

ORDINANCE NO. 197

**AN ORDINANCE PROVIDING FOR THE CONSTRUCTION, OPERATION AND MAINTENANCE OF THE SEWERAGE SYSTEM OF THE CITY OF LAKESIDE; PROVIDING FOR CHARGES FOR USE THEREOF; AND SETTING FORTH UNIFORM REQUIREMENTS FOR DIRECT AND INDIRECT CONTRIBUTORS INTO THE WASTEWATER COLLECTION AND TREATMENT SYSTEM FOR THE CITY OF LAKESIDE AND ALLOWING THE CITY TO COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS REQUIRED BY THE CLEAN WATER ACT OF 1977; AND REPEALING ORDINANCES NO. 37, 38, 44, 56, 58, 62, 64, 67, 87, 91, 94, 97, 106, 110, 114, 115, 132, 139, 142, 156, 157, 159, and 172.**

The city of Lakeside ordains as follows:

**GENERAL PROVISIONS**

**Section 1. Purpose.**

(1) Pursuant to the general laws of the state of Oregon, and the powers granted in the charter of the city of Lakeside, the council of the city hereby declares that it acquired, owns, constructed, equipped, operates and maintains within and without the city limits of the city of Lakeside, Oregon, a sewage treatment plant(s), sewers, equipment and appurtenances necessary, useful, or convenient for a complete sewerage system, and treatment plant, and also including the reconstruction of such sewers as may necessarily or conveniently be deemed proper by the council.

(2) The purposes of this ordinance are to:

(a) Prevent the introduction of pollutants into the municipal wastewater system which will interfere with the operation of the system or contaminate the resulting sludge;

(b) Prevent the introduction of pollutants into the municipal wastewater system which will pass through the system, inadequately treated, into receiving waters or the atmosphere or otherwise be incompatible with the system;

(c) Improve the opportunity to recycle and reclaim wastewaters and sludges from the system; and

(d) Provide for equitable distribution of the cost of the municipal wastewater system.

(3) This ordinance provides for the regulation of direct and indirect contributors to the municipal wastewater system through the issuance of permits to certain non-domestic users and through enforcement of general requirements for the other users, authorizes monitoring and enforcement activities, requires user reporting, assumes that existing customer's capacity will not be preempted, and provides for the setting of fees for the equitable distribution of costs resulting from the program.

(4) This ordinance applies to the city and to persons outside the city who are, by contract or agreement with the city, the users of the city POTW. Except as otherwise provided in this ordinance, the sewer commissioner shall administer, implement, and enforce the provisions of this ordinance.

## **Section 2. Definitions and Abbreviations.**

(1) Definitions. As used in this ordinance, the following mean:

Act or the Act. The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et. seq.

Approval Authority. The Director in an NPDES state with an approved state pretreatment program and the Administrator of the EPA in a non-NPDES state or NPDES state without an approved state pretreatment program.

Biochemical Oxygen Demand (B.O.D.). The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure, five (5) days at 20° centigrade expressed in terms of weight and concentration (milligrams per liter [mg/l])

Building Sewer. A sewer conveying wastewater from the premises of a user to the POTW.

Categorical Standards. National Categorical Pretreatment Standards or Pretreatment Standard.

City. The city of Lakeside, Coos County, Oregon, an Oregon municipal corporation.

Cooling Water. The water discharged from any use such as air conditioning, cooling or refrigeration, or to which the only pollutant added is heat.

Compatible Pollutant. Biochemical oxygen demand, suspended solids, pH and fecal coliform bacteria; plus any additional pollutants identified in the publicly owned treatment work's NPDES permit, where the publicly-owned treatment work is designed to treat such pollutants and, in fact, does treat such pollutants to the degree required by the POTW's NPDES permit.

Control Authority. The "Approval Authority," defined above; or the superintendent if the city has an approved pretreatment program under the provisions of 40 CFR, 403.11.

Direct Discharge. The discharge of treated or untreated wastewater directly to the waters of the state.

Drop Manhole. A main line or house service line lateral entering a manhole at a higher elevation than the main flow line or channel. At no time shall a main line or house service line lateral be attached to a manhole higher than flow elevation.

Dwelling. Dwelling is any building which contains one or two "Dwelling Units" used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or which are occupied for living purposes.

Dwelling Unit. Dwelling unit is a single unit providing complete independent living facilities for one or more persons including permanent provisions for living, sleeping, eating, cooking, and sanitation in accordance with state of Oregon, One and Two Family Dwelling Specialty Code, authorized by ORS 455.310-350, 455.450, 455.610-690 and 455.990; Section R-118-Definitions.

EDU. Equivalent Dwelling Unit.

Environmental Protection Agency, or EPA. The U. S. Environmental Protection Agency, or, where appropriate, a designation for the administrator or other duly authorized official of the agency.

Grab Sample. A sample which is taken from a waste stream on a one-time basis with no regard to the flow in the waste stream and without consideration of time.

Holding Tank Waste. Any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks, and vacuum-pump tank trucks.

Incompatible Pollutant. All pollutants other than compatible pollutants as defined under "Direct Discharge" of this section.

Indirect Discharge. The discharge or the introduction of nondomestic pollutants from any source regulated under Section 307(b) or (c) of the Act, (33 U.S.C. 1317), into the POTW (including holding tank waste discharged into the system).

Interference. The inhibition or disruption of the POTW treatment processes or operations or which contributes to a violation of any requirement of the city's NPDES permit. The term includes prevention of sewage sludge use or disposal by the POTW in accordance with 405 of the Act, (33 U.S.C.1345) or any criteria, guidelines or regulations developed pursuant to the Solid Waste Disposal Act (SWDA), the Clean Air Act, the Toxic Substances Control Act, or more stringent state criteria (including those contained in any state sludge management plan prepared pursuant to Title IV of SWDA) applicable to the method of disposal or use employed by the POTW.

National Categorical Pretreatment Standard or Pretreatment Standard. Any lawful adopted regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Act (33 U.S.C. 1347) which applies to a specific category of industrial users.

National Pollution Discharge Elimination System or NPDES Permit. A permit issued pursuant to Section 402 of the Act (33 U.S.C. 1342).

National Prohibitive Discharge Standard or Prohibitive Discharge Standard. Any lawful adopted regulation developed under the authority of Section 307 (b) of the Act and 40 CFR, Section 403.5.

New Source. Any source, the construction of which is commenced after the publication of proposed regulations prescribing a Section 307(c) (33 U.S.C.1317) categorical pretreatment standard which will be applicable to such source, if the standard is promulgated within 120 days of proposal in the Federal Register. If the standard is promulgated later than 120 days after proposal, a new source means any source, the construction of which is commenced after the date of promulgation of the standard.

Person. An individual, partnership, copartnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or its legal representatives, agents or assigns. The masculine gender includes the feminine. The singular includes the plural where indicated by the context.

pH. The logarithm (base 10) of the reciprocal of the concentration of hydrogen ions expressed in grams per liter of solution.

Pollution. The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.

Pretreatment or Treatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration can be obtained by physical, chemical, or biological processes, or process changes by other means, except as prohibited by 40 CFR Section 403.6(d).

Pretreatment Requirements. A substantive or procedural requirement related to pretreatment, other than a National Pretreatment Standard imposed on an industrial user.

Publicly Owned Treatment Works (POTW). A treatment works as defined by Section 212 of the Act, (33 U.S.C. 192g) which is owned in this instance by the city. This definition includes any sewers that convey wastewater to the POTW treatment plant, but does not include pipes, sewers or other conveyances not connected to a facility providing treatment. POTW also includes any sewers that convey wastewaters to the POTW from persons outside the city who are, by contract or agreement with the city, users of the city's POTW.

POTW Treatment Plant. That portion of the POTW designed to provide treatment to wastewater.

Shall is mandatory; May is permissive.

Significant Industrial User. An industrial user of the city's wastewater disposal system who:

- (a) Has a discharge flow of 25,000 gallons or more per average work day, or
- (b) Has a flow greater than five percent of the flow in the city's wastewater treatment system, or
- (c) Has in the wastes toxic pollutants as defined pursuant to Section 307 of the Act of Oregon Statutes and rules, or
- (d) Is found by the city, Department of Environmental Quality (DEQ) or the U. S. Environmental Protection Agency (EPA) to have significant impact, either singly or in combination with other contributing industries, on the wastewater treatment system, the quality of sludge, the system's effluent quality, or air emissions generated by the system.

State. State of Oregon.

Standard Industrial Classification (SIC). A classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget, 1972.

STEF. Septic Tank Effluent Filtered systems are an extension of a lateral to close proximity of the structures being served and shall include a septic tank, appurtenances and required sewer lines to allow gravity flow of the filtered effluent to the trunk sewer.

STEP. Septic Tank Effluent Pumped systems are an extension of a lateral to close proximity of the structure being served and shall include a septic tank, appurtenances and required sewer lines to allow pressurized flow of the filtered effluent to the trunk sewer.

Storm Water. Any flow occurring during or following any form of natural precipitation and resulting from the precipitation.

Superintendent. The person to whom the system owner designates the authority for establishing and executing the specific practice and procedures for operating the wastewater system in accordance with the policies of the owner of the system and the permit requirements; in accordance with OAR 340-49-010.

Suspended Solids. The total suspended matter that floats on the surface of, or is suspended in, water, wastewater or other liquids, and which is removable by laboratory filtering.

Toxic Pollutant. A pollutant or combination of pollutants listed as toxic in regulations promulgated by the Administrator of the Environmental Protection Agency under the provisions of CWA 307(a) or other Acts.

User. A person who contributes, causes or permits the contribution of wastewater into the city's POTW.

Wastewater. The liquid and water-carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, together with groundwater, surfacewater, and stormwater that may be present, whether treated or untreated, that is contributed into or permitted to enter the POTW.

Waters of the State. All streams, lakes, ponds, marshes, water courses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, that are contained within, flow through, or border upon the state or any portion of the state.

Wastewater Contribution Permit. The permit described in Section 14.

(2) Abbreviations. The following abbreviations mean:

<u>BOD.</u>	Biochemical oxygen demand.
<u>CFR.</u>	Code of Federal Regulations.
<u>COD.</u>	Chemical oxygen demand.
<u>EPA.</u>	Environmental Protection Agency.
<u>l.</u>	Liter.
<u>mg.</u>	Milligrams.
<u>mg/l.</u>	Milligrams per liter.
<u>NPDES.</u>	National Pollutant Discharge Elimination System.
<u>POTW.</u>	Publicly owned treatment works.
<u>SIC.</u>	Standard Industrial Classification.
<u>SWDA.</u>	Solid Waste Disposal Act, 42 U.S.C. 6901, et. seq.
<u>USC.</u>	United States Code.
<u>TSS.</u>	Total suspended solids.

## DISCHARGES

### Section 3. General Discharge Prohibitions.

(1) No user shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater that will interfere with the operation or performance of the POTW. These general prohibitions apply to all users of a POTW whether or not the user is subject to National Categorical Pretreatment Standards or any other national, state, or local pretreatment standards or requirements. A user may not contribute the following substances to any POTW:

(a) Liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. At no time, shall two successive readings on an explosion hazard meter, at the point of discharge into the system (or at any point in the system) be more than five percent nor any single reading over ten percent of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substances which the city, the state or EPA has notified the user is a fire hazard or a hazard to the system.

(b) Solid or viscous substances that may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to: greases, garbage with particles greater than one-half(1/2")inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud or glass grinding or polishing wastes.

(c) Wastewater having a pH less than 5.0, unless the POTW specifically designed to accommodate such wastewater, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment, and/or personnel of the POTW.

(d) Wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving waters of the POTW, or to exceed the limitation set forth in a Categorical Pretreatment Standard. A toxic pollutant shall include but not be limited to any pollutant identified pursuant to Section 307(a) of the Act.

(e) Noxious or malodorous liquids, gases, or solids that either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers for their maintenance and repair.

(f) Substances that may cause the POTW's effluent or any other product of the POTW such as residues, sludges, or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process where the POTW is pursuing a reuse and reclamation program. In no case, shall a substance discharged to the POTW cause the POTW to be in non-compliance with sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines, or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act, or State criteria applicable to the sludge management method being used.

(g) Substances that will cause the POTW to violate its NPDES and/or State Disposal System Permit or the receiving water quality standards.

(h) Wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions.

(i) Wastewater having a temperature that will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW that exceeds 40°C (104°F) unless the POTW treatment plant is designed to accommodate such temperature.

(j) Pollutants, including oxygen demanding pollutants (BOD, etc.) released at a flow and/or pollutant concentration that a user knows or has reason to know will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentration or qualities of pollutants that exceed for any time period longer than fifteen minutes more than five times the average 24-hour concentration, quantities, or flow during normal operation.

(k) Wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Superintendent in compliance with applicable state or federal regulations.

(l) Wastewater that causes a hazard to human life or creates a public nuisance.

(2) When the superintendent determines that a user is contributing to the POTW any of the above enumerated substances in amounts that interfere with the operation of the POTW, the superintendent may:

(a) Advise the user of the impact of the contribution on the POTW;  
and

(b) Develop effluent limitation for the user to correct the interference with the POTW.

**Section 4. Federal Categorical Pretreatment Standards.** Upon the promulgation of the Federal Categorical Pretreatment Standard for a particular industrial subcategory, the Federal Standard, if more stringent than limitations imposed under this ordinance for sources in that subcategory, shall immediately supersede the limitations imposed under this ordinance.

**Section 5. Modification of Federal Categorical Pretreatment Standards.** If the city's wastewater treatment system achieves consistent removal of pollutants limited by Federal Pretreatment Standards, the city may apply to the approval authority for modification of specific limits in the Federal Pretreatment Standards. "Consistent removal" means reduction in the amount of a pollutant or alteration of the nature of the pollutant by the wastewater treatment system to a less toxic or harmless state in the effluent which is achieved by the system in 95 percent of the samples taken when measured according to the procedures set forth in Section 403.7 (c)(2) of (Title 40 of the Code of Federal Regulations, Part 403) - "General Pretreatment Regulations for Existing and New Sources of Pollution" promulgated pursuant to the Act. The city may modify pollutant discharge limits in the Federal Pretreatment Standards if the requirements contained in 40 CFR, Part 403, Section 403.7, are fulfilled and prior approval from the approval authority is obtained.

**Section 6. Specific Pollutant Limitations.** No person shall discharge wastewater containing in excess of:

- 0.03 mg/l arsenic
- 0.01 mg/l cadmium
- 0.03 mg/l copper
- 0.2 mg/l cyanide
- 0.05 mg/l lead
- 0.03 mg/l mercury
- 0.3 mg/l nickel
- 0.03 mg/l silver
- 1.0 mg/l total chromium
- 0.3 mg/l zinc
- 100.0 mg/l oil and grease
- 1.0 mg/l phenolic compounds that cannot be removed by the city's wastewater treatment processes.

**Section 7. State Requirements.** State requirements and limitations on discharges shall apply in any case in which they are more stringent than federal requirements and limitations or those in this ordinance.

**Section 8. City's Right of Revision.** The city reserves the right to establish by ordinance more stringent limitations or requirements on discharges to the wastewater disposal system if deemed necessary by the city to comply with the purposes contained in section 1.



**Section 9. Excessive Discharge.** No user shall ever increase the use of process water or in anyway attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the Federal Categorical Pretreatment Standards, or in any other pollutant specific limitation developed by the city or state. However, dilution may be an acceptable means of complying with some of the prohibitions set forth in section 3.

**Section 10. Accidental Discharge.**

(1) Each user shall provide protection from accidental discharge of prohibited materials or other substances regulated by this ordinance. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the owner or user's own cost. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the city for review, and shall be approved by the city before construction of the facility. All existing users shall complete such a plan within three (3) months of date of application for a pretreatment permit. No user who commences contribution to the POTW after the effective date of this ordinance shall be permitted to introduce pollutants into the system until accidental discharge procedures have been approved by the city. Review and approval of such plans and operating procedures shall not relieve the industrial user from the responsibility to modify the user's facility as necessary to meet the requirements of this ordinance. In the case of an accidental discharge, it is the responsibility of the user to immediately notify the POTW of the incident. The notification shall include location of discharge, type of waste, concentration and volume, and corrective actions.

(2) Within five days following an accidental discharge, the user shall submit to the superintendent a detailed written report describing the cause of the discharge and the measures to be taken by the user to prevent similar future occurrences. The notification shall not relieve the user of any expense, loss, damage, or other liability which may be incurred as a result of damage to the POTW, fish kills, or any other damage to person or property; nor shall such notification relieve the user of any fines, civil penalties, or other liability which may be imposed by this ordinance or other applicable law.

(3) A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees whom to call in the event of a dangerous discharge. Employers shall insure that all employees who may cause or permit such a dangerous discharge to occur are advised of the emergency notification procedure.

## FEES

### Section 11. Purpose of Fees.

(1) The city may impose fees in order to recover the costs of the implementation of the program from users of the city's wastewater disposal system. The applicable charges or fees shall be set by resolution and contained in the city's schedule of charges and fees.

(2) All tax-exempt organizations shall be required to pay a fee that is equal to 200 percent of the standard connection and sewer usage rate fees.

(3) All sewer connection and monthly sewer usage rate fees outside of the city limits shall be 200 percent of the standard fees.

**Section 12. Specific Charges and Fees.** The city may adopt charges and fees that may include:

(1) Fees for reimbursement of costs of setting up and operating the city's pretreatment program.

(2) Fees for monitoring, inspections and surveillance procedures.

(3) Fees for reviewing accidental discharge procedures and construction.

(4) Fees for permit applications.

(5) Fees for filing appeals.

(6) Fees for consistent removal by the city of pollutants otherwise subject to Federal Pretreatment Standard.

(7) Other fees the city may deem necessary to carry out the requirements contained in this ordinance. These fees relate solely to the matters covered by this ordinance and are separate from all other fees chargeable by the city.

## ADMINISTRATION

**Section 13. Wastewater Discharges.** No person shall, without a city permit, discharge to any natural outlet within the city, or any area under the jurisdiction of the city, and/or to the POTW any wastewater except as authorized by the superintendent in accordance with the provisions of this ordinance.

**Section 14. Wastewater Contribution Permits.** Significant users proposing to connect to or to contribute to the POTW shall obtain a wastewater discharge permit before connecting to or contributing to the POTW. Existing significant users connected to or contributing to the POTW shall obtain a wastewater contribution permit within 108 days after the effective date of this ordinance.

### Section 15. Permit Application.

(1) Users required to obtain a wastewater contribution permit shall file with the city an application accompanied by a fee of \$125. Existing users shall apply for a wastewater contribution permit within 180 days after the effective date of this ordinance. In support of the application, the user shall submit, in units and terms appropriate for evaluation, the following information:

- (a) Name, address, and location, if different from the address.
- (b) SIC number according to the Standard Industrial Classification Manual, Bureau of the Budget, 1972, as amended.
- (c) Wastewater constituents and characteristics including but not limited to those mentioned in section 2 of this ordinance as determined by a certificated analytical laboratory. Sampling and analysis shall be permitted in accordance with procedures established by the EPA pursuant to Section 304(g) of the Act and contained in 40 CFR, part 136, as amended.
- (d) Time and duration of contribution.
- (e) Average daily and three minute peak wastewater flow rates, including daily, monthly and seasonal variations if any.
- (f) Site plans, floor plans, mechanical and plumbing plans and details to show all sewers, sewer connections, and appurtenances by the size, location and elevation.
- (g) Description of activities, facilities and plant processes on the premises including all materials which are or could be discharged.
- (h) Where known, the nature and concentration of any pollutants in the discharge which are limited by any city, state or federal pretreatment standards, and a statement regarding whether or not the pretreatment standards are being met on a consistent basis and, if not, whether additional O&M and/or additional pretreatment is required for the user to meet applicable pretreatment standards.
- (i) Each product produced by type, amount, process or processes and rate of production.
- (j) Type and amount of raw materials processed (average and maximum per day).
- (k) Number of type of employees, and hours of operation of plant and proposed or actual hours of operation of pretreatment system.
- (l) Any other information as may be deemed by the city to be necessary to evaluate the permit application.

**Section 16. Additional Pretreatment Requirements.**

(1) If additional pretreatment and/or O&M will be required to meet the Pretreatment Standards, the shortest schedule by which the user will provide such additional pretreatment. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

(2) The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards e.g., hiring an engineer, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.

(3) No increment referred to in subsection (2) above shall exceed nine months.

(4) Not later than fourteen days following each date in the schedule and the final date for compliance, the user shall submit a progress report to the Superintendent including, as a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken by the user to return the construction to the schedule established. In no event shall more than nine months elapse between such progress reports to the superintendent.

(5) The city will evaluate the data furnished by the user and may require additional information. After evaluation and acceptance of the data furnished, the city may issue a wastewater contribution permit subject to terms and conditions provided in sections 15 and 16.

**Section 17. Permit Modifications.** Within nine months of the promulgation of a Natural Categorical Pretreatment Standard, the wastewater contribution permit of users subject to such standards shall be revised to require compliance with such standard within the time frame prescribed by the standard. If a user, subject to a National Categorical Pretreatment Standard, has not previously submitted an application for a wastewater contribution permit as required by sections 15 and 16, the user shall apply for a wastewater contribution permit within 180 days after the promulgation of the Applicable National Categorical Pretreatment Standard. In addition, the user with an existing wastewater contribution permit shall submit to the superintendent within 180 days after the promulgation of an applicable Federal Categorical Pretreatment Standard the information required by this ordinance.

**Section 18. Permit Conditions.** Wastewater discharge permits shall be expressly subject to all provisions of this ordinance and all other applicable regulations, user charges and fees established by the city. Permits may contain the following:

(1) The unit charge or schedule of user charges and fees for the wastewater to be discharged to a community sewer.

(2) Limits on the average and maximum wastewater constituents and characteristics.

(3) Limits on average and maximum rate and time of discharge or requirements for flow regulations and equalization.

(4) Requirements for installation and maintenance of inspection and sampling facilities.

(5) Specifications for monitoring programs which may include sampling locations, frequency of sampling, number, types and standards for tests and reporting schedule.

(6) Compliance schedules.

(7) Requirements for submission of technical reports or discharge reports.

(8) Requirements for maintaining and retaining plant records relating to wastewater discharge as specified by the city, and affording city access thereto.

(9) Requirements for notification of the city of any new introduction of wastewater constituents or any substantial change in the volume or character of the wastewater constituents being introduced into the wastewater treatment system.

(10) Requirements for notification of slug discharges as per CFR Title 40, Section 100.

(11) Other conditions deemed appropriate by the city to ensure compliance with this ordinance.

**Section 19. Permit Duration.** Permits shall be issued for a specified time period, not to exceed five years. A permit may be issued for a period less than one year or may be stated to expire on a specific date. The user shall apply for permit reissuance a minimum of 180 days prior to the expiration of the user's existing permit. The terms and conditions of the permit may be subject to modification by the city during the term of the permit as limitations or requirements as identified in section 17 are modified or other just cause exists. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.

**Section 20. Permit Transfer.** Wastewater discharge permits are issued to a specific user for a specific operation. A wastewater discharge permit shall not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation without the written approval of the city. Any succeeding owner or user shall also comply with the terms and conditions of the existing permit.

**Section 21. Reporting Requirements for Permittee.**

(1) Compliance Data Report. Within 90 days following the date for final compliance with applicable Pretreatment Standards or, in the case of a new source, following commencement of the introduction of wastewater into the POTW, any user subject to Pretreatment Standards and Requirements shall submit to the Superintendent a report indicating the nature and concentration of all pollutants in the discharge from the regulated process which are limited by Pretreatment Standards and Requirements and the average and maximum daily flow for those process units in the user facility which are limited by such Pretreatment Standards or Requirements. The report shall state whether the applicable Pretreatment Standards or Requirements are being met on a consistent basis and, if not, what additional O&M and/or pretreatment is necessary to bring the user into compliance with the applicable Pretreatment Standards or Requirements. This statement shall be signed by an authorized representative of the industrial user, and certified to by a qualified professional.

## **Section 22. Periodic Compliance Reports.**

(1) Any user subject to a Pretreatment Standard, after the compliance date of the Pretreatment Standard, or, in the case of a new source, after commencement of the discharge into the POTW, shall submit to the Superintendent during the months of June and December, unless required more frequently in the Pretreatment Standard or by the superintendent, a report indicating the nature and concentration, of pollutants in the effluent which are limited by the Pretreatment Standards. The report shall include a record of all daily flows that during the reporting period exceeded the average daily flow reported in section 21. In consideration of such factors as local high or low flow rates, holidays, budget cycles, etc., the superintendent may agree to alter the months during which the above reports are to be submitted.

(2) The superintendent may Impose mass limitations on users that are using dilution to meet applicable Pretreatment Standards or Requirements, or in other cases where the imposition of mass limitations are appropriate. In such cases, the report required by subsection (1) of this section shall indicate the mass of pollutants regulated by Pretreatment Standards in the effluent of the user. These reports shall contain the results of sampling and analysis of the discharge, including the flow and the nature and concentration, or production and mass where requested by the Superintendent, of pollutants contained therein that are limited by the applicable Pretreatment Standards. The frequency of monitoring shall be prescribed in the applicable Pretreatment Standard. All analysis shall be performed in accordance with procedures established by the administrator pursuant to Section 304(9) of the Act and contained in 40 CFR, Part 136 and amendments thereto or with any other test procedures approved by the administrator. Sampling shall be performed in accordance with the techniques approved by the Administrator.

(3) If 40 CFR, Part 136 does not include a sampling or analytical technique for the pollutant in question sampling and analysis shall be performed in accordance with the procedures est forth and approved by the Administrator.

## **Section 23. Monitoring Facilities.**

(1) Users shall provide and operate at the user's expense monitoring facilities to allow inspection, sampling, and flow measurement of the building sewer and/or internal drainage systems. The monitoring facility should normally be situated on the user's premises, but the city may, when such a location would in the city's opinion be impractical or cause undue hardship on the user, allow the facility to be constructed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles. Users must obtain the prior written approval of the city to locate a facility on their premises.

(2) There shall be ample room in or near the sampling manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility, sampling, and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the user.

(3) Whether constructed on public or private property, the sampling and monitoring facilities shall be provided in accordance with the city's requirements and all applicable local construction standards and specifications.

**Section 24. Inspection and Sampling.** The city shall have the right to inspect the facilities of any user to ascertain whether the purpose of this ordinance is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the city or their representative ready access at all reasonable times, day or night, to all parts of the premises for the purpose of inspection, sampling, records examination or in the performance of any of their duties. The city, approval authority, and where the NPDES state is the approval authority. EPA shall have the right to set up on the user's property such devices necessary to conduct sampling inspection, compliance monitoring and/or metering operations. If a user has security measures in force that would require proper identification and clearance before entry into their premises, the user shall make necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the city, approval authority, and EPA will be permitted to enter, without delay, for the purposes of performing their specific responsibilities.

**Section 25. Pretreatment.**

(1) Users shall provide necessary wastewater treatment as required to comply with all Federal Categorical Pretreatment Standards within the time limitations as specified by the Federal Pretreatment Regulations. Any facilities required to pretreat wastewater to a level acceptable to the city shall be provided, operated, and maintained at the user's expense. Detailed plans showing the pretreatment facilities and operating procedures shall be submitted to the city for review, and shall be acceptable to the city before construction and/or permitting of the facility. The review of such plans and operating procedures will in no way relieve the user from the responsibility of modifying the facility as necessary to produce an effluent acceptable to the city under the provisions of this ordinance. Subsequent changes in the pretreatment facilities or method of operation shall be reported to and be acceptable to the city prior to the user's initiation of the changes. Records relating to the compliance with Pretreatment Standards shall be made available to officials of the EPA or approval authority upon request, and upon their payment to the city of the normal and customary fees for inspection of such records.

(2) Grease, oil and sand traps shall be provided, operated, and maintained when in the opinion of the Sewer Commissioner or his/her duly authorized representative, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand or other harmful ingredients; except that such traps shall not be required for private living quarters or dwelling units. Grease traps shall be required for all restaurants and oil traps for all service stations.

(3) All traps shall be of a type and capacity approved by the State of Oregon Uniform Plumbing Specialty Code; ORS 447.020(2), Section 711 - Grease Traps, and shall be located as to be readily and easily accessible for cleaning and inspection. A grease trap shall be required for delicatessens, drive-in restaurants, convenience food stores, and any place selling food to the public.

(4) All non-domestic waste shall be pretreated when required. Pretreatment may include, but is not limited to, vibrating or rotary screen to remove any particle larger than 20-mesh and such other facilities as may be determined necessary by the city and the current United States Environmental Protection Agency pretreatment regulations, to render the waste acceptable for admission to the public sewers.

(5) All wastes containing soil, dirt, and/or sand shall be settled in a minimum of two hours in an acceptable basis before discharge to a public sewer.

(6) Operation. Where pretreatment or flow-equalizing facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

(7) Waste Sampling and Monitoring. Waste discharged into the public sewers shall be subject to periodic inspection, and a determination of character and concentration made. The determinations shall be made as often as deemed necessary by the Sewer Commissioner or his/her duly authorized representative.

(8) When automatic flow measurement and sampling facilities are not available, the samples shall be collected by the city in such a manner to be representative of the composition of the wastes. The sampling may be accomplished either manually or by the uses of mechanical equipment. Access to the sampling locations shall be granted to the Sewer Commissioner or his/her duly authorized representative at all times.

(9) All measurements, tests and analyses of the characteristics of water and wastes to which reference is made in these rules and regulations shall be determined by the city in accordance with the Code of Federal Regulations; Title 40, Section 136, and shall be determined at a central manhole provided, or taken at said control manhole.

(10) In the event that no special manhole has been required, the control manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by the city by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards to life, limb, and property.

(11) Records. Records and logs will be maintained on all grease traps, flow measurement, and equipment. These records shall contain, at a minimum, the following: dates of cleaning, times, amounts, disposal amounts, bills of lading, and owner/representative initials.



**Section 26. Confidential Information.**

(1) Information and data on a user obtained from reports, questionnaires, permit applications, permits and monitoring programs and from inspections shall be available to the public or other governmental agency without restriction and upon the payment to city of the normal and customary fee for inspection of such records, unless the user specifically requests and is able to demonstrate to the satisfaction of the city that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets of the user.

(2) When requested by the person furnishing a report, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public but shall be made available upon written request to governmental agencies for uses related to this ordinance, the National Pollutant Discharge Elimination System (NPDES) Permit, State Disposal System and/or the Pretreatment Programs; provided, however, that such portions of a report shall be available for use by the State or any state agency in judicial review or enforcement proceedings involving the person furnishing the report and wastewater constituents and characteristics will not be recognized as confidential information.

**Section 27. Service Charges.** Equitable charges for sewerage service or subsequent service, maintenance, operation, extension, and construction are hereby imposed upon all water users within the city using water from the Lakeside Water District irrespective of whether the said premises so served are connected with the city sewage system if a sewer is available to which connection can be made to the premises. The charges shall also be levied and imposed against all premises connected with the city sewerage system whether the premises are within or are outside the city limits of the city, and whether the premises that are connected are served by water from the Lakeside Water District.

**Section 28. See Resolution "A".** Monthly sewerage user charges shall be as established by the city by resolution for resident and non-resident users.

**Section 29. Sewer Bill.** All charges shall be shown on the regular monthly bill and shall be charged, collected, and paid monthly.

**Section 30. Harmful Contributions.**

(1) The city may suspend the wastewater treatment service and/or a Wastewater Contribution Permit when suspension is necessary to stop an actual or threatened discharge that presents or may present an imminent or substantial endangerment to the health or welfare of persons, to the environment, causes interference to the POTW, or causes the city to violate any condition of its NPDES Permit.

(2) Any person notified of a suspension of the wastewater treatment service or the wastewater contribution permit shall immediately stop or eliminate the contribution. If a person fails to comply voluntarily with the suspension order, the city may take steps necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW system or endangerment to any individuals. The city shall reinstate the wastewater contribution permit and/or the wastewater treatment service upon proof of the elimination of the non-complying discharge. A detailed written statement submitted by the user describing the causes of the harmful contribution and the measures taken to prevent any future occurrence shall be submitted to the city within fifteen days of the date of occurrence.

**Section 31. Revocation of Permit.** Any user who violates the following conditions of this ordinance, or applicable State and Federal regulations, is subject to having a permit revoked in accordance with the procedures of this ordinance:

(1) Failure of a user to factually report the wastewater constituents and characteristics of the discharge.

(2) Failure of the user to report significant changes in operations, or wastewater constituents and characteristics.

(3) Refusal of reasonable access to the user's premises for the purpose of inspection or monitoring;

(4) Violation of conditions of the permit.

**Section 32. Notification of Violation.** When the city finds that any user has violated or is violating this ordinance, or a wastewater contribution permit, the city may send the person a written notice stating the nature of the violation. Within thirty days of the date of the notice, a plan for the satisfactory correction of the violation shall be submitted to the city by the user.

**Section 33. Show Cause Hearing.**

(1) The city may order any user who causes or allows an authorized discharge to show cause before the city council why the proposed enforcement action should not be taken. A notice shall be served on the user specifying the time and place of a hearing to be held by the municipal court regarding the violation, the reasons why the action is to be taken, the proposed enforcement action, and directing the user to show cause before the municipal court why the proposed enforcement action should not be taken. The notice of the hearing shall be served personally or mailed registered or certified mail return receipt requested to the user's last known address at least five (5) days before the hearing. Service may be made on the registered agent or any officer of a corporation.

(2) The municipal court may itself conduct the hearing and take the evidence, or may designate any special master to:

(a) Issue in the name of the municipal court notices of hearings requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in such hearings;

(b) Take the evidence;

(c) Transmit a report of the evidence and hearing, including transcripts and other evidence, together with recommendations to the municipal court for action thereon.

(3) Any hearing held pursuant to this ordinance, testimony taken must be under oath.

(4) After the municipal court has reviewed the evidence, it may issue an order to the user responsible for the discharge directing that, following a specified time period, the sewer service be discontinued unless adequate treatment facilities, devices or other related appurtenances shall have been installed on existing treatment facilities, devices or other related appurtenances are properly operated. Further orders and directives as are necessary and appropriate may be issued.

**Section 34. Legal Action.** If any person discharges sewage, industrial wastes or other wastes into the city's wastewater disposal system contrary to the provisions of this ordinance, federal or state pretreatment requirements or any order of the city, the city attorney may commence an action for appropriate legal and/or equitable relief in the Circuit Court of Coos County, or other appropriate court of jurisdiction.

## STEP/STEG

### **Section 35. Guidelines for Design of Septic Tank Effluent Pump or Gravity (STEP/STEG) Sewer Projects Involving Common Sewers.**

(1) Applicability. These criteria apply to STEP (septic tank effluent pump) units discharging to pressurized common sewers, and to STEP or STEG (septic tank effluent gravity-draining) units discharging to small-diameter common collector sewers. Pressurized and small-diameter collectors have interactive hydraulic effects and solids handling limitations which warrant a comprehensive engineering design. Approval of these designs, unlike gravity sewers, has not been delegated under OAR 340-52-045. These criteria do not apply to the following:

(a) Individual or single-dwelling septic tank or grinder pump units discharging directly to a conventional common gravity sewer. Their design, review, inspection and approval are subject to regulations of the State Building Codes Agency.

(b) Tanks discharging to a drainfield or other on-site disposal system. They are subject to design, review, inspection and approval as established in our on-site sewage disposal rules (OAR 340-17, 72 & 73).

(c) Vacuum sewer collection systems. Technical features should conform with recommendations in the literature. Administrative requirements for vacuum sewers are similar to those listed below for STEP systems.

(2) Types of Step Systems. In a typical STEP system, household sewage is pretreated in a septic tank where gross solids and grease are held back. A "clear" effluent from the mid-depth of the tank is conveyed to a common sewer. Usually the effluent is pumped from the septic tank under pressure to a small-diameter, pressurized collector sewer. Effluent may also flow by gravity, where terrain allows, to small-diameter gravity collector lines. This type of STEP system is often called a STEG (septic tank effluent gravity) or STED (septic tank effluent drain) system to distinguish it from pumped systems. However, these guidelines and criteria apply to both.

(3) Scope. A STEP/STEG system is considered to include all of its components beginning with the septic tanks, and ending at the point(s) of discharge into a conventional gravity sewer or treatment plant. Building drains discharging into tanks are regulated under the Oregon State Plumbing Code, and are not considered part of a STEP system.

(4) Administrative Requirements. All additions and extensions to existing STEP (or STEG) systems, as well as new systems, are subject to review and approval per OAR 340-52. Submittals should document fulfillment of administrative requirements by the city of Lakeside.

The OWNER is defined as the municipality, sanitary district, private sewage utility, or sanitary authority which is responsible for the operation of the system. The property being served is defined as the USER.

Legal title to tanks, pumps, or other components should preferably be "owned" by the owner. The objective of vesting title in the owner instead of the user is to avoid potential for cost disputes over equipment selection and repair methods. Having the user "own" title to any of the system components may be considered on a case-by-case basis, but is not recommended.

Regardless of where title is vested, the owner shall completely control all tanks, pumps, service lines, and other components of the system on private property. This requirement is essential to assure operable hydraulics and overall system reliability. The administrative requirements are:

(a) The city shall maintain ultimate responsibility and authority for design, equipment and materials selection, installation, operation and maintenance of the entire STEP/STEG system including tanks, controls and other appurtenances on private property. The city may contract these services with qualified contractors. Assigning any of them to a user is not acceptable.

(b) The city shall possess a recorded general easement or deed restriction to enter the private property being served, and to access the system and its components. Access must be guaranteed to operate, maintain, repair, restore service, and remove sludge.

(c) No system shall be operated without the direct field supervision of a certified operator, in accordance with OAR 340-49. An operations and maintenance manual shall be submitted for review prior to startup. In accordance with OAR 340-52, no STEP/STEG system shall be operated without an approved manual.

(d) The city shall maintain and operate STEP/STEG facilities without any interruption, sewage spills on the ground, sewage backup into buildings, or other unhealthy conditions. The city shall establish operating procedures and maintain certified staff to assure:

(i) Timely response to outages and trouble calls.

(ii) Adequate spare parts on hand including spare pumps, piping, electrical controls, and valves. Equipment should be standardized to reduce spares. Inventory shall include, at a minimum:

1 spare of each type of pumping unit per 15 customers served.

1 spare control panel per 30 customers.

1 spare set of level controls per 30 customers.

1 spare effluent screen per 100 customers.

(iii) Annual inspection of each tank and sludge removal every five years, or as experience dictates.

(e) The city's sewer use ordinance shall contain special provisions regulating STEP/STEG systems. Essential provisions include:

(i) Exclusion of infiltration and inflow, including a ban on connection of non-sewage wastewaters.

(ii) Prohibition of and establishment of penalties for modifications, repairs, or tampering by the user.

(iii) Control of materials and workmanship through adoption of technical specifications and construction standards.

(iv) Regulations and procedures for connection to a STEP/STEG system of new users, including signing of easements as a condition of service. Assessment of differential user fees is optional.

(v) Regulations for adding new STEP/STEG systems and extending existing systems to serve new areas, including submittal of plans as outlined below.

(vi) Record-keeping for all installed STEP/STEG tanks by lot number, tank number, and address.

(5) Design Submittals (Technical Data). Plans and specifications shall be submitted for prior approval in accordance with OAR 340-52. Submittals shall include:

(a) Engineer's design calculations covering hydraulics and the sizing of STEP/STEG tanks, pumps, and lines. In general, system design shall conform with recommendations published in Manual of Practice FD-12, Alternative Sewer Systems, Water Pollution Control Federation, 1986, and with applicable Oregon Administrative Rules.

(b) Technical standards and specifications for STEP systems to be installed, including acceptance testing.

(c) Copy of current ordinance allowing use of STEP/STEG systems within the cities service area. This may be in the form of an amendment to the cities sewer use ordinance.

(d) Copy of access easement form to be signed by user.

(e) Engineer's evaluation of hydrogen sulfide production from the STEP mainlines and design of control measures to protect gravity sewer system against corrosion.

(f) List of spares and repair materials to be supplied to the city to assure reliable operation of the system.

(g) Copy of the current approved construction, design, and equipment standards that have been adopted by the city.

(h) For each new system or extension, a Land Use Compatibility Statement in accordance with OAR 340-18.

(i) A copy of the proposal form or similar itemized list of quantities involved in the project.

(j) The name and address of the owner, developer, and engineer shall be shown on the plans. Easements shall also be shown. Blanket easements may be indicated by note.

(6) Tanks and Inlet Piping.

(a) Single tanks serving multiple lots under separate ownership will not normally be allowed. Each residence or site should have a separate tank. The rare exception will be considered case-by-case.

(b) Systems serving facilities such as RV parks, mobile home parks, apartments, and unit developments are usually under the control of a single customer or responsible association. At the discretion of the engineer, such systems may be designed with shared tanks, subject to requirements of the Oregon State Plumbing Code.

(c) Tanks shall be sized according to flow per criteria published in OAR 340-71-220(4), On-Site Rules, page 71-51. Minimum tank capacity shall be 1000 gallons.

(d) Construction details and configuration of tanks shall generally conform with OAR 340-73-050, Dosing Tank Construction, page 73-13. All tanks shall feature inlet and outlet risers with lockable covers. Covers shall be designed for H-20 loading in traffic areas. Inlet riser shall be a minimum 8 inch diameter. Outlet risers shall be sized to accommodate and access the equipment installed, with 24 inch diameter as a minimum. Intermediate 8 inch risers will be required on large tanks over 3000 gallons.

(e) Tanks shall be designed for all anticipated structural loads, including soil backfill. Where vehicle access is allowed, the tank shall be protected with an appropriate structural slab. All designs shall be stamped per OAR 340-52.

(f) To assure retention of solids and grease in the tank, all tanks shall feature a plastic effluent screen. Screens shall conform with the standard published in OAR 340-73-055(1)(d) on page 73-15. No unscreened discharges will be allowed.

(g) Flotation of tanks in areas of high groundwater shall be anticipated in system design. Structural design features and operational procedures shall be employed to prevent flotation. Equalization of buoyancy through hydrostatic pressure-relief valves installed in a STEP tank will not be allowed. Normally a tank should be filled immediately after installation and, on passing the leakage test, should not be pumped down more than 3 feet thereafter.

(h) Existing septic tanks should be removed or abandoned in place. Existing tanks which fully meet the requirements, including leakage test, may be considered for use in the STEP/STEG system. However, to retrofit the effluent screen, flow controls, access risers, and other specified features is usually impractical.

(i) Existing watertight tanks in good condition may occasionally be allowed, on a case-by-case basis, to remain in service and under the customer's private control as pretreatment units discharging to a new tank meeting the approved specifications.

(j) Existing building drains should be replaced and inspected per code. Alternatively, a cleanout shall be installed adjacent to the building and the drain shall be tested in accordance with the Oregon State Plumbing Code. Only watertight drains in good condition may be connected to a STEP/STEG tank.

(k) Pipe connections to tanks shall be made with an approved commercial waterstop manufactured for the intended purpose. Field improvised waterstops or adapters will not be approved.

(l) All sewage from the building including kitchen, laundry, and bath wastes shall be intercepted and conveyed to the STEP/STEG tank.

(m) Prior to startup, tanks shall be smoke-tested to confirm that all connected plumbing is properly vented through external house stacks, in accordance with Oregon Building Code Agency regulations.

(7) Pumps and Outlet Piping.

(a) To maintain the efficiency of the specified screen, each individual pump discharge and gravity outlet shall be limited to 10 gpm maximum flow rate by means of a flow-control orifice, regardless of influent flowrate or downstream head conditions. Flows exceeding 10 gpm tend to blind the screen over time, requiring them to be cleaned. Flows shall generally be controlled between 5 and 10 gpm.

(b) Effluent pumps shall be submersible turbine pumps and shall generally comply with the provisions of OAR 340-73-055, sized as appropriate for head/capacity conditions of the design. Installed pumps shall be capable of passing a 24-hour wet test in constant operations against shutoff head. Conventional centrifugal sewage pumps are usually less satisfactory for STEP system service because of their flat characteristic curve, but may be considered case-by-case for extremely low-head installations. Grinder pumps are unacceptable for discharge to STEP systems because of solids and grease.

(c) Pressurized service lines from a STEP tank to the common collector sewer shall be minimum 1 inch diameter. A shutoff valve (gate, plug, or ball) shall be installed in a tamperproof valve vault at property line. Unless otherwise approved, a swing check valve shall be installed in the same vault, and an additional swing check valve shall be installed at the tank outlet. Valves shall be full-port type and constructed of non-corrodible materials such as plastic and stainless steel.

(d) Gravity-flow service lines from STEG tanks to small diameter gravity sewers shall be minimum 2 inch diameter. All service lines shall have a minimum capacity of 10 gpm flowing half full, based on Manning's  $n = 0.013$ . Each service line shall be vented at the upper end. Venting shall be continuous through the tank and building stack.

(8) Pumps and Controls.

(a) Power is normally furnished by the user. Pump control panels should be energized through a dedicated breaker in the building served.

(b) Control panels shall be NEMA-4X with a locked door. Panels shall be exterior mounted and should be visible to cities service personnel from public right-of-way. Electrical conduits shall be sealed gas-tight at the tank and the panel.

(c) Installations shall contain a high-water alarm switch, activating a user-cancelable buzzer and an alarm light. Access to the light reset button shall be restricted to the cities service personnel. Alarms shall [be] separately fused so that trip of pump breaker shall not disable alarm.

(d) Pump control panels shall be equipped with elapsed time meters, and may also be equipped with event counters at the option of the city. Operational controls shall be HAND/OFF/AUTO/. Dual pumping units shall have operator-cancelable automatic alternators and event counters.

(9) Common Pressure Sewers.

(a) Common pressure sewer shall be minimum 2 inch diameter PVC or polyethylene pressure pipe, installed with toning wire or detachable tracer tape.

(b) Pipe sizing and layout shall generally conform with recommended practices in WFCP Manual of Practice FD-12, Alternative Sewer Systems, Table 2.1 and Chapter 3.

(c) Isolation valves, flushing connections, vacuum release valves, air release valves, and pig launching stations are optional. Such appurtenances shall be at the discretion of the engineer and the city, subject to OAR 340-52 approval.

(10) Common Small-Diameter Gravity Sewers.

(a) Sewers shall be minimum 4 inch diameter, installed with tracer tape or toning wire.

(b) Sewers shall be designed to flow half full, based on 1 gpm per dwelling and Manning's  $n = 0.013$ . Minimal velocities are acceptable. However, low-velocity and flooded sections may require sulfide controls.



(c) Subject to a 4 inch minimum diameter, inverted siphons shall be designed to flow at a velocity of 0.5 feet per second or greater, based on a Hazen-Williams coefficient of 100.

(d) Cleanouts shall be sealed with a screwed cap or plug secured under a tamperproof (bolt-down) cover. Cleanout spacing shall be approximately 300 feet. Conventional open-channel manholes will not be allowed except where desired to site a flume for flow measurement.

(11) Sulfide Control.

(a) The normal hydrogen sulfide content of gravity sewers in the Pacific Northwest is approximately zero. The hydrogen sulfide content of septic tank effluent from the specified withdrawal zone is also generally negligible.

(b) However, effluent sulfate readily reduces to sulfide during periods of detention in the STEP service piping, pressure sewers, and inverted siphons. These systems reduce all available sulfate over time, resulting in hydrogen sulfide concentrations well exceeding 10 mg/l.

(c) Because of corrosion, odor, and safety concerns, STEP discharges into unarmored gravity sewers shall not exceed 0.1 mg/l hydrogen sulfide content.

(d) Common pressure sewers:

(i) STEP system designs shall include effective controls to prevent the development of hydrogen sulfide in flooded service lines, pressure sewers, and flooded sections of small-diameter gravity sewers.

(ii) Pressure sewers shall be oxygenated by means of air injection into the head (low point) of each common sewer collector line. End-of-pipe chemical oxidation systems are relatively expensive and will not usually be approved.

(iii) Air injection rate shall be 2 scfm per inch diameter. Air supply shall be a receiver-mounted compressor rated at the static head on the system at the point of injection. Static head shall be computed as the sum of all ascending segments in the line being aerated.

(iv) No automatic air release valves shall be installed. Manual air release valves and automatic vacuum valves may be installed where warranted in the judgment of the engineer.

(v) Air injectors shall be 1 inch copper tubing and saddle-mounted corporation stop. Adjacent to the corporation stop, injector piping shall contain a suitable check valve, needle valve, airflow meter with pressure gauge, and an isolation valve and pressure reducer at the receiver, along with necessary unions and drip legs for condensate. All fittings shall be suitable for air service at the rated pressure of the compressor.

(vi) Compressor and injector assembly shall be secured in a locked vault. Compressors and vaults should be muffled, silenced, and soundproofed. Compressors may be installed below grade in noise-sensitive areas. Receivers shall be fitted with automatic drain valves for condensate purge.

(vii) Spare or standby compressors will not be required for STEP systems.

(viii) End-of-pipe aeration alone, or air-stripping alone, is generally unable to reduce the sulfide content of STEP sewers to 0.1 mg/l, and shall not be relied on for sulfide control. However, an approved commercial air-stripper vented through an activated carbon filter may be installed as a polishing process. This process may be installed prior to discharge into any gravity sewer where odor and safety may be a concern, at the engineer's or cities discretion.

(ix) New sulfide control methods will be considered and evaluated on their merits.

(e) Unflooded Sections of Common Small-Diameter Gravity Sewers. Development of hydrogen sulfide in small-diameter sewers is minimal, assuming sufficient fall or grade to provide surface turbulence, continuous venting through connected house stacks, and the absence of flooded sections. In such systems, sulfide controls may be limited to pumped STEP services connected to the sewer.

(i) Pressurized STEP services connected to small-diameter gravity sewers shall be back-drained between pump cycles to purge the entire service. A vacuum release valve shall be installed at the high point of the service and a backdrainage solenoid valve shall be installed on a tree at the pump in place of the check valve. Valve shall be 1 inch, full port, explosion-proof, wired to close when the pump is on. Vacuum release valve shall be installed in a tamper-proof vault readily accessible to cities service personnel.

(ii) To assure against sulfide formation in slow-moving lines, small-diameter sewers should be sized to flow no more than half-full at average daily flow and to provide at least 0.5 fps velocity when flowing half-full. Minimum grades should be based on Manning's  $n = 0.013$ :

2 inch @ 0.16 percent

3 inch @ 0.08 percent

4 inch @ 0.05 percent

6 inch @ 0.03 percent

8 inch @ 0.02 percent

(iii) Adverse grades and inverted siphons will create flooded sections, and shall be aerated as described above.

(iv) Alternatively, the downstream conventional sewer and manholes shall be armored with approved acid-proof coatings for a sufficient distance to dissipate the hydrogen sulfide. The required distance shall be determined case-by-case by the engineer, depending on sewer turbulence and anticipated initial sulfide strength. Normally a requirement to armor approximately 2000 feet should be anticipated.

(12) Construction.

(a) Construction should comply with applicable provisions of the 1990 Oregon APWA Standard Specifications for sanitary sewer construction. All mechanical and electrical equipment should be subjected to performance testing prior to acceptance by the city. Contractor's and supplier's warranties should be obtained.

(b) Septic tanks shall be tested hydrostatically after installation and after all pipe penetrations have been completed. Tanks shall be filled to a marked point 4 inches above the base of the risers. Leakage shall not exceed 50 gallons per day. Existing building drains and vent stacks being reconnected shall be tested as described above.

(c) All piping shall be pressure tested. Because of shallow burial and the strength of pressure-rated piping, there is often little potential for pipe deflection, and testing for deflection is optional. The engineer and city should determine whether installed piping should be tested for deflection case-by-case, and should specify the design of mandrel to be used.

(13) Certification. The engineer (or his authorized agent per OAR 345-52-040) shall inspect the construction and, on completion, shall certify proper construction in accordance with the approved plans per OAR 340-52, including any change orders subsequently approved.

## PENALTY

**Section 36. Civil Penalties.** Any user who violates an order of the municipal court or who willfully or negligently failed to comply with any provision of this ordinance, and the orders, rules, regulations and permits issued hereunder, shall be fined not less than \$50.00 or more than \$500.00 for each offense. Each day on which a violation occurs or continues shall be a separate offense.

**Section 37. Falsifying Information.** A person who knowingly makes a false statement, representation, or certification in an application, record, report, plan or other document filed or required to be maintained pursuant to this ordinance or wastewater contribution permit, or who falsifies, tampers with, or knowingly renders inaccurate a monitoring device or method required under this ordinance, shall, upon conviction, be punished by a fine of not more than \$500.00.

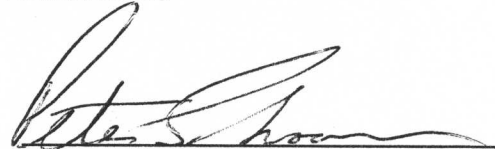
**Section 38. Severability.** The sections of this ordinance are severable. The invalidity of a section shall not affect the validity of the remaining sections.

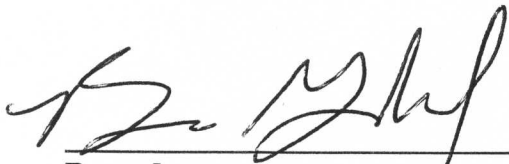
**Section 39. Repeal.** Ordinance No. 37, adopted September 21, 1978, as amended by Ordinances No. 38, adopted June 28, 1979; Ordinance No. 44, adopted September 20, 1979; Ordinance No. 56, adopted June 19, 1980; Ordinance No. 58, adopted June 19, 1980; Ordinance No. 64, adopted December 18, 1980; Ordinance No. 62, adopted October 16, 1980; Ordinance No. 67, adopted April 16, 1981; Ordinance No. 87, adopted ? 20, 1982; Ordinance No. 91, adopted June 16, 1983; Ordinance No. 94, adopted October 20, 1983; Ordinance No. 97, adopted February 16, 1993, as amended by Ordinance No. 106, adopted October 16, 1986; Ordinance No. 110, adopted October 16, 1986; Ordinance No. 114, adopted December 18, 1986; Ordinance No. 115, adopted February 19, 1987; Ordinance No. 132, adopted February 19, 1989; Ordinance No. 142, adopted April 15, 1990; Ordinance No. 139, adopted July 20, 1989; Ordinance No. 156, adopted June 10, 1993; Ordinance No. 157, adopted May 13, 1993; Ordinance No. 159, adopted July 8, 1993; Ordinance No. 172, adopted September 8, 1994, are repealed.

**ATTEST:**

Passed by the council this 9<sup>th</sup> day of Nov, 1995.

Approved by the mayor this 9<sup>th</sup> day of Nov, 1995.

  
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Mayor

  
\_\_\_\_\_  
Recorder