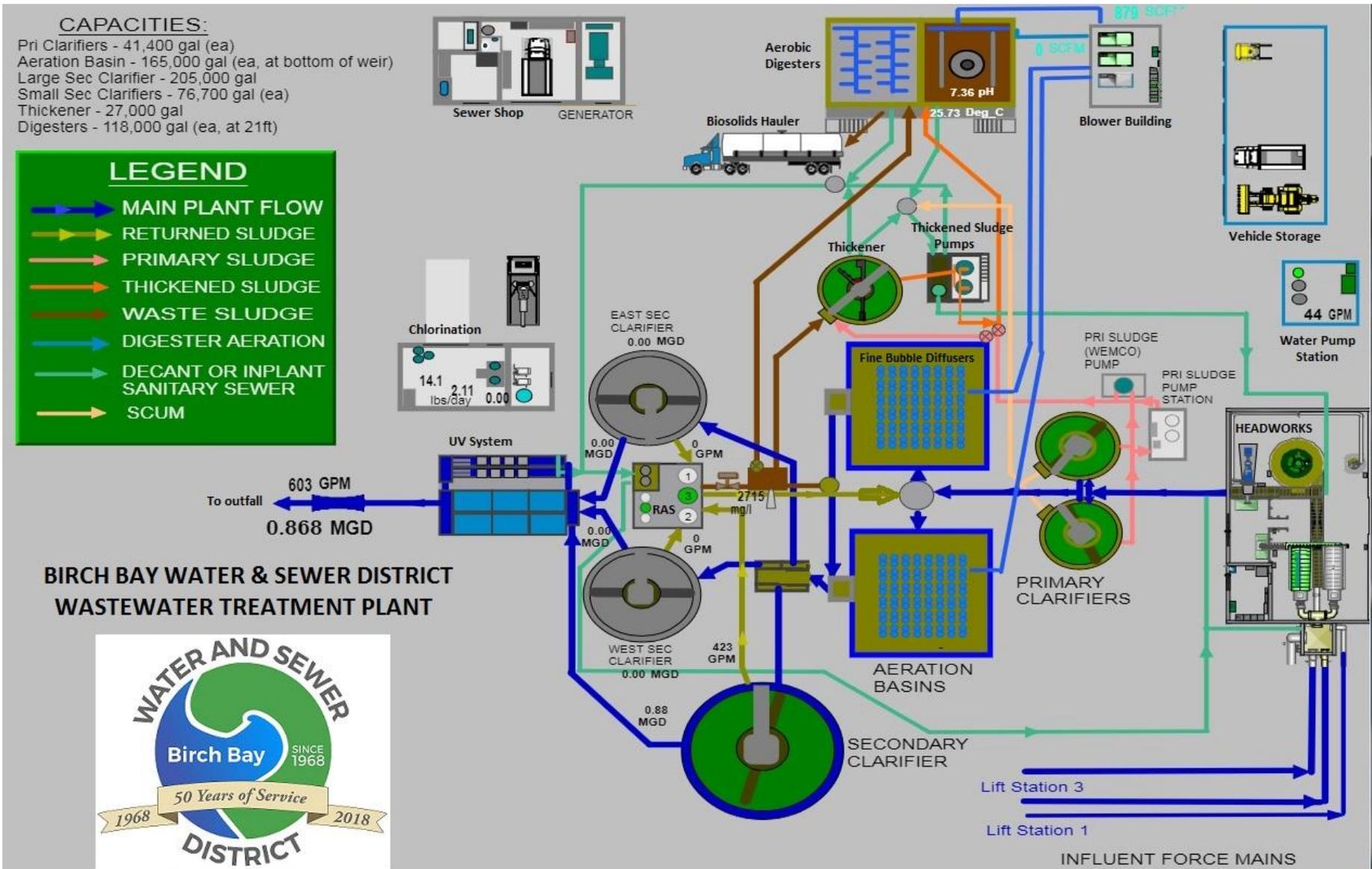


Figure 1

Water Balance

A water balance is provided in as much detail as possible in Table 1 below, utilizing the Parshall flume meters located at the influent and effluent, magnetic flow meters for the Return Activated Sludge (RAS) Process (including individual RAS mag meters at each clarifier), and magnetic flow meters for the thickened sludge system.

Flow between processes is controlled by gravity and pump speeds and setpoints. There is no storage within the plant. Therefore, with the exception of the return activated sludge (RAS) process, what flows in through each major portion of the process is effectively the same as what flows out and in to the next portion of the process. RAS pumping rates can be adjusted for process optimization. Additionally, a small portion of the treated plant effluent is returned to the plant for wash-down water, pump seal water, and surface and equipment sprays (to conserve and minimize potable water use). At no time during the past NPDES permit cycle has a bypass of any process occurred.

Influent and Effluent Flow meter accuracy is checked and maintained using two methods. Flow meters are compared and verified on a continuous basis against other meters using algorithms in a PLC, including a comparison of flume meters to the mag meters at the lift stations feeding the WWTP. If flow & balance errors are increasing above an acceptable tolerance, automatic warnings via the SCADA system occur, allowing the operator to check/calibrate equipment in a timely manner. Furthermore, influent and effluent flume meters are specifically checked and calibrated at least once per year. Flow discrepancy between influent and effluent flow meters are less than 0.5%.

A more detailed table providing average flows through each section of the process for the past 4 years is shown in Table 1.

Table 1

PROCESS AREA	Average Flow (gpd)	Notes
Influent (Parshall Flume Meter)	875,465	Includes flow from two collection system lift stations and in-plant sanitary lift station
Sanitary Lift Station (estimated with runtimes)	15,000	Flow from within Admin building and WWTP bathrooms, scum skimmers and thickener overflows
Return Activated Sludge (RAS) (Mag Meter)	1,087,587	Settled clarifier flow returned from the secondary clarifiers to maintain biomass in aeration basins (Average 125% of Effluent Flow)
Aeration (Influent + RAS)	1,963,052	Flow through the aeration basins
Waste Flow (Primary + Secondary)	29,353	Average 9,000 gpd waste flow from Primary Clarifier, estimated from runtimes
Disinfection/Effluent (Parshall Flume Meter)	871,492	
Digesters (Mag meter)	5,416	Biosolids from thickener, hauled away for treatment land application