Ohio Administrative Code

Rule 3745-42-03 Requirements for applications and engineering plans.

Effective: March 31, 2017

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules and federal statutory provisions referenced in this rule, see rule 3745-42-01 of the Administrative Code.]

(A) Applications for both permits to install and plan approvals required by rule 3745-42-02 of the Administrative Code shall be made using forms prepared by Ohio EPA and shall contain such information as the director deems necessary to determine whether the criteria of rule 3745-42-04 of the Administrative Code are met.

(1) Any of the following must be signed and certified by a professional engineer licensed by the Ohio state board of registration for professional engineers and surveyors:

(a) Engineering plans, such as detail plans, blueprints and drawings. or specifications for disposal systems including, but not limited to the following:

(i) Sanitary sewer extensions.

(ii) Pump stations or distribution systems.

(iii) Prefabricated unit installations (e.g., small sewage treatment plants).

(iv) Sewage treatment plants.

(v) Land application systems.

(vi) Holding tanks.

(vii) Mound systems.

(viii) Septic tanks and leach fields.

(ix) Drip distribution systems.

(x) Monofills (disposal sites for fly ash, foundry sand or other similar industrial wastes).

(xi) Industrial or commercial treatment works.

(b) Reports on process evaluations at disposal systems including combined sewer overflow operational or long term control plan approvals, sewer system evaluations and infiltration and inflow analysis plans.

(c) Operation and maintenance manuals for disposal systems.

(d) Publicly owned treatment works (POTW) local limit technical justifications for new or revised local limits submitted for approval in accordance with pretreatment rules in Chapter 3745-3 of the Administrative Code.

(e) General plans or facility plans, including feasibility and cost analysis.

(f) Impoundment closure plans.

(g) Beneficial reuse or recycling plans that involve engineering calculations including, but not limited to, structural fill projects, building foundations and road beds.

(2) Applications for permits to install or plan approvals that are not required to be signed and certified by a professional engineer licensed by the Ohio state board of registration for professional engineers and surveyors include the following:

(a) Municipal sludge management plans using agronomically sound land application rates.

(b) Beneficial use or recycling projects using agronomically sound land application rates.

(c) Pretreatment program modification requests other than technical justification modification requests for local limits including, but not limited to, changes in sewer use ordinances, local laws and local regulations.

(d) Groundwater monitoring plans.

(3) In addition to the specific types of documents in paragraph (A)(1) of this rule, the director may require other documents submitted under this chapter to be signed and certified by a professional engineer licensed by the Ohio state board of registration for professional engineers and surveyors to protect human health or the environment.

(B) Applications for permits to install and plan approvals shall be signed by the person, firm, agency or entity responsible for constructing the disposal system. If, after construction, the disposal system will be turned over to a public entity or another party to own, operate or maintain, the director may require both persons responsible for construction and the future owner or operator or person who maintains the system to sign the permit application and be subject to the terms and conditions of the permit issued thereafter. The application shall be signed as follows:

(1) In the case of a corporation, by a responsible corporate officer. For these purposes, a responsible corporate officer means any of the following:

(a) 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.

(b) The manager of one or more manufacturing, production or operating facilities, provided: the manager is authorized to make management decisions that govern the operation of the regulated facility including having 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 are taken to gather complete and accurate information for permit application requirements; and authority to sign documents has been assigned or delegated

to the manager in accordance with corporate procedures.

(2) In the case of a partnership, by a general partner.

(3) In the case of sole proprietorship, by the proprietor.

(4) In the case of a municipal, state, federal or other governmental facility, by the principal executive officer, the ranking elected official or other duly authorized employee.

(C) In the case of plan approval for the land application of sludge, the application shall be signed by either the president, vice-president or highest ranking corporate officer with offices located in the state, or the owner of the entity planning to apply the sludge, or the highest elected official of the municipality from which the sludge is generated.

(D) The signatures shall constitute personal affirmation that all statements or assertions of fact made in the application are true and complete and comply fully with applicable state requirements and shall subject the signatory to liability under section 2921.13 of the Revised Code.

(E) Before the director will review an application package, it shall contain at a minimum the following items:

(1) The appropriate application fees (Comment: See section 3745.11 of the Revised Code).

(2) Two copies of the permit to install or plan approval application (e.g., Ohio EPA form 4309) with all blanks filled in and the form signed in accordance with paragraph (B) of this rule.

(3) Any sewage disposal system company, as defined in section 4905.03 of the Revised Code, that is or will be regulated as a public utility shall obtain and submit to the director a copy of their certificate of necessity and need from the public utilities commission of Ohio, as required by section 4933.25 of the Revised Code.

(4) Except for sanitary sewer extension projects containing sewer pipe less than fifteen inches in diameter and industrial waste treatment works projects covered under paragraph (I)(3) of this rule, an

engineering report describing the design features and operation features necessary to enable the disposal system to achieve the required effluent quality. At a minimum, the report shall include the following:

(a) Description of existing system and an evaluation of conditions and problems needing correction, if applicable.

(b) The anticipated average daily flow, peak hourly flow and wastewater load for the existing and planned conditions. The basis of the projections of initial and future flows and wastewater load must be included and must reflect the existing or initial service area, and the anticipated future service area.

(c) Description of the impact of the proposed project on all existing wastewater facilities, including gravity sewers, lift stations, and treatment facilities used in association with the project.

(d) A written description of the project.

(e) Engineering criteria used in the design of the project.

(f) Project site information including topography, soils, geologic conditions, depth to bedrock, ground water level, floodway or floodplain considerations, and other pertinent site information not included in the detailed plans.

(g) The reasons for selection of the proposed project, including cost effectiveness, operational advantages, feasibility, and how the project fits into a long term plan.

(5) An explanation of how best available technology, as required in rule 3745-42-04 of the Administrative Code, is achieved, if applicable.

(6) Unless otherwise specified in a general permit to install issued by the director, four complete sets of the detailed plans and at least two copies of the contract specifications. The plans and specifications shall be submitted in accordance with the following requirements, as applicable:

(a) All detailed plan sheets shall be eleven inches by seventeen inches, twenty-two inches by thirty-four inches, or twenty-four inches by thirty-six inches. Each sheet shall have a sufficient margin to allow for proper binding and complete title blocks. Each set of plan sheets submitted on paper shall be bound together.

(b) Each set of detailed plans shall contain the following:

(i) The name and type of building or project.

(ii) The owner's name and address including the county and township or municipality.

(iii) The name of the engineer preparing the plans, the original handwritten or an electronic signature (i.e., unique identifier or personal identification number (PIN) for electronically submitted plans) of the engineer and the engineer's stamp on the title sheet of the detailed plans when required by paragraph (A) of this rule.

(iv) For projects that connect or discharge to the local sewer authority's disposal system, a cover sheet that has the local sewer authority's signature or a letter from the local sewer authority that expresses support for the project.

(v) The date plans were prepared or revised.

(vi) Scale or scales to which plans are drawn.

(vii) Cross sections and plan and profile views of all the unit processes within the treatment system and their capacities, with all views drawn to scale and clearly labeled.

(viii) Identification of the dimensions and relative elevations of structures.

(ix) Unless contained in a separate contract specification book, identification of the equipment or product specifications, and the location, size, and ASTM designation of piping and joints.

(x) A hydraulic profile of the flow of water through the unit processes that indicates points of

chemical addition, control instrumentation, alarm levels, and monitoring equipment.

(xi) Where applicable, a description of the ultimate method of sludge disposal.

(xii) Unless contained in a separate contract specification book, identification of stand-by equipment, including the number of each component and each component's capacity, location, size, and intended operation.

(c) Each set of detailed plans shall contain a site plan showing the following, where applicable:

(i) Adjacent properties, storage areas, contours, existing and final grades and drainage courses, property lines, existing and proposed buildings, parking areas, drives, elevations, the number, location, and elevation of referenced benchmarks, normal stream elevations and flood level, existing and proposed utilities, locations and logs of test borings, locations of proposed and existing treatment works, anticipated future service areas, all sewers that will collect and transport sewage, industrial waste or other waste, and outfalls from treatment works.

(ii) Sanitary sewers, storm sewers, and water lines or locations of water wells (show the location of all wells up to and including ten thousand gallons per day within one hundred fifty feet and all wells over ten thousand gallons per day within three hundred feet of the disposal system), including manholes and pump stations.

(iii) The location of each entry to the public sewer.

(iv) The north arrow.

(d) Each set of detailed plans shall contain a vicinity map showing surrounding roadways, railroad tracks, and major water courses within at least one thousand feet of the project.

The director or the director's authorized representative may request additional information as necessary to determine compliance with any applicable laws as defined in rule 3745-42-01 of the Administrative Code during the review of the permit to install or plan approval application.

(F) The director may waive submittal requirements identified in paragraph (E)(7) of this rule for specific technologies or project types, such as industrial projects that require a permit to install prior to funding procurement, as necessary to efficiently review the application package and administer this chapter. The director may require that prior to the initiation of construction or initiation of operation, that plans required in paragraph (E)(7) of this rule have been submitted.

(G) The director may allow electronic submittal of any document required to be submitted by this rule. If the director allows electronic submittal, the director may allow the applicant to submit only one electronic copy of the document, even if the applicant would be required to submit more than one copy in non-electronic form by this rule.

(H) Except for cities, villages, counties and other public entities, public utilities, or industrial applicants, any applicant proposing to install a disposal system to collect or treat sewage from two or more homes or collect or treat sewage with an average design flow of ten thousand gallons per day or greater, shall submit the following information as part of a permit application in addition to the information required in paragraphs (A) to (E) of this rule to demonstrate financial, legal and technical ability to own and operate a disposal system:

[Comment: The following information is necessary for submittal and review in order to ensure that an applicant granted approval to own, operate and maintain a disposal system has the financial, legal and technical resources available to properly own, operate and maintain the system in order to comply with permit requirements and applicable laws and regulations.]

(1) A demonstration that a public entity or utility is not available or has submitted a written waiver, provided the waiver does not conflict with either any areawide waste treatment management plan adopted in accordance with section 208 of the act, or approved regional sewage service and treatment plan.

(2) Financial and personnel commitments that are needed to provide effective management and operation of the disposal system.

[Comment: Personnel commitments may include accounting, grounds and maintenance and contract with a certified operator.]

(3) Documentation of ownership accountability through bylaws or deed that includes the legal authority to take the measures necessary for construction, operation and maintenance of the disposal system, and valid easements for all sewers, if applicable.

(4) The organizational structure, credentials of management and operations personnel, and cooperative agreements or service contracts, if appropriate.

(5) For an association of home or property owners served by the disposal system, the document establishing the association shall impose covenants or restrictions on the land of each property owner that assures the proper long-term operation and maintenance of the disposal system including at a minimum the following:

(a) A statement that clearly indicates the association of home or property owners is and will continue to be technically and financially responsible for the operation and maintenance of the disposal system until such time as the disposal system is no longer needed or has been transferred to a public entity or utility.

(b) The legal authority to regulate the use of the disposal system.

(c) The legal authority to enforce clean water ordinances.

(d) The legal authority to levy assessments on its members and enforce these assessments by liens on the properties of each owner.

(e) The legal authority to transfer ownership and operation of the disposal system to a public entity or utility.

(f) The requirement that members connect with the disposal system and be bound by the rules of the association.

(g) That the association must continue in existence until after the disposal system is properly closed.

(6) A financial plan, signed by a certified public accountant registered by the accountancy board of Ohio, describing the disposal system revenues and cash flow for meeting the costs of construction and the costs of operation and maintenance for a minimum of five full years from the date the applicant anticipates initiating operation. At a minimum, the financial plan shall include the following:

(a) Projected financial statements for each of the first five years of operation including the following:

(i) A balance sheet.

(ii) An income statement.

(iii) A statement of cash flow.

(b) A demonstration of ability to promptly fund the cost of repairs, capital replacement, and compliance over the anticipated life of the disposal system.

(7) Documentation of the creation of a reserve fund for the sole purpose of maintaining, repairing and replacing the disposal system and how this reserve will be maintained at an appropriate level over the anticipated life of the disposal system.

[Comment: The information in this paragraph is necessary for submittal and review in order to ensure that an applicant granted approval to own, operate and maintain a disposal system has the financial, legal and technical resources available to properly own, operate and maintain the system in order to comply with permit requirements and applicable laws and regulations.]

(I) In addition to the information contained in paragraphs (A) to (E) of this rule, applications for permits to install for industrial waste treatment works that have a direct discharge to waters of the state or are tributary to a treatment works (i.e., an indirect discharger) shall include, as applicable, all of the following:

(1) For indirect dischargers, written approval from the sewer authority that will be responsible for treating the industrial waste. The application shall contain a statement by the sewer authority that it is

aware of the proposed project and agrees to accept the treated industrial waste from the applicant's facility. The approval and statement may be in the form of a letter from the sewer authority, or each set of plans must be signed by the sewer authority. If the applicant is proposing to connect to, or construct or modify an existing sewerage system tributary to, a sanitary sewer that is not owned or operated by the sewer authority responsible for treating the industrial waste, then the connection, construction or modification shall be through an approved sewer tap to the sewerage system.

(2) For both direct and indirect dischargers, schematic diagrams of the processes that generate, collect, treat, and dispose of the industrial wastes. In the schematic diagram, the applicant shall do the following:

(a) Clearly label each major process unit in sufficient detail to allow the agency to have a clear understanding of the types and quantities of pollutants that may be generated.

(b) Identify the average and maximum flow rates (expressed as gallons per day) for each major process unit that generates industrial waste, and identify the frequency and volume of spent chemical dumps and the concentrations of pollutants in the influents and effluents for the pretreatment facility.

(c) If the plans are for a modification to an existing, approved facility, distinguish between existing facilities and new facilities.

(3) For both direct and indirect dischargers, an engineering report. In the engineering report, the applicant shall do the following:

(a) Provide a project summary that presents the objectives to be achieved by the proposed facility or new discharge, and generally describes the means proposed to accomplish the objectives, and the anticipated results. The project summary shall also identify the appropriate categorical regulations, the appropriate local effluent limitations, and any applicable court orders or pretreatment standards.

(b) Briefly describe the manufacturing process or unit process generating the industrial waste stream, and, at a minimum the following:

(i) Delineate the process unit operations in the facility producing the waste streams and explain the

relationship between these operations and how the waste streams will be treated.

(ii) Describe the operating schedules.

(iii) Characterize each waste stream by its average and maximum flow values (expressed in gallons per minute and gallons per day) and chemical and physical characteristics, including the concentrations of pollutants and maximum allowable loadings of all pollutants that may be present in the waste stream. Particular emphasis shall be directed towards applicable standards, toxic pollutants, and pollutants that the industrial waste pretreatment facilities are designed to remove.

(c) Briefly describe proposed and existing treatment facilities that will be used to treat the industrial waste streams described in paragraph (I)(3)(b) of this rule, as well as standby and auxiliary equipment for each treatment unit shown in the detail plans, and at a minimum the following:

(i) Describe the average and maximum flow rates (expressed in gallons per minute and gallons per day) that each treatment unit will process, excluding stand-by and auxiliary equipment, as well as the frequency and concentrations of pollutants in all dumps of the process line.

(ii) Describe the chemical and physical characteristics of the waste stream that each treatment unit will receive, including the concentrations of all pollutants that the unit is designed to remove or that may affect the operation of the unit.

(iii) Describe the chemical and physical characteristics of the treated waste stream for each treatment unit.

(iv) State the pertinent specifications of each treatment unit and each major equipment item, including stand-by and auxiliary equipment.

(v) State the criteria used to design or size each treatment unit and the associated equipment.

(vi) Describe the ultimate means of disposal of residuals, sludges, and collected industrial wastes.

(J) The director may waive requirements identified in paragraphs (I)(1) to (I)(3) of this rule for

specific technologies or project types as necessary to efficiently review the application and administer this chapter.