



EPA Form 2-C Supplemental Cooling Water Intake Structures

CWA §316(b) requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact. EPA has promulgated rules for new facilities at 40 CFR 125 Subpart I and for existing facilities at 40 CFR 125 Subpart J. This form requests information from applicants using EPA Form 2-C to determine applicability of CWA 316(b) requirements and inform applicants of additional application requirements that may apply to the facility.

Facility Name: _____

NPDES Permit Number: _____

SECTION A. APPLICABILITY

☐ Yes ☐ No

Is there a cooling water intake associated with this facility? Cooling water intake means a structure withdrawing cooling water, for contact or noncontact cooling, from a surface water source. Withdrawal from groundwater or a public water system is not applicable. If No, STOP.

1. What is the design intake flow (in gallons per day)? _____
2. What percentage of the flow is used exclusively for cooling? _____
3. What is the maximum intake velocity? _____
4. Describe the cooling water system (e.g., once-through, closed-cycle). _____
5. Name the surface water body from which cooling water is withdrawn. _____
6. Provide latitude/longitude of the cooling water intake(s) (NAD83/WGS84). _____ / _____
To ensure accurate locations provide at least 5 significant digits.
7. Describe the configuration of the intake(s) (e.g., dimensions, screen type). _____
If as-built plans and specifications are available, please provide.
8. When was the intake(s) installed, including any major modifications? _____
9. When was the intake(s) last inspected? If regular inspections are scheduled, provide frequency. _____
10. Have there been any studies to determine the impact of the intake(s) on aquatic organisms (e.g., impingement/entrainment studies). ☐ Yes ☐ No
If yes, please provide

SECTION B. APPLICATION REQUIREMENTS

CWA §316(b) requirements apply to all industrial NPDES permitted facilities with cooling water intake structures. EPA has promulgated best technology available (BTA) effluent guidelines for facilities meeting certain thresholds:

- Design intake flow greater than two million gallons per day.
- Greater than 25 percent of the water withdrawn is used for cooling purposes.

Submittal requirements for facilities subject to BTA effluent guidelines:

- New facilities must submit information specified in 40 CFR 122.21(r) and 40 CFR 125.86.
- Existing facilities must submit information specified in 40 CFR 122.21(r) and 40 CFR 125.95.

Facilities subject to BTA guidelines are encouraged to contact Ecology early in the application process. Ecology may consider this application administratively incomplete until the required information is received.

Submittal requirements for existing facilities and new facilities below BTA thresholds:

- Ecology will evaluate the information submitted with this form and may request additional information to assess the need for requirements under 40 CFR 125.90(b) or 40 CFR 125.80(c).

SECTION C. INSTRUCTIONS

All applicants required to submit EPA Form 2C, available here: www.ecy.wa.gov/programs/wq/permits/forms.html must also submit this supplemental form to determine the applicability of CWA §316(b) and any additional application requirements. Enter all applicable information and submit this form as an attachment to Form 2C.

APPLICABILITY

CWA §316(b) requirements apply only to point sources (facilities that have or are required to have an NPDES permit) withdrawing cooling water from waters of the U.S. (surface waters). Withdrawal from groundwater, a public water system, or the use of treated effluent that would otherwise be discharged to waters of the state does not constitute use of a cooling water intake structure. Select Yes or No to the first question. If you answer No, you do not need to complete the remainder of the form.

1. Design intake flow (DIF) means the value assigned during the facility's design representing the maximum instantaneous rate of flow of water the cooling water intake system is capable of withdrawing from a source waterbody. Existing facilities may adjust this value to reflect any permanent changes to the maximum capabilities of the intake system including but not limited to permanent removal of pumps, flow limit devices, and physical limitations of piping. DIF doesn't include emergency capacity or redundant pumps. Report this value in gallons per day (gpd).
2. Report the percentage of water withdrawn that is used exclusively for cooling purposes, measured on an average monthly (new facilities) or average annual over the past three years (existing facilities) basis. Cooling water that is used in a manufacturing process either before or after it is used for cooling is not considered cooling water for the purposes of calculating this percentage.
3. Provide the maximum actual or design intake velocity as water passes through the structural components of the intake screen, measured perpendicular to the screen mesh. Report this value in feet per second (fps). Indicate which value is reported, design or actual.
4. Describe the cooling water system, including if the water is used once (once-through) or recirculated (closed-cycle). If recirculated, provide the minimum number of cycles the water is recirculated and average blowdown flow in gpd.
5. Provide the name of the surface water body your intake structure withdraws water from (e.g., ABC river)
6. Provide an accurate location for each intake structure associated with the facility.
7. Describe the cooling water system including a description of the intake screen dimensions, perforation sizes (if known), and screen type (e.g., traveling screens, wedgewire, barrier nets, trash racks). Provide any design drawings and specifications available.
8. Give the date the intake was first installed and the date(s) of any major modifications to the structure(s).
9. Provide the date of last intake inspection and the frequency of any regularly scheduled inspections.
10. Please provide any available studies of the impact to aquatic life from your cooling water intake structure. These may include studies of entrainment and impingement of fish and shellfish.

APPLICATION REQUIREMENTS

Facilities with design intake flows greater than two million gallons per day, of which greater than 25 percent of the water withdrawn is used exclusively for cooling purposes, must comply with applicable application requirements in federal rule. Please refer directly to the applicable rules, cited in Section B. to determine requirements specific to your facility. Existing facilities should also contact their permit manager for technical assistance. New facility applicants should contact their regional office permit coordinator (www.ecy.wa.gov/programs/wq/permits/permit_coord.html) for assistance.

All applicants are encouraged to provide thorough answers to the questions on this form, along with any additional information that may be useful in determining applicability and application requirements. Ecology may request additional information from facilities with cooling water intake structures operating below the design intake and percentage flow thresholds. Ecology will use the information provided to make a case-by-case determination of the need for additional requirements per 40 CFR 125.80(c) and 40 CFR 125.90(b).

For special accommodations or documents in alternate format, call the Water Quality Program at 360-407-6600. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.