Purpose and policy.

Chapter 13.20 of the Bingen City Code sets forth uniform requirements for discharges into the city sewage works and enables the city to protect public health in conformity with all applicable local, state and federal laws relating thereto.
The objectives of this chapter are the following:

A. To promote the health, safety and welfare of those persons within the city’s public sewer system by requiring use of the sewage works;

B. To prevent the introduction into the sewage works of pollutants that will interfere with the normal operation of the sewage works that would not receive adequate treatment and which would pass through the sewage works into receiving waters and/or the atmosphere or otherwise be incompatible with the sewage works;

C. To ensure that the quality of sludge from the sewage works is maintained at a level which allows its use and disposal in compliance with applicable statutes and regulations;

D. To protect sewage works personnel who may be affected by sewage in the course of their employment and to protect the general public;

E. To enable the city to comply with all its permits, conditions, sludge use and disposal requirements and any other federal or state laws to which the sewage works is subject. (Ord. 446 §2 (part), 1998).

13.20.020 Definitions.

Unless the context specifically indicates otherwise, the meaning of terms used in this title shall be as set forth in this section.

“Apartment” means any single dwelling unit designed for occupancy in the same building with other units and having separate kitchen facilities in each said unit, and includes multiple residence units having such facilities.

“B.O.D.” (denoting biochemical oxygen demand) means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five days at twenty degrees centigrade, expressed in milligrams per liter.

“Building drain” means 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 feet outside the inner face of the building wall.

“City” means the City of Bingen.

“Cooling water” or “non-contact cooling water” means water used for cooling purposes which does not come into direct contact with any raw material, intermediate product, waste product, or finished product, and that contains no additives, pollutants, toxins, or dangerous wastes.
“Domestic water” or “domestic water system” means that water, and water system in which it is carried, which is for human consumption and normal household and business or industrial uses provided from the city’s supply.

Dwelling Unit, Multiple. “Multiple dwelling unit” means a building or arrangement of buildings or portions thereof, used or intended to be used as the home of two or more families or householders living independently of each other.

Dwelling Unit, Single. “Single-family dwelling unit” means a building arranged or designed to be occupied by not more than one family or householder.

“Garbage” means solid wastes from the preparation, cooking and dispensing of food that has been shredded to such degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half inch (1.27 centimeters) in any dimension.

“Industrial user” means industrial facility that generates industrial wastes and discharges those waste to the sewer.

“Industrial wastes” means the liquid wastes from industrial processes, as distinct from sanitary wastes.

“Large industrial or commercial user” means an industry or commercial establishment discharging sewages or industrial wastes in excess of five thousand gallons per day on an average annual flow basis, or as determined by the city to be discharging water, sewage, wastewater, or industrial waste with unusual BOD, chemical oxygen demand, suspended solids, or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works.

“Milligrams per liter” (abbreviated as mg/l) means the weight of any substance expressed in milligrams contained within one liter.

“Natural outlet” means any outlet into a watercourse, pond, ditch, lake or other body of surface water or groundwater.

“Person” means any individual, firm, company, association, society, corporation, or group.

“PH” means the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

“Public works director” means the public works director of the city, or his authorized deputy, agent, or representative.

“Sewage” means a combination of the water carried wastes from residences, business buildings, institutions, and industrial establishments, together with such ground waters, surface waters, and storms waters as may be present.
“Sewage treatment plant” means any arrangement of devices and structures used for treating sewage.

“Sewage works” means all facilities for collecting, pumping, treating, and disposing of sewage.

Sewer, Building. “Building sewer” means the extension of the sewer from the building drain to the public sewer or other place of disposal. A building sewer shall be owned, constructed, installed, operated, and maintained by a person and is not a portion of the public sewer.

Sewer, Combined. “Combined sewer” means a sewer receiving both surface runoff and sewage.

Sewer, Private. “Private sewer” means the sewer line and disposal system owned, constructed, installed, operated and maintained by a person where connection with the public sewer system is not required, and is not regulated by this chapter.

Sewer, Public. “Public sewer” means a sewer in which all owners of abutting properties have equal rights, and is controlled by public authority.

Sewer, Sanitary. “Sanitary sewer” means a sewer which carries sewage and industrial waste to the sewage treatment plant, and to which storm waters, surface waters, and ground waters are not intentionally admitted.

“Storm sewer” or “storm drain” means a sewer which carries storm waters, surface waters and drainage, but excludes sewage and industrial wastes other than unpolluted cooling water, For the purposes of this section, the city’s “industrial drain” is a storm sewer.

Shall and May. The word “shall” is mandatory. The word “may” is permissive.

“Slug” means any discharge of industrial wastes which in concentration of any given component or in quantity of flow is more than five times the average twenty-four-hour concentration or average twenty-four-hour flow during the industrial user’s normal operation. The industrial monitoring records from a similar period of operation shall be used to determine the average twenty-four-hour concentration of flow under normal operations.

“Suspended solids” means solids that either float on the surface of, or are in suspension in, water, sewage, industrial wastes, or other liquids, which are removable by laboratory filtering, are determined by quantitative standard laboratory procedures, and are expressed in milligrams per liter, and are also known as “bio-solids”.

“Uniform Plumbing Code” means the materials and procedures set forth in appropriate specifications of the latest version of the Uniform Plumbing Code developed by the International Association of Plumbing and Mechanical Officials.

“Watercourse” means a channel in which a flow of water occurs either continuously or intermittently. (Ord. 446 §2 (part). 1998).
13.20.030  Objectionable waste-Deposit prohibited.

It is unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner upon public or private property within the city or in any area under the jurisdiction of the city, any human or animal excrement, garbage or other objectionable waste. (Ord. 446 §2 (part), 1998).

13.20.040  Sewage treatment required when.

It is unlawful to discharge to any natural outlet within the city, or in any area under the jurisdiction of any sanitary sewage, industrial wastes, or other polluted waters, except where suitable treatment has been provided in accordance with the provisions of this chapter. (Ord. 446 §2 (part), 1998).

13.20.050  Privies, cesspools prohibited.

Except as provided in this chapter, it is unlawful to construct or maintain any privy, privy vault, septic tank, cesspool or other facility intended or used for the disposal of sewage. (Ord. 446 §2 (part), 1998).

13.20.060  Toilet facilities required.

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 sewer of the city, is required at his expense to install suitable toilet facilities therein and to connect such facilities directly with the proper public sewer in accordance with the provisions of this article, within ninety days after the date of official notice to do so; provided, that said public sewer is within one hundred feet of the property line. Temporary portable toilets for construction sites, special events, parks, and other locations may be used upon the granting of a permit by the mayor or his designee. (Ord. 446 §2 (part), 1998).

13.20.070  Private sewage disposal systems-Abandonment and connection to public sewer.

At such time as a public sewer becomes available to a property served by a private disposal system, as provided in Section 13.20.060, a direct connection shall be made to the public sewer in compliance with this chapter, and any septic tanks, cesspools, and similar private sewage disposal facilities shall be abandoned and filled with suitable material at the expense of the property owner. Abandonment of the private disposal system shall comply with all recommendations of the county health district. (Ord. 446 §2 (part), 1998).
13.20.080 Private sewage disposal systems-Operations and maintenance.

The owner shall operate and maintain the private sewage disposal facilities
In a sanitary manner at all times, at no expense to the city. (Ord. 446 §2 (part), 1998).

13.20.090 Private sewage disposal systems-Additional requirements.

No statement contained in this chapter shall be construed to interfere with any additional
requirements that may be imposed by the health officer. (Ord. 446 §2 (part), 1998).

13.20.100 Connection made by city-assessment of expense.

In the event the building sewer and connection are not made within the time provided for in
Section 13.20.060 following notice, the public works director is authorized and directed to cause
the same to be made and to file a statement of the cost thereof with the city clerk, and thereupon
a warrant shall be issued under the direction of the city council against the sewer revenue fund
for the payment of such cost. Such amount, together with a penalty, shall of ten percent thereof,
plus interest at the rate of eight percent per year upon the total amount of the property upon
which such building sewer and connection has not been placed as required and shall become a
lien thereon as herein provided. Such total amount, when collected shall be paid into the sewer
revenue fund. (Ord. 446 §2 (part), 1998).

13.20.110 Federal and State requirements.

Federal and state requirements and limitations on discharges to the city’s waste water treatment
plant shall be met by all commercial and industrial users which are subject to such standards.
(Ord. 446 §2 (part), 1998).

13.20.120 Permit required to make connection to public sewer.

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 public works director. (Ord. 446 §2 (part), 1998).

13.20.130 Expense of connection borne by owner-Liability for damage.

All costs and expense incidental to the installation and connection of the building sewer shall be
borne by the owner or applicant of the premises in question. The owner shall indemnify the city
against any loss or damage that may directly or indirectly be occasioned by the installation of the
building sewer. (Ord. 446 §2 (part), 1998).

13.20.140 Specifications.

A. 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 resolutions of the city. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the latest version of the Standard Specifications for Road, Bridge and Municipal Construction (developed by the Washington State Department of Transportation and the Washington State Chapter of the American Public Works Association), the American Society of Testing Materials, and the Water Environment Federation Manual of Practice No. 9 shall apply.

B. The size and slope of the building sewer shall be subject to the approval of the public works director, but in no event shall the diameter be less than is provided by the Uniform Plumbing Code described in this section. (Ord. 446 §2 (part), 1998).

13.20.150 Use of backwater valve.

RESERVED.

13.20.160 Sanitary sewer-Discharges prohibited.

No person shall discharge or cause to be discharged any storm water, surface water, groundwater, roof runoff, subsurface drainage, cooling water or unpolluted industrial process water to any sanitary sewer. (Ord. 446 §2 (part), 1998).

13.20.170 Harmful wastes prohibited.

A. Federal and state requirements and limitations on discharges to the sewer system shall be met by all commercial and industrial users which are subject to such standards, and, except as otherwise provided in this chapter, no person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer:

1. Any liquid or vapor having a temperature higher than one hundred fifty degrees Fahrenheit;

2. Any water or waste containing fats, grease, or oils, whether emulsified or not, in excess of one hundred milligrams per liter, or containing substances which may solidify or become viscous at temperatures between thirty-two and one hundred fifty degrees Fahrenheit;

3. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas;

4. Any garbage that does not meet the definition of properly shredded garbage;

5. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, or any other solid or viscous substance capable of causing obstruction to the flow in sewers or the interference with the proper operation of the sewage works;
6. Any waters or wastes containing abrasives capable of causing damage to, or interfering with the proper operation of, the sewage works;

7. Any waters or wastes having a pH lower than 5.5 or higher than 9.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works;

8. Any waters or wastes containing toxic or poisonous substances in sufficient quantity, either single or by interaction with other wastes, to injure or interfere with any sewage treatment process or 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 two milligrams per liter;

9. Any waters or wastes containing persistent pesticides and/or pesticides or fungicides regulated by the Federal Insecticide Fungicide Rodenticide Act;

10. Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such material at the sewage treatment plant;

11. Any noxious or malodorous gas or substance capable of creating a public nuisance;

12. Any cleaning or disinfectant chemicals which destroy or retard the organisms which are essential to the efficient operation of the sewage works and sewage treatment plant; any such cleaning or disinfectant chemical proposed for use together with its chemical composition shall be submitted to the public works director for evaluation prior to usage;

13. Any septic tank waste;

14. Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions whether neutralized or not;

15. Any waters or wastes containing phenols or other taste or odor producing substances, in such concentration exceeding limits which may be established by the public works director 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 water;

16. Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the public works director in compliance with applicable state or federal regulations;
17. 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 sewage at the sewage treatment plant exceeds the limits established by the public works director;

18. Any waters or wastes, which in the opinion of the city may cause harm to the sewers or the sewage treatment process or the equipment therefore or that may have an adverse effect on the receiving stream or that my otherwise endanger life, limb, public property or constitute a nuisance;

19. Any substance that will cause the city’s waste water treatment plant to violate any of its disposal system permits;

20. Any hazardous wastes as defined in rules published by the state of Washington or pursuant to the Federal Environmental Protection Act;

21. Materials which exert or cause:
   a. Unusual concentrations of inert suspended solids (such as, but not limited to Fullers earth, lime slurries and time residues) or of dissolved solids (such as, but not limited to sodium chloride and sodium sulfate);
   b. Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions);
   c. Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment plant;
   d. Unusual flow or concentration of wastes constituting “slugs” as defined herein;

22. Waters or wastes containing substances which are not amenable to treatment by the sewage treatment plant, or are amendable 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;

B. In the event of the discharge or proposed discharge to the sewage works of any waters or wastes which contain the substances or possess the characteristics enumerated in this section, and/or which in the judgment of the public works director may have a deleterious effect upon the sewage works, sewage treatment plant, or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the public works director may:

1. Reject the wastes;
2. Require pretreatment to an acceptable condition for discharge to the public sewer;
3. Require control over the quantities and rates of discharge; and/or
4. Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges under the provisions of this chapter.

C. If the public works director permits the pretreatment or equalization of waste flows, the design and installation of the plant(s) and equipment shall be subject to the review and approval of the public works director, and subject to the requirements of all applicable codes, ordinances and laws;

D. To adequately assess the impact to the sewage works, sewage treatment plant, or receiving waters, or the potential hazard to life, or the potential to constitute a public nuisance, written notification shall be given to the public works director. Written notification shall be provided for discharges or proposed discharges as follows:

1. Accidental Discharges. The public works director shall be notified immediately of any accidental discharge. Formal written notification discussing the circumstances and remedies shall be submitted to the public works director within five days of the occurrence. For the purpose of this provision, “accidental discharge” means the inadvertent and unavoidable discharge of any waters or wastes which contain the substances or possess the characteristics enumerated in this section, including slug discharges.

2. Slug Discharges. The public works director shall be notified in writing at least five days in advance of any planned slug discharge. (Ord. 446 §2 (part), 1998).

13.20.180 Grease, oil, and sand interceptors required-Specifications.

A. Grease, oil, and sand interceptors shall be provided when, in the opinion of the public works director, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, and 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 public works director, and shall be so located as to be readily and easily accessible for cleaning and inspection.

B. Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight, and which, when bolted in place, shall be gastight and watertight. (Ord. 446 §2 (part), 1998).
13.20.190 Maintenance of grease, oil and sand interceptors.

Where installed, all grease, oil and sand interceptors shall be maintained by the owner, at his expense, to provide continuously efficient operation at all times.

13.20.200 Preliminary treatment required for certain wastes-Approval of facilities.

A. The admission into the public sewers of any water or wastes;
   1. Having a five day biochemical oxygen demand greater than three hundred milligrams per liter; or
   2. Containing more than three hundred fifty milligrams per liter, of suspended solids; or
   3. Containing any quantity of subscribed in Section 13.20.170; or
   4. Having an average daily flow greater than two percent of the average daily sewage flow of the city.

B. Where necessary in the opinion of the public works director, the owner shall provide, at his expense, such preliminary treatment as may be necessary to:
   1. Reduce the biochemical oxygen demand and to three hundred milligrams per liter and the suspended solids to three hundred fifty milligrams; or
   2. Reduce objectionable characteristics or constituents to within the maximum limits provided for in Section 13.20.170; or
   3. Control the quantities and rates of discharge of such waters or wastes.

C. Plans, specifications, and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the public works director and of the appropriate state regulatory agency if required, and no construction of such facilities shall be commenced until the approvals are obtained in writing. (Ord. 446 §2 (part), 1998).

13.20.210 Maintenance of preliminary treatment facilities.

Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation, by the owner at his expense. (Ord. 446 §2 (part), 1998).
13.20.220 Monitoring stations.

As determined by the city, industrial or commercial users may be required to install monitoring stations. If monitoring stations are required, the city shall designate when, where, and how many stations shall be installed. Monitoring stations shall be constructed by, and at the expense of the industrial or commercial user, in accordance with general plans, and a list of acceptable equipment provided by the city. Once installed, the city will own, operate and maintain all monitoring stations. Maintenance and upgrades in equipment needed to accommodate growth of the user, or replacement of damaged equipment resulting from negligence of the user, shall be at the expense of the industrial or commercial user. Industrial or commercial users shall provide unrestricted city access to all monitoring stations. The rates and charges for industrial or commercial users utilizing monitoring stations shall be based upon the volume, strength and other characteristics of the discharges (as determined through monitoring, measurements, tests, and analyses), and costs associated with the operation and maintenance of the monitoring stations. (Ord. 446 §2 (part), 1998).

13.20.230 Tests and analysis-Standards.

All measurements, tests and analyses of the volume, strength and characteristics of discharges to which reference is made in Section 13.20.200 (B) and Section 13.20.220, shall be determined in accordance with the latest edition of “Standard Methods for Examination of Water and Wastewater,” published by the American Public Health Association, and shall determined through samples collected at, or measurements made at the monitoring stations. In the event that no monitoring station has been required, the nearest downstream manhole shall be considered to be the point where sample collection or measurements are to be made. 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 analyses involved will determine whether a twenty-four hour composite or whether a grab sample should be taken. (Ord. 446 §2 (part), 1998).


No statement contained in this chapter shall be construed as preventing any special agreement or arrangement between the city and any industrial user whereby an industrial waste of unusual strength or character may be accepted by the city for treatment, subject to payment therefore by the industrial user. (Ord. 446 §2 (part), 1998).

13.20.250 Industrial wastes-Screening of coarse solids.

Each and every industrial plant, and such other commercial user as the public works director may deem necessary, shall install, operate and maintain satisfactory screens or to the devices, approved by the public works director, to screen coarse solids from industrial waste before water is discharged to sewers. (Ord. 446 §2 (part), 1998).
13.20.260 Right of access for inspection.

A. The public works director, his representative, 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 chapter. The public works director 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.

B. While performing the necessary inspection work on private properties, the public works director or his representative shall observe all safety rules applicable to the premises established by the person and the person shall be held harmless for injury or death to the city employees and the city shall indemnify the person against loss and damage to its property asserted against the person and growing out of the inspection, except as may be caused by negligence or failure of the person or company to maintain safe conditions.

C. The public works director, his representative, 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 the easement. All entry and subsequent work, if any, on the easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

D. In the event free access during proper hours to all buildings and premises served by the domestic sewage system is denied, the public works director or his employees shall obtain warrants for inspection of pipes, fixtures, and the manner in which the provisions of this chapter are being complied with. (Ord. 446 §2 (part), 1998).

13.20.270 Damaging sewer system.

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 public sewer and sewage disposal system. (Ord. 446 §2 (part), 1998).

13.20.280 Liability for damage.

Any person who violates any of the provisions of this chapter shall become liable to the city for any expense, loss or damage occasioned by the city, including wastewater treatment plant, by reason of such violation. (Ord. 446 §2 (part), 1998).
13.20.290 Search warrants.

If the public works director, his representative, and other duly authorized employees of the city bearing proper credentials and identification have been refused access to a building, structure or property, or any part thereof, and is able to demonstrate probable cause to believe there may be a violation of this chapter, or that there is a need to inspect as part of a routine inspection program of the city designed to verify compliance with this title or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then the public works director shall seek issuance of a search warrant from the Bingen Municipal Court. Such warrant shall be served at reasonable hours by the public works director in the company of a uniformed police officer of the city. (Ord. 446 §2 (part), 1998).

13.20.300 Sewer service penalties, damages and enforcement measures.

A. Criminal Penalty. Any person knowingly or intentionally violating any provision of this chapter shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punishable by a fine not to exceed five hundred dollars or by imprisonment in jail not to exceed six months, or both such fine and imprisonment.

Each separate day, or any portion thereof, during which any violation of this chapter occurs or continues shall be deemed to constitute a separate offense and, upon conviction thereof, shall be punishable as provided in this section.

B. Civil Infraction. Any person otherwise violating any provision of this title shall be deemed to have committed a civil infraction for which a penalty of two hundred fifty dollars may be imposed.

Each separate day, or any portion thereof, during which any violation of this chapter occurs or continues shall be deemed to constitute a separate offense and, upon conviction thereof, shall be punishable as provided in this section.

C. Injunction. In addition to the foregoing criminal remedy, the violation of any of the provisions in this chapter is deemed to be a nuisance and threatening to the health and safety of the citizens of Bingen. The city may utilize any civil remedy available to it under the laws of the state of Washington to enforce these provisions, including injunctive relief.

D. Civil Damages. Any person violating any of the provisions of this chapter shall become liable to the city for any direct or indirect expense, loss or damage occasioned by the city by reason of such violation. (Ord. 446 §2 (part), 1998).

13.20.310 Savings Clause.

If any provision of Chapter 13.20 or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected. (Ord. 446 §2 (part), 1998).