Alaska Department of Environmental Conservation
Division of Environmental Health

Drinking Water Program - Engineering Plan Review
Checklist - Instructions

Purpose

These checklists apply to a public water system (PWS) requesting construction approval (or operational approval if approval to construct was not granted prior to construction) for the following:

- New construction
- System modifications and/or change of use
- Separation distance waivers

The checklists are based on the plan review requirements as referenced in the State of Alaska Drinking Water regulations, 18 AAC 80 (amended as of May 3, 2019). These checklists supersede all previous versions and are updated as necessary. The DEC Drinking Water Program website has the latest versions.

The checklists are intended to be used as guidance documents only. Completion of the checklists may not constitute a complete submittal. Additional project information not identified in the checklists may be requested by the Department as a part of the plan review process.

Plan Review Process and Checklist Instructions

The plan review and approval process consists of **two major steps** to obtain certifications for **approval to construct and approval to operate**. A certificate must be obtained from the Department prior to constructing, modifying, and operating a PWS. Submittals must be sent to the engineering coordinator at the office covering the area served by the PWS. The Department encourages engineers and system owners and operators to read the DEC Engineering Plan Review Overview webpage at http://dec.alaska.gov/eh/dw/engineering/plan-review/ and contact local DEC environmental program technicians early in the planning and design with plan review questions. Drinking Water Program engineering contact information, including a map of areas (at bottom of Office Location tab), can be found at http://dec.alaska.gov/eh/dw/contact/. Plan sets, whether design, as-built, or record drawings, must be submitted with the following:

- Each page labeled as design, as-built, or record drawing and be sealed, signed, and dated by the Alaska registered professional engineer (P.E.) in responsible charge of design or construction observation as applicable
- For as-built or record drawings, all construction changes clearly shown on the original drawings prepared and approved by the Department for construction*
- Hardcopy on paper no larger than 11-inches by 17-inches**

* Any disclaimer included on the drawings must identify the signature with typed name, and license number and not invalidate the engineer's seal or responsibility for ensuring the project provides public health protection, meets the requirements of the Drinking Water regulations, and was constructed in compliance with approval to construct and the Drinking Water regulations.

** 8.5-inch by 11-inch paper may be used if legible at that size. An additional electronic copy in Adobe portable document format (PDF) is appreciated but not required.

The checklists are used to evaluate the completeness of submitted plans. If a submittal is not complete, it will be returned to the applicant or held until contact is made with the applicant. Formal review is not required to begin until the Department determines the plan submittal is complete and the fee payment is made.

Plan approval requests must be received at least 30 days before the proposed commencement of constructing, installing, modifying, or improving a PWS and at least 60 days before the proposed commencement of constructing, installing, modifying, or improving a PWS project involving state or federal monetary assistance (18 AAC 15.020). In accordance with the Drinking Water regulations, the Department will make every effort to issue its approval

or denial of requests within 30 days after receiving all of the plans and information needed. If a submittal is deficient, the Department will notify the owner and their engineer that additional information is needed. Failure of the Department to issue an approval or denial within 30 days does not constitute automatic approval.

Approval to construct requires a submittal to the Department for review which includes engineering construction plans, specifications, and calculations. New community and non-transient non-community water systems must show capacity to operate in compliance with state regulations. After the Department's review is complete, a letter issuing the approval and a copy of a construction and operation certificate with the Approval to Construct section signed will be sent to the owner and their engineer. The following forms are used for construction approval review:

1. *Facility Information Form*: This form compiles owner, operator, and facility contact information and includes an Owner's Statement section. The Owner's Statement section must be signed by the owner of the PWS, as the applicant of the request to construct or modify their PWS, before a plan review will commence. **Note:** An Applicant Certification Form (Checklist 0.0a) must be used in lieu of facility and project information forms when an applicant other than the PWS owner is requesting a waiver for a potential source of contamination owned by the applicant or located on the applicant's property.
2. *Project Information Form:* This form compiles PWS and submitting engineer information. Section III of the form is used to determine the checklists needed for the review using the following steps:
    i. Identify the column(s) matching the project scope (i.e. New PWS, Modify Existing PWS, Distribution Extension or Replacement, Waiver, or Water Haul).
    ii. Identify the checklist in this column that is required based on the water system and project. Mark all boxes for the checklists that apply to the project.
3. *Checklist*: Complete all checklists identified in Section III of the Project Information Form. If an item on the checklist does not apply to the project, indicate on the checklist why the item does not apply. If an element of the project design does not comply with the Drinking Water regulations, the submitting engineer must explain why it cannot be designed to comply and justify that the proposed design is as protective of public health.

Interim approval to operate is a temporary certificate allowing a system to begin operation without submitting all plan review items required for final approval to operate. Submittal requirements will be stated in the letter granting approval to construct. After the Department's review of the request is complete, a letter granting the approval and a copy of the Construction and Operation Certificate, with the Interim Approval to Operate section signed, will be sent to the owner and engineer. Typically, the following must be provided with the request:

- Letter requesting interim approval to operate
- Verification construction has been substantially completed as approved
- Documentation that conditions of approval to construct were met
- Results of any required tests (e.g. pressure or bacteriological tests)

Final approval to operate will be issued after the Department receives and reviews satisfactory documentation that all requirements and conditions specified in the approval to construct or interim approval to operate letter have been met. A third party sanitary survey or System Inventory Form completed by the registered design engineer and an Emergency Preparedness Compliance Certification will be required as part of the approval to operate for all new PWSs. After the Department's review is complete, a letter granting the approval and a copy of the Construction and Operation Certificate, with the Final Approval to Operate section signed, will be sent to the owner. Typically, the following must be provided in the request:

- Letter requesting final approval to operate
- Verification construction has been completed as approved
- Justification for any construction changes to approved design
- Documentation that conditions of approval to construct were met
- Results of any required tests (e.g. pressure or bacteriological tests)
- Set of as-built or record drawings