

## MODEL SEWER ORDINANCE

AN ORDINANCE REGULATING THE USE OF PUBLIC AND PRIVATE SEWERS AND DRAINS, PRIVATE SEWAGE DISPOSAL, THE INSTALLATION AND CONNECTION OF BUILDING SEWERS, AND THE DISCHARGE OF WATERS AND WASTES INTO THE PUBLIC SEWER SYSTEM (S): AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF IN THE CITY OF \_\_\_\_\_ BOROUGH OF \_\_\_\_\_, STATE OF ALASKA.

Be it ordained and enacted by the Council of the City of \_\_\_\_\_ State of Alaska as follows:

### ARTICLE I

Unless the context specifically indicates otherwise, the meaning of terms used in this ordinance shall be as follows:

- Sec 1.  $\cong$ BOD $\cong$  (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20EC, expressed in milligrams per liter.
- Sec 2.  $\cong$ Building Drain $\cong$  shall mean that part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five (5) feet (1.5 meters) outside the inner face of the building wall.
- Sec 3.  $\cong$ Building Sewer $\cong$  shall mean the extension from the building drain to the public sewer or other place of disposal.
- Sec 4.  $\cong$ Combined Sewer $\cong$  shall mean a sewer receiving both surface runoff and sewage.
- Sec 5.  $\cong$ Garbage $\cong$  shall mean solid wastes from the domestic and commercial preparation, cooking, and dispensing of food, and from the handling, storage, and sale of produce.
- Sec 6.  $\cong$ Industrial Wastes $\cong$  shall mean the liquid wastes from industrial manufacturing processes, trade, or business as distinct from sanitary sewage.
- Sec 7.  $\cong$ Natural Outlet $\cong$  shall mean any outlet into a watercourse, pond, ditch, lake, or other body of surface or groundwater.
- Sec 8.  $\cong$ Person $\cong$  shall mean any individual, firm, company, association, society, corporation, or group.
- Sec 9.  $\cong$ pH $\cong$  shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

- Sec 10. ?Properly Shredded Garbage≡ shall mean the wastes from the preparation, cooking, and dispensing of food that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half (1/2) inch (1.27 centimeters) in any dimension.
- Sec 11. ?Public Sewer≡ shall mean a sewer in which all owners of abutting properties have equal rights, and is controlled by public authority.
- Sec 12. ?Sanitary Sewer≡ shall mean a sewer which carries sewage and to which storm, surface, and groundwaters are not intentionally admitted.
- Sec 13. ?Sewage≡ shall mean a combination of the water-carried wastes from residences, business buildings, institutions, and industrial establishments, together with such ground, surface, and stormwaters as may be present.
- Sec 14. ?Sewage Treatment Plant≡ shall mean any arrangement of devices and structures used for treating sewage.
- Sec 15. ?Sewage Works≡ shall mean all facilities for collecting, pumping, treating, and disposing of sewage.
- Sec 16. ?Sewer≡ shall mean a pipe or conduit for carrying sewage.
- Sec 17. ?Shall≡ is mandatory; ?May≡ is permissive.
- Sec 18. ?Slug≡ shall mean any discharge of water, sewage, or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty four (24) hour concentration or flows during normal operation.
- Sec 19. ?Storm Drain≡ (sometimes termed ?storm sewer≡) shall mean a sewer which carries storm and surface waters and drainage, but excludes sewage and industrial wastes, other than unpolluted cooling water.
- Sec 20. ?Superintendent≡ shall mean the superintendent of sewage works and/or of water pollution control of the city or his authorized deputy, agent, or representative.
- Sec 21. ?Suspended Solids≡ shall mean solids that either float on the surface of, or are in suspension in water, sewage, or other liquids, and which are removable by laboratory filtering.
- Sec 22. ?Watercourse≡ shall mean a channel in which a flow of water occurs, either continuously or intermittently.

Sec 23. Hearing Board shall mean that the Board appointed to provision of Article ( ). [This section to be included only if optional article entitled Hearing Boards is made a part of the ordinance.]

## **ARTICLE II**

### Use of Public Sewers Required

- Sec 1. It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner on public or private property within the city, or in any area under the jurisdiction of said city, any human or animal excrement, garbage, or other objectionable waste.
- Sec 2. It shall be unlawful to discharge to any natural outlet within the city or in any area under the jurisdiction of the city, any sewage or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this ordinance.
- Sec 3. Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of sewage.
- Sec 4. The owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the city and abutting on any street, alley, or right-of-way in which there is now located or may in the future be located a public sanitary or combined sewer of the city, is hereby required at his expense to install suitable toilet facilities herein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of this ordinance, within ninety (90) days after date of official notice to do so, provided that said public sewer is within one hundred (100) feet (30.5 meters) of the property line. If an on-site pressure system is required for a service connection, the operation and maintenance costs for the facility shall be the responsibility of the owner or user.
- Sec 5. It shall be unlawful for any person, establishment or corporation to discharge to the sewer system any pollutant except in compliance with Federal standards promulgated pursuant to the Clean Water Act, and any more stringent state and local standards.

## **ARTICLE III**

### Private Sewage Disposal

- Sec 1. Where a public sanitary or combined sewer is not available under the provisions of Article II, Section 4, the building sewer shall be connected to a private sewage disposal system complying with the provisions of this article.
- Sec 2. Before commencement of construction of a private sewage disposal system, the owner

shall first obtain a written permit signed by the Superintendent. The application for such permit shall be made on a form furnished by the city, which the applicant shall supplement by any plans, specifications, and other information as are deemed necessary by the Superintendent. A permit and inspection fee shall be paid to the city at the time the application is filed.

- Sec 3. A permit for a private sewage disposal system shall not become effective until the installation is completed to the satisfaction of the Superintendent. The Superintendent shall be allowed to inspect the work at any stage of construction and, in any event, the applicant for the permit shall notify the Superintendent when the work is ready for final inspection, and before any underground portions are covered. The inspection shall be made within ( ) hours of the receipt of notice by the Superintendent.
- Sec 4. The type, capacities, location, and layout of a private sewage disposal system shall comply with all recommendations of the Department of Health and Social Services of the State of Alaska. No permit shall be issued for any private sewage disposal system employing subsurface soil absorption facilities where the area of the lot is less than three acres. No septic tank or cesspool shall be permitted to discharge to any natural outlet.
- Sec 5. At such time as a public sewer becomes available to a property served by a private sewage disposal system, as provided in Article III, Section 4, a direct connection shall be made to the public sewer in compliance with this ordinance, and any septic tanks, cesspools, and similar private sewage disposal facilities shall be abandoned and filled with suitable material.
- Sec 6. The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, at no expense to the city. If an on-site pressure system is required for use of the public sewer facility, the operation and maintenance costs of the pressure system shall be the responsibility of the owner or user.
- Sec 7. No statement contained in this article shall be construed to interfere with any additional requirements that may be imposed by the Health Officer.
- Sec 8. When a public sewer becomes available, the building sewer shall be connected to said sewer within sixty (60) days and private sewage disposal system shall be cleaned of sludge and filled with clean bank-run gravel or dirt.

## **ARTICLE IV**

### **Building Sewers and Connections**

- Sec 1. No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the Superintendent.

- Sec 2. There shall be two (2) classes of building sewer permits: (a) for residential and commercial service, and (b) for service to establishments producing industrial wastes. In either case, the owner or his agent shall make application on a special form furnished by the city. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the Superintendent. A permit and inspection fee of ( ) dollars for a residential or commercial building sewer permit and ( ) dollars for an industrial building sewer permit shall be paid to the city at the time the application is filed.
- Sec 3. All costs and expense incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the city from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.
- Sec 4. A separate and independent building sewer shall be provided for every building: except where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard, or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as on building sewer.
- Sec 5. Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the Superintendent to meet all requirements of this ordinance.
- Sec 6. The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling the trench, shall all conform to the requirements of the building and plumbing code or other applicable rules and regulations of the city. in the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the A.S.T.M. and W.P.C.F. Manual of Practice No. 9 shall apply.
- Sec 7. Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.
- Sec 8. No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.
- Sec 9. The connection of the building sewer into the public shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the A.S.T.M. and the W.P.C.F. Manual of Practice No. 9. All such connections shall be made gastight and watertight. Any deviation from the prescribed procedures and materials must be approved by the Superintendent before installation.

- Sec 10. The applicant for the building sewer permit shall notify the Superintendent when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the Superintendent or his representative.
- Sec 11. All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the city.

## **ARTICLE V**

### Use of Public Sewers

- Sec 1. No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, or unpolluted industrial process waters to any sanitary sewer.
- Sec 2. Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewer, or to a natural outlet approved by the Superintendent. Industrial cooling water or unpolluted process waters may be discharged, on approval of the Superintendent, to a storm sewer, combined sewer, or natural outlet.
- Sec 3. No person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewers:
- (a) Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid, or gas.
  - (b) Any waters or wastes containing toxic or poisonous solids, liquids, or gases in sufficient quantity, either singly or by interaction with other wastes to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the sewage treatment plant, including but not limited to cyanides in excess of (0.5) mg/l as CN in the wastes as discharged to the public sewer.
  - (c) Any waters or wastes having a pH lower than (6.0) or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the sewage works.
  - (d) Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the sewage works such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshings, entrails and paper dishes, cups, milk containers, etc. either whole or ground by garbage grinders.

Sec 4. No person shall discharge or cause to be discharged the following described substances, materials, waters, or wastes if it appears likely the sewers, sewage treatment process or equipment, have an adverse effect on the receiving stream, or can otherwise endanger life, limb, public property, or constitute a nuisance. In forming his opinion as to the acceptability of these wastes, the Superintendent will give relation of flows and velocities in the sewers, materials or construction of the sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, degree of treatability of wastes in the sewage treatment plant, and other pertinent factors. These substances prohibited are:

- (a) Any liquid or vapor having a temperature higher than 150EF (65EC).
- (b) Any water or waste containing fats, gas, grease or oils, whether emulsified or not, in excess of 100 mg/l or containing substances which may solidify or become viscous at temperatures between 32 and 150EF (0 and 65EC).
- (c) Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor or three-fourths (3/4) horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the Superintendent.
- (d) Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions whether neutralized or not.
- (e) Any waters or wastes containing iron, chromium, copper, zinc, and similar objectionable or toxic substances; or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewage at the sewage treatment works exceeds the limits established by the Superintendent for such materials.
- (f) Any waters or wastes containing phenols or other taste- or odor-producing substances, in such concentrations exceeding limits which may be established by the Superintendent as necessary, after treatment of the composite sewage, to meet the requirements of the State, Federal, or other public agencies of jurisdiction for such discharge to the receiving waters.
- (g) 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.
- (h) Any waters or wastes having a pH in excess of (8.5).
- (i) Materials which exert or cause:
  - (1) Unusual concentration or inert suspended solids (such as, but not limited to,

Fullters earth, lime slurried, and lime residues) or of dissolved solids (such as, but not limited to sodium chloride and sodium sulfate).

- (2) Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions).
- (3) Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant loan on the sewage treatment works.
- (4) Unusual volume of flow or concentration of wastes constituting "slugs" as defined herein.

(j) Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed, or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

Sec 5. All industrial and commercial process wastewater shall be pretreated prior to discharge to the public sewers, if necessary, in accordance with the provisions of the United States Environmental Protection Agency, the State Department of Environmental Conservation, and/or the Municipality, whichever is more stringent. The minimum pretreatment requirements are as follows:

Parameter	Maximum Concentration mg/l
BOD	300.0*
Suspended Solids (SS)	300.0*
TKN	30.0*
Arsenic	0.05
Barium	5.0
Boron	1.0
Cadmium	0.02
Chromium	0.05
Copper	0.02
Cyanide	0.05
Lead	0.10
Manganese	0.05
Mercury	0.002
Nickel	0.08
Selenium	0.02
Silver	0.01
Zinc	0.05

\*BOD<sub>5</sub>, SS and TKN may be increased by written approval of the Superintendent for limited periods

of time.

As a condition for authorization to dispose of industrial wastes through the municipal system, the industrial applicant for a sewage permit shall provide the municipality with information describing wastewater constituents and characteristics, and the type of activity and quantity of production.

Sec 6. If any waters or wastes are discharged, or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated in Section 4 and 5 of this Article, and which in the judgment of the Superintendent may have a deleterious effect upon the sewage works, processes, equipment, or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the Superintendent may:

- (a) Reject the wastes,
- (b) Require pretreatment to an acceptable condition for discharge to the public sewers
- (c) Require control over the quantities and rates of discharge, and/or
  
- (d) Require payment cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges under the provisions of Section II of this article.

If the Superintendent permits the pretreatment or equalization of waste flows, the design and installation of the plans and equipment shall be subject to the review and approval of the Superintendent and subject to the requirements of all applicable codes, ordinances, and laws.

Sec 7. Grease, oil and sand interceptors shall be provided when, in the opinion of the Superintendent, 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 interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the Superintendent, and shall be located as to readily and easily accessible for cleaning and inspection.

Sec 8. Where preliminary treatment 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.

Sec 9. When required by the Superintendent, the owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable control manhole together with such necessary meters and other appurtenances in the building sewer to facilitate observation, sampling, and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the Superintendent. The manhole shall be installed by the owner at his expense, and shall be maintained by him so as to be safe and accessible at all times.

- Sec 10. All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this ordinance shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater," published by the American Public Health Association, and shall be determined at the control manhole provided, or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out 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. (The particular analysis involved will determine whether a twenty-four (24) hour composite of all outfalls of a premise is appropriate or whether a grab sample or samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from 24 hour composites of all outfalls whereas pH's are determined from period grab samples.)
- Sec 11. No statement contained in this article shall be construed as preventing any special agreement or arrangement between the city and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the city for treatment, subject to payment therefore, by the industrial concern.

## **ARTICLE VI**

### Protection from Damage

- Sec 1. No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which is a part of the sewage works. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct.

## **ARTICLE VII**

### Powers and Authority of Inspectors

- Sec 1. The Superintendent and other duly authorized employees of the city bearing proper credentials and identification shall be permitted to enter all properties for the purposes of inspection, observation, measurement, sampling, and testing in accordance with the provisions of this ordinance. The Superintendent or his representative shall have no authority to inquire into any processes including metallurgical, chemical, oil, refining, ceramic, paper, or other industries beyond that point having a direct bearing on the kind and source of discharge to the sewers or waterways or facilities for waste treatment.
- Sec 2. While performing the necessary work on private properties referred to in Article VII, Section 1 above, the Superintendent or duly authorized employees of the city shall observe all safety rules applicable to the premises established by the company and the company shall be held harmless for injury or death to the city employees and the city shall indemnify

the company against loss or damage to its property by city employees and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions as required in Article V, Section 8.

- Sec 3. The Superintendent and other duly authorized employees of the city bearing proper credentials and identification shall be permitted to enter all private properties through which the city holds a duly negotiated easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair, and maintenance of any portion of the sewage works lying within said easement. All entry and subsequent work, if any, on said easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

## **ARTICLE VIII**

### Penalties

- Sec 1. Any person found to be violating any provision of this ordinance except Article VI shall be served by the city with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.
- Sec 2. Any person who shall continue any violation beyond the time limit provided for in Article VIII, Section 1, shall be guilty of a misdemeanor, and on conviction thereof shall be fined in the amount not exceeding ( ) dollars for each violation. Each day in which any such violation shall continue shall be deemed a separate offense. Additionally, chronic violation of the terms of this ordinance may result in the termination of the sewer disposal permit.
- Sec 3. Any person violating any of the provisions of this ordinance shall become liable to the city for any expense, loss, or damage occasioned the city by reason of such violation.

## **ARTICLE IX**

### Validity

- Sec 1. All ordinances or parts of ordinances in conflict herewith are hereby repealed.
- Sec. 2 The invalidity of any section, clause, sentence, or provision of this ordinance shall not affect the validity of any other part of this ordinance which can be given effect without such invalid part of parts.

## **ARTICLE X**

### Ordinance in Force

Sec 1. This ordinance shall be in full force and effect from and after its passage, approval, recording, and publication as provided by law.

Sec 2. Passed and adopted by the Council on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, by the following vote:

Ayes \_\_\_\_\_

Namely \_\_\_\_\_

Nays \_\_\_\_\_

Namely \_\_\_\_\_

Approved this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_

\_\_\_\_\_  
Mayor

Attest:

\_\_\_\_\_  
City Clerk

