

**WAC 173-240-060 Engineering report.** (1) The engineering report for a domestic wastewater facility shall include each appropriate (as determined by the department) item required in WAC 173-240-050 for general sewer plans unless an up-to-date general sewer plan is on file with the department. Normally, an engineering report is not required for sewer line extensions or pump stations. See WAC 173-240-020(13) and 173-240-030(5). The facility plan described in federal rule 40 C.F.R. 35 is an "engineering report."

(2) The engineering report must be sufficiently complete so that plans and specifications can be developed from it without substantial changes. Three copies of the report must be submitted to the department for approval, except as waived under WAC 173-240-030(5).

(3) The engineering report shall include the following information together with any other relevant data as requested by the department:

(a) The name, address, and telephone number of the owner of the proposed facilities, and the owner's authorized representative.

(b) A project description that includes a location map and a map of the present and proposed service area.

(c) A statement of the present and expected future quantity and quality of wastewater, including any industrial wastes that may be present or expected in the sewer system.

(d) The degree of treatment required based upon applicable permits and rules, the receiving body of water, the amount and strength of wastewater to be treated, and other influencing factors.

(e) A description of the receiving water, applicable water quality standards, and how water quality standards will be met outside any applicable dilution zone.

(f) The type of treatment process proposed, based upon the character of the wastewater to be handled, the method of disposal, the degree of treatment required, and a discussion of the alternatives evaluated and the reasons they are unacceptable.

(g) The basic design data and sizing calculations of each unit of the treatment works. Expected efficiencies of each unit and also of the entire plant, and character of effluent anticipated.

(h) Discussion of the various sites available and the advantages and disadvantages of the site or sites recommended. The proximity of residences or developed areas to any treatment works. The relationship of the twenty-five-year and one hundred-year flood to the treatment plant site and the various plant units.

(i) A flow diagram that shows general layout of the various units, the location of the effluent discharge, and a hydraulic profile of the system that is the subject of the engineering report and any hydraulically related portions.

(j) A discussion of infiltration and inflow problems, overflows and bypasses, and proposed corrections and controls.

(k) A discussion of any special provisions for treating industrial wastes, including any pretreatment requirements for significant industrial sources.

(l) Detailed outfall analysis or other disposal method selected.

(m) A discussion of the method of final sludge disposal and any alternatives considered.

(n) Provision for future needs.

(o) Staffing and testing requirements for the facilities.

(p) An estimate of the costs and expenses of the proposed facilities and the method of assessing costs and expenses. The total amount shall include both capital costs and also operation and maintenance

costs for the life of the project, and must be presented in terms of total annual cost and present worth.

(q) A statement regarding compliance with any applicable state or local water quality management plan or any plan adopted under the Federal Water Pollution Control Act as amended.

(r) A statement regarding compliance with the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA), if applicable.

(4) The engineering report for projects that use land application, including seepage lagoons, irrigation, and subsurface disposal, shall include information on the following together with appropriate parts of subsection (3) of this section, as determined by the department:

(a) Soils and their permeability;

(b) Geohydrologic evaluation of factors such as:

(i) Depth to groundwater and groundwater movement during different times of the year;

(ii) Water balance analysis of the proposed discharge area;

(iii) Overall effects of the proposed facility upon the groundwater in conjunction with any other land application facilities that may be present;

(c) Availability of public sewers;

(d) Reserve areas for additional subsurface disposal.

(5) The engineering report for projects funded by the Environmental Protection Agency shall, in addition to the requirements of subsection (3) or (4) of this section, follow EPA facility plan guidelines contained in the EPA publication, "Guidance for Preparing a Facility Plan" (MCD-46), and shall indicate how the special requirements contained in 40 C.F.R. 35.719-1 will be met.

[Statutory Authority: RCW 90.48.110. WSR 00-15-021 (Order 00-09), § 173-240-060, filed 7/11/00, effective 8/11/00. Statutory Authority: Chapters 43.21A and 90.48 RCW. WSR 83-23-063 (Order DE 83-30), § 173-240-060, filed 11/16/83. Statutory Authority: RCW 90.48.110. WSR 79-02-033 (Order DE 78-10), § 173-240-060, filed 1/23/79. Formerly chapter 372-20 WAC.]