

CHAPTER 372-36 WAC
COLUMBIA BASIN IRRIGATION AREA — SEWAGE AND WASTE

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WAC

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WAC 372-36-010 Foreword. Residents of the Columbia Basin Irrigation Project Area are, and will continue to be, faced with problems involving the disposal of sanitary sewage and wastes from industry. Since there are no continuous streams in the area, waste material must be disposed of either on land or in reservoirs or in the drains provided for return irrigation water.

Most drains on the upper project area discharge to Moses Lake or Potholes Reservoir which supply some of the irrigation water for the lower area. Other return waters will eventually find their way by various drains and waterways to the Columbia.

There are extensive plans for the recreational development of Moses Lake, Potholes Reservoir and other lakes in the project area.

The preservation of water quality in the surface and ground waters of this project is important since such quality will affect the use of the water for irrigation, recreation and water supply. The quality of the Roosevelt Lake water used for irrigation will undoubtedly be altered in some manner by the leaching action in the soils to which it is applied. This change in quality is sure to affect its subsequent use, but is a change which for the most part is beyond control. Changes in water quality due to sewage and wastes, however, are subject to control and it is imperative that such control be exercised.

In addition to the public health problem, one of the most aggravating problems which is sure to exist in a presently undetermined degree is that of algae growths. These growths will appear in

drains, lake and reservoirs in which return water is collected. Soil leachings will provide some of the nutrients for this growth. Sewage and industrial wastes can, if not controlled, substantially add to these nutrients. Algae growths may interfere with the use of the waters for recreation and will substantially increase maintenance on drains, canals, farm laterals, and sprinkler systems.

Another problem involved in the control of wastes discharged to the return water is that of preventing the discharge of certain material in quantities which will affect the soils or crops to which the water is applied. It is not presently known that such materials will result from industrial developments in the area; however, it is desirable that their presence be anticipated and regulations for their control be applied.

Other problems which should be similarly anticipated are the effects of waste materials on domestic and industrial water supplies. Most of the present supplies are taken from underground sources and further demands for increased supplies will result from the development of the area. In this connection, sanitation is a primary factor, but is not the only consideration. Odors, tastes, color, turbidities and the presence of certain chemical compounds are factors influencing the quality of a water supply. Since sewage and waste disposal must be accomplished in many cases by land surface or subsurface application, the possible effects on ground water supplies require that these methods of disposal be carefully controlled.

In order to provide for the necessary control of the anticipated effects of sewage and waste disposal on water quality in this area, the following regulations have been adopted. These regulations may be altered from time to time as experience dictates.

Attention is here directed to another set of regulations of ecology which apply in this area. These are "Rules and regulations for the submission and approval of plans for the installation of public sewage and industrial waste works and for the operation of such works." (See chapter 372-20 WAC.)

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW. 88-13-029 (Order 88-62), § 372-36-010, filed 6/8/88; Rule .04.241, filed 3/1/60.]

WAC 372-36-020 Promulgation. The following regulations regarding the discharge of waste products to the canals, drains, wasteways, reservoirs and ground waters of the Columbia Basin Irrigation Project Area and the minimum standards for the treatment and disposal of sewage and industrial wastes in this area are hereby adopted and promulgated.

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW. 88-13-029 (Order 88-62), § 372-36-020, filed 6/8/88; Rule .04.241, filed 3/1/60.]

WAC 372-36-030 Domestic sewage rules.

(1) **Municipal and community.** (Including school and industrial installations):

- (a) The discharge of raw sewage is prohibited under any circumstances.
- (b) The discharge of sewage treatment plant effluent into canals used for irrigation or stock watering is prohibited.
- (c) The discharge of sewage treatment plant effluent into drains, wasteways, or reservoirs,

from which water is subsequently reused in canals and laterals is prohibited, except by specific approval where special circumstances may require such discharge.

- (d) The disposal of sewage treatment plant effluent by land application methods is prohibited in locations where such disposal would adversely affect surface or ground water withdrawn for domestic purposes. Discharge at extreme depths is prohibited.

(Note: Rules and regulations of the state board of health prohibit irrigation of certain crops with sewage plant effluent.)

- (e) The minimum degree of treatment shall, in any case, be at least the equivalent of primary treatment and disinfection of the effluent.
- (f) Additional treatment, of a degree to be determined for each case, shall be provided where specific approval is granted for discharge to drains, wasteways, or reservoirs.
- (g) Additional treatment, of a degree to be determined for each case, shall be provided prior to disposal by land application methods when necessary to prevent possible contamination of ground and surface waters, or creation of a nuisance.
- (h) Notwithstanding (a) through (g) of this subsection, the degree of treatment, the provision for disinfection and method of disposal shall be a matter for the determination and approval of the department of ecology for each individual case.

(2) Individual farm unit, household or other source of domestic sewage not covered by subsection (1) of this section.

- (a) No raw sewage or septic tank effluent shall be discharged to any canal, reservoir, drain or wasteway.
- (b) Households, farm units, schools, small business concerns or other sources of domestic sewage involving a limited number of persons shall provide sewage disposal facilities as prescribed by the county health department of the county in which the source is located.

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW. 88-13-029 (Order 88-62), § 372-36-030, filed 6/8/88; Rule .04.242, filed 3/1/60.]

WAC 372-36-040 Industrial wastes — General requirements. The following materials shall not be discharged to any drain or wasteway in excess of the concentration specified in each case. In no case will any of these materials be discharged to a canal:

- (1) No oils, tars, cleaning compounds or inflammables.
- (2) No phenols or pheno-like compounds in excess of 0.05 parts per million.
- (3) No toxic materials such as:
- (a) Fruit washing compounds
 - (b) Wood preservatives
 - (c) Insecticides—aldrin, rotenone, BHC, DDT, and all other similar products
 - (d) No weed killers
 - (e) Metallic or nonmetallic products of metal processing or plating—acids, alkalies, cyanides, copper, etc.

- (4) Total salts, maximum 2500 parts per million.
- (5) No salts or elements injurious to crops, soils or animals — aluminum, boron, arsenic, selenium, lead, manganese, etc.
- (6) No wastes with a pH less than 6.5 or greater than 8.5.
- (7) No floating solids.
- (8) No suspended solids in excess of that which can be removed by approved clarification or settling with a 2-hour detention period.

[Rule .04.243(A), filed 3/1/60.]

WAC 372-36-050 Industrial wastes — Ground water requirements. Wastes containing materials listed in WAC 372-36-040 (1) through (5) above, shall not be disposed of in such a way as to enter the ground water.

[Rule .04.243(B), filed 3/1/60.]

WAC 372-36-060 Specific requirements of each industry — Milk plants.

- (1) Condenser water, cooling water and ice machine water may be discharged to drains or waterways, but not to canals.
- (2) Wastes after proper treatment may be discharged to a drain or wasteway, if such discharge is approved by the department of ecology. The preferred methods of disposal of milk waste are:
 - (a) Small receiving stations or bottling plants — connection to city sewers, or irrigation.
 - (b) All others — irrigation or treatment by filtration or activated sludge.
- (3) Milk waste may be used directly for irrigation under a controlled system whereby no nuisance is caused.

[Statutory Authority: RCW 43.216.001 [43.21B.001] and chapter 43.21A RCW. 88-13-029 (Order 88-62), § 372-36-060, filed 6/8/88; Rule .04.243 (C)(1), filed 3/1/60.]

WAC 372-36-070 Specific requirements of each industry — Canning, freezing and dehydration.

- (1) Cooling waters may be discharged to drain or wasteway.
- (2) Wastes shall be screened (20-mesh standard gauge) and disposed of by lagooning, irrigation or in leaching trenches.

[Rule .04.243 (C)(2), filed 3/1/60.]

WAC 372-36-080 Specific requirements of each industry — Meat packing. No wastes from slaughterhouses or meat packing plants shall be allowed to enter any drain or wasteway. Recommended methods of disposal are:

- (1) In all cases, blood, paunch manure, fleshings and grease shall be collected for rendering or

some other type of utilization.

- (2) Wastes from small operations after complying with subsection (1) above may be accepted in city sewer system or may be treated by a combination grease trap–septic tank and drain field.
- (3) Wastes from large plants after complying with subsection (1) above may be treated by filtration and the effluent used for irrigation but not discharged to a canal, drain or wasteway.

[Rule .04.243 (C)(3), filed 3/1/60.]

WAC 372–36–090 Specific requirements of each industry — Beet sugar.

- (1) No lime wastes, process waters or Steffen’s waste shall be discharged to any drain or wasteway or in any way such that it may reach ground water.
- (2) Flume water may be discharged to a drain or wasteway, but only after grit removal and reuse in the flumes with not more than 40 percent make-up. The waste water discharged to provide for the make–up must be settled in a tank equipped for continuous sludge removal and having a detention period of 2 hours.
- (3) Flume water may be lagooned or used for irrigation.

[Rule .04.243 (C)(4), filed 3/1/60.]

WAC 372–36–100 Specific requirements of each industry — Potato washings.

- (1) Wash water shall not be discharged to any wasteway or drain if it is possible to dispose of the water by irrigation on land.
- (2) If wash water is to be discharged to any wasteway or drain it must first be settled in a tank equipped with continuous sludge removal equipment and having a detention period of 2 hours or in a lagoon with a similar detention period with sufficient additional space for sand and solids accumulation.
- (3) Wash water may be lagooned or used for irrigation.

[Rule .04.243 (C)(5), filed 3/1/60.]

WAC 372–36–110 Specific requirements of each industry — Sand and gravel washing. No sand and gravel washings will be discharged to a drain or wasteway unless first passed through a lagoon with a settling period of 2 days.

[Rule .04.243 (C)(6), filed 3/1/60.]

WAC 372–36–120 Specific requirements of each industry — Livestock wastes.

- (1) Feed lots or hog wallows shall not be located within 100 feet of any wells used for public water supply.
- (2) Feed lots or hog wallows shall be so located that surface runoff or waste water from the lot will not enter any canal, drain, wasteway or reservoir.

- (3) Livestock and poultry carcasses shall not be deposited in any canal, drain, wasteway or reservoir.

[Rule .04.243 (C)(7), filed 3/1/60.]

WAC 372-36-130 Specific requirements of each industry — Miscellaneous operations.

- (1) Garbage disposal areas and incinerators shall be so located to preclude discharge of drainage to any canal, drain, wasteway or reservoir.
- (2) Operations not covered by these requirements will be considered individually and requirements established as the need arises.

[Rule .04.243 (C)(8), filed 3/1/60.]