

Board of Public Utilities

Cheyenne Water and Sewer Department

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RULES AND REGULATIONS

FOR GREASE TRAPS AND INTERCEPTORS

AND INSPECTION MANHOLES (MONITORING FACILITIES)

SUPPLEMENT TO TITLE 13 OF THE CHEYENNE CITY CODE

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RULES AND REGULATIONS FOR GREASE TRAPS AND INTERCEPTORS, AND INSPECTION MANHOLES (MONITORING FACILITIES)

I. <u>AUTHORITY</u>.

Pursuant to Title 2, Chapter 2.68 and Title 13, Chapters 13.12 and 13.20 of the Code of the City of Cheyenne, the Board of Public Utilities (BOPU) shall make all rules and regulations necessary for the safe, economical, and efficient operation and management of publicly owned treatment works (POTW), also referred to as the Cheyenne wastewater collection system and treatment facilities. These Rules and Regulations supplement the applicable sections of the Cheyenne City Code.

II. <u>SCOPE</u>.

Grease traps/interceptors are required for all commercial and industrial facilities discharging wastewater to the Water Reclamation facilities owned and operated by the City of Cheyenne Board of Public Utilities and that are operated regularly for the preparation of food, including but not limited to restaurants, cafeterias, cafes, fast food outlets, pizza outlets, delicatessens, sandwich/coffee shops, and any and all other kinds and types of food vending establishments in which any food preparation (including heating or defrosting by means of any kind of oven or heating device) takes place on the premises, whether or not such facilities are located in a separate building or structure or occupy space in a building or structure that is occupied by other businesses, as well as schools, churches, fraternal clubs, boarding houses with communal kitchen facilities, nursing homes/assisted living facilities, day care centers and any other business operations which have kitchens engaged in the preparation of food.

In addition, meat cutting facilities and others capable of discharging significant amounts of fats, oils and greases into the Sanitary Sewer System shall be required to install grease traps/interceptors.

Certain facilities may petition for an exception, by completing the exception form (Attachment A) and sending it to The Board of Public Utilities Industrial Pretreatment Program personnel for review. Items such as menu, location, BMPs and meal preparation volume will be considered. Written permission or denial of the exception will be provided to the Facility.

The use of grease traps/interceptors as detailed in these Rules and Regulations for Grease Traps and Interceptors and Monitoring Manholes (Rules and Regulations) for the above commercial and/or industrial users does not relieve the user of complying with all provisions of Chapters 13.12 Sewer System and 13.20, Wastewater Treatment and Disposal of the Code of the City of Cheyenne, and those provisions pertaining to Industrial Pretreatment, or the General Industrial Pretreatment Regulations (40 CFR, Part 403) promulgated by the U.S. Environmental Protection Agency (EPA).

III. <u>GENERAL</u>.

A. <u>Use of Best Management Practices (BMPs)</u>.

The commercial /industrial users governed by these Rules and Regulations are required to apply BMPs to reduce the amount of grease introduced into the trap/interceptor and wastewater collection system. The Board will supply an example of the most current BMPs (attached).

B. <u>International Plumbing Code</u>.

These Rules and Regulations shall supplement all requirements of the International Plumbing Code 2015 Edition, including Appendices B, C, D, and E as adopted by the City of Cheyenne. In cases of conflict between these Rules and Regulations and those contained in the International Plumbing Code, the more stringent specification shall apply.

IV. <u>GREASE TRAPS/INTERCEPTORS</u>.

A. <u>General</u>.

1. Waste discharged from fixtures and equipment in establishments which may contain grease, including, but not limited to scullery sinks, pot and pan sinks, dishwashing machines, soup kettles, and floor drains located in areas where grease containing equipment may exist, shall be drained through grease traps/ interceptors. Drains from toilets, restroom sinks and showers shall not be connected to the grease trap/interceptor, but shall connect to the sanitary sewer downstream from any grease traps/interceptors.

2. Garbage disposals/grinders are discouraged. Leftover food and scraps should be disposed of in the garbage rather than into the sanitary sewer system. If installed, disposals/grinders shall not be connected to grease interceptors and shall connect to the sanitary sewer downstream from any grease traps/interceptors. Fats, Oils and Greases shall not be disposed of through garbage grinders/disposals.

3. All grease traps/interceptors shall be installed and connected in such a manner that they shall be at all times easily accessible for inspection, cleaning, and removal of the captured fats, oils and greases. A grease trap/interceptor may not be installed near food handling areas. Outside grease traps/interceptors shall be designed to accommodate H 20 traffic loading.

a. All newly constructed facilities shall be required to install an approved, external grease trap/interceptor with a minimum size of 1000 gallons and not exceeding 3000 gallons in capacity. If required by the BOPU, for high volume facilities, grease traps/interceptors shall be arranged in series to provide additional retention and separation time. All grease trap/interceptor designs will require review by the BOPU Industrial Pretreatment Program personnel, with final approval by the City of Cheyenne Chief Plumbing Inspector.

b. New facilities which are limited by space or other factors and cannot install an outside grease trap/interceptor as specified shall be required to install and maintain an internal grease trap/interceptor with a minimum size of 100 pound grease holding capacity. Weekly maintenance by facility personnel may be required. Inspections shall be conducted by the Industrial Pretreatment Program personnel who may require grease trap/interceptor cleaning at the time of the inspection. Should the facility not follow the Rules and Regulations as specified, the facility shall be subject to penalties Under Title 2 of the City Code.

c. Existing facilities without an external grease interceptor shall install an external grease trap/interceptor to meet the Rules and Regulations unless a facility is granted an exception following the procedure set forth in part II, Scope of these Rules and Regulations or has been grandfathered in. Should the facility choose not to install an external grease interceptor and grease passes through the trap/interceptor or causes sewer blockage, the facility shall be subject to penalties under Title 2 or Title 13 Chapter 13.20. Industrial Pretreatment Program personnel will be responsible for facility effluent quality monitoring. Failure to comply with these Rules and Regulations may result in enforcement action as set forth in the Cheyenne City Code.

4. For all new buildings, building renovations, or where directed by the BOPU, the installed grease traps/interceptors shall be located outside of the building on private property. Location of traps/interceptors inside the building must be approved by the BOPU Industrial Pretreatment personnel and the City Plumbing Inspector.

B. <u>Outside Grease Traps/Interceptors.</u>

1. Outside grease traps/interceptors shall contain two compartments.

2. The "Fixture Flow Table" in Section IV.D. of these Rules and Regulations shall be utilized to determine the total rate of flow in gallons per minute from kitchen facilities, based on a fixture unit count. Using this flow, the required size of the grease trap/interceptor can be found in Section IV.E. of these Rules and Regulations entitled, "Grease Trap/Interceptor Sizing Chart"

C. <u>Inside Grease Traps/Interceptors</u>.

1. Grease traps/interceptors within a building may be allowed only for existing facilities where a grease trap/interceptor already exists or if installation of an outside trap/interceptor is not possible .

2. No inside grease interceptors shall be installed which have rates of flow of more than 55 gallons per minute, nor less than 20 gallons per minute, unless expressly approved by BOPU Industrial Pretreament personnel and the City of Cheyenne Chief Plumbing Inspector.

3. The "Fixture Flow Table" in Section IV.D. of these Rules and Regulations shall be utilized to determine the total rate of flow in gallons per minute from kitchen facilities, based on a fixture

unit count. Using this flow, the required size of the grease trap/interceptor can be found in Table E. of these Rules.

4. BOPU Industrial Pretreatment personnel or the City of Cheyenne Chief Plumbing Inspector may require two grease traps/interceptors in series if installation of an outside trap/interceptor is not possible, space constraints prevent installation of a single properly sized trap or evidence of grease passing through to the collection system has been found.

D. <u>Fixture Flow Table</u>.

Source: EPA Design Manual Onsite Wastewater Treatment and Disposal Systems 1980

| <u>Type of fixture</u> | Rate of Flow |
|----------------------------------|------------------|
| | <u>in g.p.m.</u> |
| | |
| Floor drain/sink | 10 |
| Restaurant kitchen sink | 15 |
| Single compartment scullery sink | 20 |
| Three compartment sinks | 35 |
| 2 single compartment sinks | 25 |
| 2 double compartment sinks | 35 |
| Dishwasher for restaurants: | |
| Up to 30 gallon water capacity | 15 |
| 30 to 50 gallon water capacity | 25 |
| 50 to 100 gallon water capacity | 40 |

E. <u>GREASE TRAP/INTERCEPTOR SIZING CHART.*</u>

| Total Rate of Flow GPM | Approximate Total Water Capacity | | Approximate Total Grease Capacity |
|------------------------|-------------------------------------|---------|--------------------------------------|
| | Cu.ft. | Gallons | Cu.Ft. |
| Less than 100 | 44 | 330 | 13 |
| 100-200 | 107 | 800 | 41 |
| 200-300 | 153 | 1145 | 57 |
| 300-400 | 200 | 1500 | 77 |

Alternate designs may be considered, based upon a minimum retention time of three minutes and a minimum total water capacity of 330 gallons. Other combinations of tank dimensions may be submitted for approval, provided that the alternate design shall have the same basic proportional dimensions, comparable volumes, and functional capabilities as outlined in the most recent "City of Cheyenne and Board of Public Utilities Construction Standards and Specifications"

V. <u>MAINTENANCE</u>.

1. All commercial/industrial users of the wastewater system shall be responsible for the proper removal and disposal of the material captured by their grease traps/interceptors. Grease traps/interceptors in food service/preparation facilities or other facilities referenced above in Section II: Scope, of these Rules and Regulations shall be cleaned or serviced at least quarterly and more frequently if determined necessary by the Industrial Pretreatment Program personnel to prevent pass through of grease into the wastewater collection system. Example: accumulation of grease in the user's sewer lines or the city sanitary sewer collection system past the grease traps/interceptors would be grounds for increased cleaning frequency. User will be notified in writing of increased cleaning requirements. Less frequent cleaning may be approved only after inspection and approval in writing from the BOPU Industrial Pretreatment Program personnel.

2. Users shall maintain records of the dates and means of disposal of waste removed from their grease traps/interceptors pursuant to City Code chapter 13.12.220. In addition, a copy of the record shall be sent to the following address within 2 weeks of completion of the cleaning;

Board of Public Utilities Attn: Industrial Pretreatment Program P.O. Box 1469 Cheyenne WY 82003

3. The collected waste material shall be disposed of in accordance with all applicable environmental and health regulations, including DEQ Solid Waste Guideline number 10, Laramie County Small Wastewater Regulations Chapter 1, Chapter 2; Design and Construction Standards for Small Wastewater Systems, and 40 CFR, Chapter 1, Subchapter I. A copy of the final disposal record shall be sent to the address referenced above. Waste removed from a user's grease trap/interceptor shall not be introduced into any sanitary or storm sewer at any location.

a. Collected materials from self-cleaning may be disposed of in the trash if it contains no free liquid or is in a sealed container.

b. Removal and hauling of the collected materials not performed by the user's personnel shall be performed by a waste hauler licensed by the Cheyenne/Laramie County Environmental Health Department.

4. The user shall allow BOPU personnel access at reasonable times to all parts of the premises for purposes of inspecting, sampling, record examination, or performance of any other BOPU duties.

5. The BOPU may suspend water service when necessary pursuant to City Code 13.12.230.

6. Biological/enzyme treatments shall not be substituted for the pumping of grease interceptors

at the frequency determined by these Rules and Regulations. VI. <u>GREASE TRAP/INTERCEPTOR CLEANING REQUIREMENTS</u>

Owners/Operators of facilities which are equipped with a grease trap/interceptor are responsible for regular cleaning and upkeep. The following requirements for grease trap cleaning are provided for all persons engaged in cleaning of grease traps and/or interceptors:

A. Cleaning: Outside Grease Interceptors.

1. All material in the interceptor shall be removed to the bottom of the tank. Sides shall be scraped or washed down with water and the scrapings or material washed down from the walls shall be removed. Inlet and outlet pipes shall be cleaned of grease buildup. Lids, seals and covers shall be replaced to prevent persons from accidentally falling into the interceptor.

2. Any material accidentally spilled on the ground during cleaning or removing grease shall be cleaned up prior to departure from the site.

B. Cleaning: Inside Grease Traps.

- 1. Equipment used to clean grease traps shall be clean prior to entering facility.
- 2. Lids shall be removed and seals inspected for damage or leakage.
- 3. All grease and sludge shall be removed to the bottom of the trap.
- 4. Sides and baffles shall be scraped of accumulated grease.
- 5. Chamber shall be rinsed with water (hot water recommended) and all water, grease and sludge removed.
- 6. Inlet and outlet pipes shall be checked and cleaned as necessary.
- 7. The seals and lid shall be replaced and secured to prevent persons from falling into the trap.
- 8. Any material removed from the trap shall not be introduced into the sanitary sewer or storm sewer.
- 9. Any material accidentally spilled on the floor during cleaning, transporting of equipment or removing grease shall be cleaned up prior to departure from the site.

C. If a grease trap is found to be inoperable, damaged or in such condition that it is unsafe or is failing to capture grease introduced into the trap, all steps necessary shall be taken to return the trap/interceptor to fully operable condition immediately.

D. Material pumped from grease traps shall be recycled or disposed of at an approved facility pursuant to City Code Chapter13.12.070.

E. After cleaning, the grease trap/interceptor shall be filled with fresh water.

VII. INSPECTION MANHOLES (MONITORING FACILITIES).

A. An inspection manhole (monitoring facility) shall be required on the service line of any commercial and/or industrial user subject to these Rules and Regulations. A petition for an exception can be made following the procedure set forth in Part II., Scope of these Rules and Regulations The inspection manhole shall allow for proper inspection, sampling, and flow measurement of the waste within the facility sewer. All wastewater from the facility shall flow through the inspection manhole.

B. The inspection manhole (monitoring facility) shall be installed on the user's premises. The BOPU in coordination with the City may allow the manhole to be constructed within the public right-of-way if installation on the User's premises is not possible.

C. The inspection manhole (monitoring facility) shall be located in such a manner as to allow easy access for inspection and sampling purposes.

D. The inspection manhole shall be designed to accommodate H 20 traffic loading. All manholes must be constructed to the requirements of the most recent "City of Cheyenne and Board of Public Utilities Construction Standards and Specifications