## **Appendix C**



## **Rules and Regulations Governing Wastewater Control**

Rule and Regulations propagated pursuant to City of Aurora Code of Ordinances Chapter 138 Article VI Section 138-263

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# Rules and Regulations Governing Wastewater Control

## I. General Information and Definitions

## A. Authority

These Rules and Regulations are issued by the General Manager of Aurora Water and the City of Aurora, Colorado (City), in accordance with, and are supplemental to Chapter 138 Article VI of the City of Aurora Municipal Code.

#### **B.** Effective Date

The Wastewater Rules and Regulations are effective on and after January 1, 2012, and supersede all former Rules and Regulations governing wastewater control.

## C. Purpose

These Rules and Regulations set forth uniform requirements for direct and indirect contributors to the wastewater collection and treatment system of the City and enables the City to comply with all requirements of the Metro Wastewater Reclamation District (District), applicable state laws and the general pre-treatment regulations issued pursuant to the Clean Water Act of 1977.

#### D. Amendments

These Rules and Regulations may be altered from time to time, and such alterations, changes, additions, or amendments shall be binding, and in full force effective as of the date of the filing and publication.

## E. Severability

In the event any provision of these Rules and Regulations or circumstances is held invalid, such invalidity shall not affect any other provision or application.

#### F. Definitions

In addition to the definitions set forth in Chapter 138, Article VI, of the City of Aurora Municipal Code entitled "Wastewater Control" and as used in these Rules and Regulations; unless the context clearly indicates otherwise, the present words and expressions shall be defined as follows:

**Acid Neutralization Unit** - a vessel made in various sizes and filled to a specified level with an approved acid-neutralizing agent through which acidic liquid wastes can be passed for acid neutralization.

**Best Management Practices or BMPs** - schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to reduce pollutants.

**Commercial User** - any non-domestic source discharging Pollutants into a Publicly Owned Treatment Works (POTW). Industrial Users fall under the commercial use category.

**Drainage Fixture Unit** - a rating in terms of gallons per minute (GPM) representing the maximum amount of water which can drain from a fixture or piece of equipment in one minute. The value of one drainage fixture unit (DFU) is equal to 7.5 GPM.

**Flow Equalization Unit** - a structure or structures with equipment or attachments for the purpose of delaying, detaining, equalizing or otherwise controlling the flow or discharge of wastewater from a premise through a building sewer into a public sewer.

FOG - Fats, oils and grease

**Food Preparation Establishment** - a commercial business or institution where food is prepared and intended for individual portion service and includes the site at which the individual portions are provided, whether consumption occurs on or off the premises. Additionally includes all food manufacturing and packaging facilities.

**Grease Interceptor** - typically a two compartment pre-cast concrete tank, interceptors are normally located outside of the building. The second compartment shall have 1/3 total capacity of the tank.

"In line" Grease Trap - a prefabricated unit for trapping of fats, oil, grease and food solids. Typically installed inside of the building, flush with the finish grade and located outside of the food prep area.

**Metro, District or Metro District** - means the Metro Wastewater Reclamation District (District) located at 6450 York Street, Denver, Colorado 80229. Wherever approval of or correspondence with the District is referred to, it shall mean the District Manager of the District unless otherwise specified.

**POTW or Publicly Owned Treatment Works** - means a treatment works which is owned in this by the Metro District or Aurora Water. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage and any sewers conveying wastewater to the Metro District or Aurora Water treatment plant. For the purposes of these Rules and Regulations, POTW shall also include any sewers conveying wastewaters to the POTW from persons outside the District or the City of Aurora who are users of the District or Aurora Water POTW.

**POTW Treatment Plant** - means the portion of the POTW designed to provide treatment to wastewater.

**Pre-treatment Device** - means an apparatus or method used to treat or remove pollutants from the wastewater stream such as grease interceptors, sand/oil interceptors, acid neutralization tanks, flow equalization units, etc.

**Pre-treatment Requirement or Requirement** - means any substantive or procedural requirement related to pre-treatment, other than a Pre-treatment Standard imposed on an Industrial User directly permitted by the Metro District.

**Private Sanitary Sewer Service Line** - the building sewer from the foundation to the publically maintained sewer main, including the tapping saddle or tee on the main.

**Production Units** - Units of measurement of a product or industry.

**Sampling** - A periodic collection of wastewater as it flows through a public or private sewer conveyance system.

**Sand and Oil Interceptors** – typically a two compartment pre-cast concrete tank, interceptors are normally located outside of the building. The second compartment shall have 1/3 total capacity of the tank.

**Significant Industrial User** - Significant Industrial User means:

- (a) Any Commercial/Industrial User subject to Categorical Pre-treatment Standards under 40 CFR §403.6 and 40 CFR Chapter I, Subchapter N;
- (b) Any Commercial/Industrial User designated as such by the Metro District on the basis that the Commercial/Industrial User has a reasonable potential for adversely affecting District operations or for violating any Pre-treatment Standard or Requirement;
- (c) Any Commercial/Industrial User discharging an average of 25,000 gallons per day or more of process wastewater to the sanitary sewer system (excluding sanitary, non-contact cooling, and boiler blowdown wastewater); and
- (d) Any Commercial/Industrial User discharging a process waste stream which makes up five percent (5%) or more of the average dry weather hydraulic or organic capacity of the Metro District's treatment plant.

Upon a finding a Commercial/Industrial User meeting the criteria in Paragraph (a) above never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pre-treatment Standards) the Metro District may determine the Commercial/Industrial User a Non-significant Categorical Commercial/Industrial User if the following conditions are met:

1. The Commercial/Industrial User, prior to the Metro District's finding, has consistently complied with all applicable categorical pre-treatment standards and requirements;

- 2. The Commercial/Industrial User annually submits the certification statement required in 403.12(q) together with any additional information necessary to support the certification statement: and
- 3. The Commercial/Industrial User never discharges any untreated concentrated wastewater. Upon a finding a Commercial/Industrial User meeting the criteria in paragraphs (b), (c), or (d) above has no reasonable potential for adversely affecting the Metro District's operation or for violating any Pre-treatment Standard or Requirement, the District may at any time, on its own initiative or in response to a petition received from a Municipality or Commercial/Industrial User, determine such Commercial/Industrial User is not a Significant Industrial User.

**Testing** - The analysis of wastewater.

**Wastewater Control Ordinance** - Operating regulations for the control of the use of the Aurora Municipal Wastewater Collection System, Treatment System, and Storm Drainage System known as Chapter 138, Article VI of the City of Aurora Municipal Code.

**Wastewater Pre-treatment Facilities** - Structures, devices or equipment, such as Grease and Sand/Oil Interceptors or Flow Equalization Units for the purpose of neutralizing or removing deleterious wastes from wastewater generated from a premise prior to its discharge into a public sewer.

## **II.** General Requirements

## A. Authority

Notwithstanding the issue of any permit, the City of Aurora reserves the full power and authority to determine all matters in connection with the control and use of its Wastewater Collection and Treatment Systems. Furthermore the General Manager of Aurora Water shall have the authority to suspend, modify or revoke, with cause any such permit in accordance with Chapter 138 of the City of Aurora Municipal Code.

## **B.** Commercial and Industrial Discharge Permits

## 1. Commercial Wastewater Discharge Permit

All commercial and industrial users contributing to or proposing to connect to, or change the nature or amount of discharge to the POTW shall provide to the City a Commercial Wastewater Discharge Permit Applications and Questionnaire before connecting to or discharging to the POTW.

## 2. Industrial Wastewater Discharge Permits

Significant Industrial Users are required to obtain an Industrial Wastewater Discharge Permit with Metro in accordance with Article VI, Division 1, Chapter 138-291 of the City of Aurora Code.

#### 3. Duration and Reissuance

Commercial wastewater discharge permits may be issued for a specified term or an indeterminate period of time. Industrial wastewater discharge permits shall be issued for a specified term not to exceed five (5) years, and may be issued for a period less than a year or may be stated to expire on a specific date. Each user shall apply for permit reissuance at least one hundred eighty (180) days prior to the expiration of the user's current commercial or industrial Wastewater Discharge Permit.

#### 4. Transferability

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 prior notification to and approval by the appropriate issuing authority. A copy of the existing permit must be provided to the prospective transferee prior to such transfer.

#### 5. Violation

It shall be unlawful for any user to violate or fail to comply with any condition of a Wastewater Discharge Permit.

(Code 1979, § 39-105(a); Ord. No. 2000-26, § 1, 4-24-2000; Ord. No. 2005-74, § 1, 10-10-2005)

#### C. Review of Plans

Location of pre-treatment facilities is reviewed with the Site Plan submittal to the Planning Department, and the Civil Plan submittal. Sizing of pre-treatment facilities is reviewed with the Building Plan submittal. If either of these submittals is not required, it is the responsibility of the generator and his/her contractor to contact Aurora Water Engineering for approval of the facility.

Aurora Water Engineering may request additional plans and information which may be needed to determine the impact on the wastewater collection system of the proposed waste(s) and the size of the wastewater pre-treatment facilities which may be required.

In the event it becomes necessary for the General Manager of Aurora Water to require an existing business or industrial user to install suitable wastewater pre-treatment and/or flow equalization units, a written explanation for the requirement shall be furnished to the owner or the authorized agent thereof. Such a requirement may arise when it becomes apparent waste discharged from the business or industry is in violation of the City Code and/or may cause harm to the public sewer system, persons entering the sewer system to perform maintenance, the treatment process, the POTW, and/or the environment. The request shall be based on one of the following determinations:

- a) **Direct sampling.** Direct sampling shall be used wherever possible. A sample taken at a control structure shall be analyzed as prescribed by Chapter 138 of the Wastewater Control Ordinance.
- b) Comparisons. When direct sampling is not possible, comparison with another similar

process, the composition and/or volume of the wastewater being known to be of a similar nature to of the business or industry in question, shall be used.

**Best Judgment.** Best judgment shall be made where it is not possible to sample and where a similar process to which a comparison does not exist. Best judgment shall be based on reasonable knowledge of the processes involved, the nature of the wastewaters produced by such processes and the amount of water consumption.

## **D.** City Notifications

The owners of any establishment requiring a wastewater pre-treatment facility shall notify Aurora Water Engineering as follows:

- A. Prior to the construction of a new business or facility requiring a wastewater pre-treatment device
- B. Upon change or transfer in ownership of a business requiring a wastewater pretreatment device
- C. Upon a significant change in process and operations, including change in the menu of a food establishment resulting in a substantial increase the use and discharge to the wastewater collection system of fats, oil and grease, which otherwise changes the quantity, quality and/or content of wastewater discharges.
- D. Upon any change in the type or size of such facility which would dictate a deviation from the plumbing plans.
- E. Upon installation of the new wastewater pre-treatment facility prior to the water test of the plumbing system for onsite review and approval of the facility.
- F. Upon the decommissioning or abandonment of an existing pre- treatment device.

## **E.** Discharge Limitations on Wastewater

Wastewater shall not contain or exhibit the characteristics as set forth in Section 6 of the Metro Wastewater Reclamation District Rules and Regulations or as set forth in Article VI, Division 1, Chapter 138-263 of the City of Aurora Code. In the event here multiple discharge limitations exist for the same contaminant, the most stringent limitation shall apply.

Notwithstanding the provisions of this Section, the General Manager of Aurora Water may, on a case by case basis, require more stringent limitations in a wastewater discharge permit, issued to a particular user, to prevent interruptions of service, increased maintenance for the City, or any other interference with the operation of the system.

## F. Storm Sewer and Storm Drainage System Connections

No direct physical connection from any storm drainage pipe or system shall be allowed into the wastewater collection system.

#### G. Abandonment of Wastewater Pre-treatment Devices

- 1. In the event the use of a building changes where no wastewater pre-treatment of wastes is needed or required, the abandoned devices shall be pumped and cleaned of accumulated material and: Disconnected from service; removed from the ground and hauled away for proper disposal or: Disconnected from service, filled with sand or other approved material and bypassed.
- 2. As an abandoned wastewater pre-treatment device may constitute a danger to those in the area and/or the public sewer system, improper abandonment shall be considered a violation of Chapter 138 of Aurora Municipal Code and will be grounds for issuance of a Notice of Violation or Summons and Complaint by Aurora Water.
- 3. Proper abandonment shall be considered the responsibility of the present owner(s) or tenant(s).
- 4. All wastewater pre-treatment unit abandonment activities must be approved and inspected by Aurora Water Engineering Division.

#### H. Notification of Violations

- 1. Failure to maintain any wastewater pre-treatment facility in efficient working condition shall constitute a violation of the Wastewater Control Ordinance Chapter 138.
- 2. Any unauthorized alteration or damage to any wastewater pre-treatment facility or method shall constitute a violation of the Wastewater Control Ordinance Chapter 138.
- 3. When a violation to the Wastewater Control Ordinance, these Rules and Regulations, Wastewater Discharge Permit or any applicable Code or Rules and Regulations is determined to exist, the General Manager of Aurora Water or his/her authorized agent shall issue to the responsible person a notice of violation. This notice shall contain at least the following:
  - A. The name of the person cited for the violation.
  - B. Location of the violation.
  - C. Details of the violation.
  - D. Corrective action to be taken by the cited person.
  - E. Time limit for the corrective action to be taken.
  - F. Penalty for non-compliance.
  - G. Statement on alternative immediate action available to the City in accordance with Chapter 138 of the Wastewater Control Ordinance.
- 4. Should the violation still exist after the time limit on the notice to comply has elapsed, the General Manager of Aurora Water or the authorized representative may invoke legal actions as provided for in Wastewater Control ordinance Chapter 138.

## **III.** Typical Grease Interceptors

All interceptors shall be installed in accordance with Detail #303, Appendix A; <u>Standards and Specifications Regarding Water</u>, <u>Sanitary Sewer and Storm Drainage Infrastructure</u>, latest revision.

## A. Applicability

- 1. Grease Interceptors shall be required for all food preparation establishments (cafes, fast food outlets, pizza outlets, delicatessens, sandwich shops, coffee shops), animal slaughter houses, soap factories, tallow/fat rendering establishments, hide curing establishments, schools, nursing homes; and others establishments capable of discharging fats, oil and grease into the City of Aurora Sanitary Sewer Collection System.
- 2. Grease interceptors required by these rules and regulations shall be installed unless the City determines the installation of a grease interceptor would not be feasible due to space constraints. The facility bears the burden of demonstrating the installation of a grease interceptor is not feasible and the variance will not lead to violations of these rules and regulations. Any food preparation establishment granted a variance from a grease interceptor requirement shall implement Best Management Practices per these rules and regulations such that an equivalent level of treatment is achieved.
- 3. Grease interceptors will not be required for private residences or dwellings.

#### **B.** Materials and Structures

- 1. All interceptors shall be located outside, on private property whenever possible within thirty feet (30') of the facility served. The location of a food establishment above the first floor of its respective building shall not be considered sufficient reason to eliminate the requirement for a grease interceptor.
- 2. All interceptors shall be pre-cast concrete and have two (2) compartments, the smallest which shall have at least 1/3 the capacity of the entire interceptor.

## C. Sizing

It is the responsibility of the generator and his/her contractors and consultants to ensure the wastewater discharge from their facility is in compliance with the City's discharge limitations. For the purpose of plan review, a general assessment of grease interceptor design will be performed using the following formulas:

#### Method 1: 2006 UPC Formula

Meals per	Waste	Retention	Storage	Capacity	Interceptor
Peak Hour	Flow Rate	Time	Factor	(gal)	Size (gal)
(1)	X (2)	X (3)	X (4)	= (5)	

## Step 1 – Meals per Peak Hour = Seating Capacity X Meal Factor

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Fast Food (45 min)	1.33
Restaurant (60 min)	
Leisure Dining (90 min)	
Dinner Club (120 min)	0.50

#### Step 2 – Waste Flow Rate:

With Dishwasher	6 gallon flow
Without Dishwasher	5 gallon flow
Single Service Kitchen	2 gallon flow
Food Waste Disposer	1 gallon flow

#### Step 3 – Retention Time

Commercial kitchen waste/dishwasher	.2.5 hours
Single service kitchen	.1.5 hours

#### **Step 4 – Storage Factor**

Commercial kitchen – 8 hour operation	1
Commercial kitchen – 16 hour operation	2
Commercial kitchen – 24 hour operation	3
Single service kitchen	1.5

#### Step 5 - Capacity

Multiply values from Steps 1-4. The result is the minimum approximate grease interceptor size for this application.

## **Method 2: Drainage Fixture Unit Calculation**

Where food is prepared, but as a general rule not consumed on the premises, or where seating capacity or number or meals served cannot adequately be determined, the following rule shall apply:

The following table establishes the drainage fixture unit values for various pieces of kitchen equipment, which may require connection to a grease interceptor. One drainage fixture unit shall equal 7.5 GPM. The total number of drainage fixture units shall be multiplied by 7.5 GPM to determine maximum rate of flow (GPM) possible into the grease interceptor. The volumetric capacity of the unit shall be five times the maximum rate of flow.

#### **Fixture Unit Values**

Type of Fixture	Fixture Unit
Value	
Clothes Washer	3
Combination Sink and Tray with Food Waste Grinder	4
Combination Sink and Tray with one 1 ½ Inch Trap	2
Combination Sink and Tray with Separate 1 ½ Inch Traps	3

Pot or Scullery Sink	4
Prep Sink	
Service Sink (Standard Trap)	
Service Sink (P Trap)	2
All Other Fixtures:	
1 ¼ Inch or less Trap Size	
1 ½ Inch Trap Size	2
2 Inch Trap Size	
2 ½ Inch Trap Size	
3 Inch Trap Size	
4 Inch Trap Size	

Example: A total of twenty-one (21) fixture units are to be discharged to a grease interceptor. 21 F.U. x 7.5GPM x 5 minute retention = 787.5 gallons.

#### **Method 3: for Schools (Public and Private)**

The sizing of grease interceptors for school kitchens shall be as follows:

Number of students x .6 (average daily participation) x 2.5 gallons per meal served equals volumetric capacity of grease interceptor. Example: 650 students x .6 ADP = 390 meals. 390 meals x 2.5 gallons/meal = 975 gallons.

School wastewater pre-treatment units shall be in accordance with the City of Aurora Standards.

## D. Maintenance and Inspections

- 1. Periodic operations and maintenance inspections are performed by Aurora Water to ensure compliance with the Wastewater Control Ordinance, these Rules and Regulations, and Wastewater Discharge Permits. It shall be the responsibility of those engaged in the operation of a business (commercial or industrial) activity to maintain their associated wastewater pre-treatment facilities in efficient functioning order.
- 2. Grease Interceptors shall be pumped and cleaned of their accumulated matter quarterly or as often as necessary to ensure maximum efficiency and to prevent non-compliance with applicable discharge limitations.
- 3. A grease interceptor is deemed to require service when settled solids and FOG exceed twenty-five percent (25%) of the liquid capacity of either compartment of the tank.
- 4. Aurora Water may require a business to maintain a specific grease interceptor pumping and cleaning interval based on observed problems or non-compliance related to grease production, accumulation and wastewater discharges.
- 5. Grease interceptor pumping, cleaning and hauling service companies hired to perform work for food preparation establishments in the City of Aurora must be properly accredited and licensed according to Colorado state law.

- 6. Maintenance and pumping records must be kept onsite for a minimum of three (3) years. Aurora Water reserves the right to require a business to routinely submit maintenance and pumping records to the City.
- 7. Partial cleaning of grease interceptors is not allowed.
- 8. Biological, enzymatic, and chemical treatments of wastewater flows are not allowed.
- 9. Access to wastewater pre-treatment facilities shall remain unobstructed at all times. The removal of large objects such as boxes, crates, cans, etc. or the need for a ladder to inspect a wastewater pre-treatment facility shall constitute a violation of Wastewater Control Ordinance Section 138-292 (d)

## E. Kitchen Best Management Practices (BMP)

Kitchen BMPs benefit food preparation establishments by preventing grease discharges and keeping interceptor maintenance costs low.

#### 1. BMPs for Food Preparation Establishments

All food preparation establishments are required to follow kitchen Best Management Practices (BMP), including, but not limited to the following:

- A. Regularly train all employees on fats, oil and grease control and management.
- B. Prevent grease from entering drainage fixture units.
- C. Excess food waste and grease must be scraped off plates prior to washing.
- D. Food waste must be disposed of in the garbage.
- E. Drain screens must be installed on all drainage fixture units.
- F. Cooking grease (yellow grease) must be collected and recycled.

#### 2. Additional BMPs for Kitchens with food waste grinders

Drains associated with food waste grinders must be plumbed to the Grease Interceptor. A solids interceptor shall separate the discharge upstream of the grease interceptor where food waste grinders are installed.

## IV. In-Line Grease Traps

All grease traps shall be installed in accordance with the manufacturer's and City specifications.

## A. Applicability

In-line grease traps shall be allowed by the Aurora Water Department only where it is determined by the Department to be impractical to install a larger grease interceptor. Installation of in-line grease traps in lieu of grease interceptors requires written approval by the Aurora Water Department.

## **B.** Sizing

Grease traps shall have the grease retention capacity indicated below:

Total Flow Through Rating (gpm)	Grease Retention Capacity (pounds)
1-20	40
25	50
35	70
50	100

#### C. Materials and Structures

- 1. Each in-line grease trap shall be constructed of durable materials satisfactory with the Aurora Water Department, and shall have a full gas-tight cover, which can be easily and readily removed.
- 2. Water-jacketed grease traps shall not be approved or installed.
- 3. Each in-line grease trap shall have an approved water seal of not less than two inches (2") in depth or the diameter of its outlet, whichever is greater.

## D. Maintenance and Inspections

- 1. Periodic operations and maintenance inspections shall be performed by Aurora Water to ensure compliance with the Wastewater Control Ordinance, these Rules and Regulations, and Wastewater Discharge Permits. It shall be the responsibility of those engaged in the operation of a business (commercial or industrial) activity to maintain their associated wastewater pre-treatment facilities in efficient functioning order.
- 2. In-line grease traps shall be cleaned of their accumulated matter as often as necessary to ensure maximum efficiency and to prevent non-compliance with applicable discharge limitations.
- 3. An in-line grease trap is shall require service when settled solids and FOG exceed twenty-five percent (25%) of the liquid capacity of the tank.
- 4. Aurora Water may require a business to maintain a specific in-line grease trap cleaning interval based on observed problems or non-compliance related to grease production, accumulation and wastewater discharges.
- 5. Maintenance records must be kept onsite for a minimum of three (3) years. Aurora Water reserves the right to require a business to routinely submit maintenance records to the City.
- 6. Grease trap cleaning and hauling service companies hired to perform work for food service establishments in the City of Aurora must be properly accredited and licensed according to Colorado state law.
- 7. Partial cleaning of in-line grease traps is not allowed.

- 8. Biological, enzymatic, chemical treatments of wastewater flows are not allowed.
- 9. Access to wastewater pre-treatment facilities shall remain unobstructed at all times. The removal of large objects such as boxes, crates, cans, etc. or the need for a ladder to inspect a wastewater pre-treatment facility shall constitute a violation of Wastewater Control Ordinance Section 138-292 (d).

## V. Flow Equalization Units

All flow equalizer units shall be installed in accordance with the standard drawings of the City of Aurora.

## A. Applicability

- 1. These rules and regulations shall apply to all types of car or truck washing facilities, and other users of the collection system capable of discharging large volumes of wastewater. Plans for these facilities and operation shall be submitted to the Aurora Water Department for approval of the type and size of the wastewater pre-treatment facility which may be required and to determine the need for a wastewater holding tank.
- 2. Businesses washing five (5) cars or less per day shall not be required to install wastewater holding tanks. They shall, however, be required to install an approved sand/oil interceptor.

#### B. Materials and Structures

#### 1. Tank

The need for a storage tank (holding tank) shall be based on actual or anticipated flows in the wastewater collection system at the point of connection and downstream so as to avoid sewer line surcharge. In the event such a tank is required, it shall have the following characteristics:

The storage tank shall have the capacity to hold one day's (24 hours) output of wastewater. It shall be the responsibility of the owner to ensure the adequacy of the storage tank.

#### 2. Bypass

Under no circumstances shall by-pass connection be installed between the washing operation and the sanitary sewer.

#### 3. Pump

A submersible sump pump with the capacity to drain the storage tank during a five (5) to six (6) hour period and, approved by the building division shall be installed. The maximum flow of the pump shall not exceed two hundred twenty-five (225) GPM.

The submersible pump shall be controlled by a timing device which shall allow the pump to operate during the period of 12:00 midnight to 6:00 a.m. Consequently, no more than 81,000 gallons of wastewater may be discharged during this six (6) hour period. Manual controls shall not be allowed and the control panel shall be locked at all times. The City reserves the right to place a lead seal on the timer box door.

#### 4. Timer and Seal

Any time a seal must be broken in order to perform emergency repairs on the timer, and after the repairs have been completed, the seal shall be replaced by the Aurora Water Department.

It shall be unlawful to remove a seal on the timer control box in order to change the hour at which the pump is to operate. Penalties shall be in accordance with Section 138 of the City Code.

## C. Maintenance and Inspections

- 1. Periodic operations and maintenance inspections shall be performed by Aurora Water to ensure compliance with the Wastewater Control Ordinance, these Rules and Regulations, and Wastewater Discharge Permits. It shall be the responsibility of those engaged in the operation of a business (commercial or industrial) activity to maintain their associated wastewater pre-treatment facilities in efficient functioning order.
- 2. All flow equalization devices (holding tanks) and other wastewater pre-treatment facilities not specifically mentioned here must be inspected annually (1 year) by their respective owners. Maintenance and inspection records must be retained on site for a minimum of three (3) years.
- 3. Partial cleaning is not allowed.
- 4. Access to wastewater pre-treatment facilities shall remain unobstructed at all times. The removal of large objects such as boxes, crates, cans, etc. or the need for a ladder to inspect a wastewater pre-treatment facility shall constitute a violation of Wastewater Control Ordinance Section 138-292 (d).

#### VI. Acid Neutralization

All acid neutralization tanks shall be installed in accordance with Detail #305, Appendix A; Standards and Specifications Regarding Water, Sanitary Sewer and Storm Drainage Infrastructure, latest revision.

#### A. Applicability

Those individuals engaged in activities where acids are used, or stored shall be required to install and maintain acid neutralization wastewater pre-treatment units. Only those drains which may receive acids intentionally or accidentally shall be connected to the neutralization unit.

#### B. Materials and Structures

Acid neutralization units shall be made of vitrified clay, high-density polyethylene, polypropylene or other material specified by a manufacturer for a specific application and approved by the General Manager of Aurora Water.

Concrete units lined with "acid resistant materials" shall not be approved.

#### 1. Neutralization Media

Limestone chips or lumps are used in most acid wastewater pre-treatment units. These chips or lumps shall not be less than one inch (1") or greater than three inches (3") in any dimension.

#### 2. Other Chemical Wastewater Pre-treatment Methods

Other chemical wastewater pre-treatment methods exist and may be approved by the City of Aurora upon demonstration they are safe, conform to all applicable standards, and produce an effluent which is acceptable to the City of Aurora. These methods will be reviewed on a case-by-case basis and require written approval by Aurora Water prior to being installed or implemented.

#### C. Sizing

Sizing of any acid neutralization unit shall be reviewed by Aurora Water and shall be as follows:

The number of sinks x 3.75 gallons per sink = Volumetric capacity of the unit (nearest size up).

In case a sink has more than one (1) compartment, each compartment shall be considered a separate sink.

The smallest acid neutralization tank allowed shall be a five (5) gallon capacity unit.

#### D. Maintenance and Inspections

- 1. Periodic operations and maintenance inspections shall be performed by Aurora Water to ensure compliance with the Wastewater Control Ordinance, these Rules and Regulations, and Wastewater Discharge Permits. It shall be the responsibility of those engaged in the operation of a business (commercial or industrial) activity to maintain their associated wastewater pre-treatment facilities in efficient functioning order.
- 2. Acid Neutralization units shall be inspected by their owners at least quarterly (3 months) to ensure the neutralization media is at its prescribed level. Maintenance and inspection records must be retained on site for a minimum of three (3) years.
- 3. Partial cleaning is not allowed.
- 4. Access to wastewater pre-treatment facilities shall remain unobstructed at all times. The removal of large objects such as boxes, crates, cans, etc. or the need for a ladder to inspect a wastewater pre-treatment facility shall constitute a violation of Wastewater Control Ordinance Section 138-292 (d).

## VII. Typical Sand and Oil Interceptors

All interceptors shall be installed in accordance with Detail #304, Appendix A; <u>Standards and Specifications Regarding Water</u>, <u>Sanitary Sewer and Storm Drainage Infrastructure</u>, latest revision.

#### **Applicability**

- 1. These Rules and Regulations shall apply to automotive/recreational service stations, truck or car wash facilities, vehicle maintenance facilities, mechanical repair shops, garden nurseries, warehouses, parking garages, machine shops, and other facilities where sand, oil, and/or hazardous wastes could enter the public sewer system.
- 2. Users with an elevator pit must either install a sand/oil interceptor or implement one of the other options outlined in Section IX of these Rules and Regulations.

#### A. Materials and Structures

1. All sand and oil interceptors shall be two compartment, pre-cast concrete tanks. The smallest compartment shall have 1/3 the capacity of the entire interceptor.

#### B. Location

All sand and oil interceptors shall be located outside, on private property, within thirty feet (30') and not less than five feet (5') from the facility served, unless otherwise approved by the General Manager of Aurora Water, and shall be accessible at all times for maintenance and inspection.

## C. Sizing

No combination sand and oil interceptor smaller than seven hundred fifty (750) gallon capacity shall be installed at a single bay facility.

The sizing shall be reviewed by the Aurora Water Department and shall be as follows: Three inch (3") diameter flow drains are rated at six (6) drainage fixture units (DFU) Four inch (4") diameter flow drains are rated at eight (8) DFU

Sizing formula shall be as follows:

DFU connected X 7.5 GPM X 5 minutes = Interceptor Size.

#### 1. Trough Drains

Where trough drains are used, each bay, or compartment, or area equaling the square foot surface of a standard service station bay which is served by a trough drain shall be rated at six (6) DFU per bay.

#### 2. Vehicle Wash Drains

Vehicle wash drains will be rated at eight (8) DFU each regardless of size.

#### D. Maintenance and Inspections

- 1. Periodic operations and maintenance inspections shall be performed by Aurora Water to ensure compliance with the Wastewater Control Ordinance, these Rules and Regulations, and Wastewater Discharge Permits. It shall be the responsibility of those engaged in the operation of a business (commercial or industrial) activity to maintain their associated wastewater pre-treatment facilities in efficient functioning order.
- 2. Sand/oil interceptors shall be pumped and cleaned of their accumulated matter as often as necessary to ensure maximum efficiency and to prevent non-compliance with applicable discharge limitations.
- 3. A sand/oil interceptor is shall require service when settled solids and floating oil exceed twenty-five percent (25%) of the liquid capacity of either compartment of the tank
- 4. Aurora Water may require a business to maintain a specific sand/oil interceptor pumping and cleaning interval based on observed problems or non-compliance related to sand/oil production, accumulation and wastewater discharges.
- 5. Interceptor pumping, cleaning and hauling service companies hired to perform work for businesses in the City of Aurora must be properly accredited and licensed according to Colorado state law.
- 6. Maintenance and pumping records must be kept onsite for a minimum of three (3) years. Aurora Water reserves the right to require a business to routinely submit maintenance and pumping records to the City.
- 7. Partial cleaning of sand/oil interceptors is not allowed.
- 8. Biological, enzymatic, chemical treatments of wastewater flows are not allowed.
- 9. Access to wastewater pre-treatment devices shall remain unobstructed at all times. The removal of large objects such as boxes, crates, cans, etc. or the need for a ladder to inspect a wastewater pre-treatment facility shall constitute a violation of Wastewater Control Ordinance Section 138-292 (d)

## **VIII. Trailer Courts and Mobile Home Parks**

- 1. All lot sanitary sewer drain inlets shall be extended not more than four inches (4") above ground. Mobile home lot drain inlets and extensions to grade shall be of material approved for underground use within a building.
- 2. All material used for sewer connections between a mobile home and the sanitary sewer inlet shall be rigid, corrosion resistant, non-absorbent, and durable. The inner surface shall be smooth.
- 3. Provisions shall be made for plugging or capping the lot sanitary sewer inlet when a mobile home does not occupy the lot.
- 4. Connections from the sanitary sewer drain outlet to the sanitary sewer lot drain inlet

shall be water and airtight. When a mobile home lot is vacant, the drain on the lot shall be capped, so as to be water and airtight.

#### IX. Elevator Pits

New users with elevator pits shall not have drains in those elevator pits connected directly to the sanitary sewer. Sump pumps may be installed in elevator pits. The requirement for a sump pump to be installed is to be determined by the building engineer, architect, or equivalent and/or as required by the local building authority.

In the event it is determined a sump pump shall be installed, there are three (3) options to manage the discharge of accumulated wastewater from the sump:

- 1. If a sand/oil interceptor is already required in the facility (e.g., a parking garage, maintenance garage, or warehouse where floor drains are present), then the sump pump outlet may be plumbed through the sand/oil interceptor. A sand/oil interceptor may not be installed for the sole purpose of draining the elevator pit, because not enough wastewater will pass through the sand/oil interceptor to allow it to function as designed.
- 2. If a sump pump is to be plumbed to the sanitary sewer and a sand/oil interceptor is not required based on other infrastructure, an oil detector shall be installed which will shut-off the flow of wastewater and sound an alarm in the event oil is detected in the wastewater. In the event the oil detector shuts off wastewater flow and the alarm sounds, the wastewater in the elevator pit shall be handled as discussed below.
- 3. If the sump pump is not to be plumbed directly to the sanitary sewer, it may be plumbed to a holding reservoir. The size and structure of the holding reservoir is to be determined by the building engineer, architect, or equivalent and/or as required by the local building authority. Wastewater in the holding reservoir shall be handled as discussed below.
- 4. Wastewater may be continuously discharged to the sanitary sewer via a sump pump if the required oil detector described above is installed and maintained in working order. Below are approved options for handling wastewater in elevator pits where the oil detector alarm has been activated, wastewater accumulated at the bottom of a sump where there is no pump and no discharge, or wastewater in a holding reservoir:
- 5. If the wastewater is to be discharged to the sanitary sewer, oil on the top of the water must be skimmed off or absorbed using oil absorbent pads or equivalent and disposed of by an appropriate waste hauler. Following removal of the oil, if the wastewater is in an elevator pit, the remaining wastewater may be discharged to the sanitary sewer via the sump pump. If the wastewater is in a holding reservoir or at the bottom of a sump where there is no pump and no discharge, the wastewater may then be discharged to the sanitary sewer via appropriate means (i.e. hose, bucket transport, etc.).
- 6. Wastewater in either the elevator pit or holding reservoir may be containerized and hauled off-site by an appropriate waste hauler.

7. If the volume of wastewater accumulating in the bottom of a sump where there is no pump and no discharge or in a holding reservoir is limited and does not require discharge to the sanitary sewer or off-site disposal, the wastewater may be allowed to evaporate.

## X. Venting

Where the venting of an interceptor is connected to building vent piping, the authority of the Aurora Water Department will stop just prior to this connection and vent piping shall be constructed per Aurora Building Division requirements

#### A. Vents not required

Where permitted by the Aurora Water Department, vent piping may be omitted on an interceptor when such interceptor acts as a primary settling tank and discharges through a horizontal indirect waste pipe into a secondary interceptor. The second interceptor shall be properly trapped and vented.

#### B. Materials

- 1. Vent pipe shall be cast iron, galvanized steel, galvanized wrought iron, lead, copper or brass. Where combustible construction is allowed, ABS and PVC vent pipe will be approved.
- 2. No galvanized wrought iron or galvanized steel pipe shall be used underground, but shall be kept at least six inches (6") above the ground.
- 3. Vent fittings shall be cast iron, galvanized steel, galvanized malleable iron, lead, copper, brass, ABS, PVC, except no galvanized iron or galvanized steel fitting shall be used underground but shall be kept at least six inches (6") above the ground.
- 4. Changes in direction of vent piping shall be made by the appropriate use of approved fittings and no such pipe shall be strained or bent. Burred ends shall be reamed to the full bore of the pipe.

#### C. Size of Vents

The size of vent piping shall be determined from its length and the total number of fixture units connected thereto, as set forth below.

A vent may exceed 1/3 of the maximum horizontal length as limited by Table 3 only if the vent is increased one (1) pipe size for its entire length.

#### D. Vent Pipe Grades and Connections

- 1. All vent and branch vent pipes shall be free from drops or sags and each such vent shall be level or shall be so graded and connected as to drip back by gravity to the drain pipe it serves.
- 2. Where vents connect to a horizontal drainpipe, each vent pipe shall be taken off the centerline of such pipe ahead of the trap being served.

- 3. Unless prohibited by structural conditions, each vent shall rise vertically to a point not less than six inches (6") above the flood level rim of the fixture served before offsetting horizontally, and whenever two (2) or more vent pipes converge, each such vent pipe shall rise to a point at least six inches (6") in height above the flood level rim of the plumbing fixture its served before being connected to any other vent. When horizontal vents are less than six inches (6") above flood level rim of the fixture, the horizontal portion shall be installed with approved drainage material.
- 4. All vent pipes shall extend undiminished in size above the roof, or shall be reconnected with a soil or waste vent of proper size. Weather heads will not be allowed.

#### E. Vent Termination

- 1. Each vent pipe or stack shall extend through its flashing and shall terminate vertically not less than ten inches (10") above the roof nor less than one foot (1') from any vertical surface.
- 2. Each vent shall terminate not less than ten feet (10') from or at least three feet (3') above any window, door, opening, air intake, or vent shaft, nor less than three feet (3') in any direction from any lot line; alley and street.
- 3. Vent pipes shall be extended separately or combined of full required size, not less than ten inches (10") above the roof or firewall.
- 4. Vent pipes for outdoor installations shall extend at least ten feet (10') above the surrounding ground and shall be securely supported.
- 5. Joints around vent pipes shall be made watertight by the use of approved flashing or flashing material.

#### **Venting for Grease and Combination Sand and Oil Interceptors**

Pipe Size	Max. Drainage Fixture Units	Max. Lengths
1 ½"	1	45
1 ½"	8 (1)	60
2" (Min exterior vent size	) 24	120
2 ½"	48	160
3" (2)	84	212
4"	256	300
5"	600	390
6"	1380	510

Note: (1) Except six (6) unit traps.

(2) Minimum pipe diameter of inlet and outlet of Type A, B, and C grease interceptors, Type A and B combination Sand and Oil Interceptors.

Note: The diameter of an individual vent shall not be less than one and one fourth inches  $(1\frac{1}{4})$  nor less than one-half of the diameter of the drain to which it is connected.

## **XI.** Swimming Pools

These Rules and Regulations shall apply to discharges from swimming pools and all those private individuals, commercial and industrial firms. Swimming pool discharges are not allowed to enter the public sanitary sewer system unless approved by the General Manger of Aurora Water per Wastewater Control Ordinance Section 138-263 (c).

Any persons discharging swimming pool water to the storm or sanitary sewer system must first notify the Aurora Water Department by calling 303-326-8645.

Discharges of swimming pool water from pools other than residential pools may be subject to discharge permitting requirements of the state of Colorado. More information may be obtained from Water Quality Control Division of the Colorado Department of Public Health and the Environment (CDPHE) 303-692-2000.

Aurora Water accepts no responsibility for damage resulting from the discharging of any swimming pool water. Any variation from this procedure will be considered a direct violation of Chapter 138 of Aurora Municipal Code and will be grounds for issuance of a Notice of Violation or Summons and Complaint by Aurora Water.

#### A. Discharge to the Sanitary Sewer

- 1. Discharges of swimming pool water to the sanitary sewer system may require preauthorization from the Metro Wastewater Reclamation District 303-286-3000.
- 2. Backwash filter wastewater discharge shall be connected only to the sanitary sewer.
- 3. Wastewater pre-treatment prior to discharge may be required.
- 4. Draining pools to the sanitary sewer shall be accomplished only between the hours of 12:00 midnight and 6:00 a.m., or at a time established by the General Manager of Aurora Water.
- 5. The drain from the pool shall be permanently controlled to discharge no more than 0.5 cubic feet per second or two hundred twenty-five (225) gpm.

#### B. Discharge to the Storm Sewer

- 1. Swimming pool discharges shall not have a physical connection to the storm drain system.
- 2. All discharges of swimming pool water to the storm drain system must be dechlorinated and filtered.
- 3. No swimming pool water shall be discharged where it will empty into a public right of way at a rate exceeding two hundred twenty-five (225) gpm, or at any rate which endangers property of other owners.
- 4. No pool wastewater shall be discharged into the public right of way during freezing weather.

5. Pool water may be discharge to a vegetated area of the owner's property as long as neighboring properties are not adversely impacted, the discharge is diverted away from building foundations, and it does not cause erosion or nuisance conditions.

# XII. Metro Wastewater Reclamation District Discharge Limitations – Excerpt from Section 6, Rules and regulations Governing the Operation, Use and Services of the System

#### 6.13 General Requirements Regarding Deleterious Wastes

None of the following described sewage, water, substances, materials or waste shall be discharged into the Metro District's (District) system or the sewer system of any municipality by any Industrial User. These requirements and prohibitions may be imposed directly on process wastewaters prior to dilution by domestic and other wastewaters discharged by the Industrial Users. Site-specific limitations and/or Best Management Practices (BMPs) may be developed and imposed on Industrial Users to ensure compliance with these *Rules and Regulations*.

- 1. Sewage of such a nature and delivered at such a rate as to impair the hydraulic capacity of the system, normal and reasonable wear and usage expected.
- 2. Sewage of such a quantity, quality, or other nature as to impair the strength or the durability of the sewer structures, equipment or treatment works, either by chemical or by mechanical action.
- 3. Sewage having a flash point lower than one hundred eighty-seven degrees (187°)F, as determined by the test methods specified in 40 CFR §261.21.
- 4. Any radioactive substance, the discharge of which, does not comply with Section RH 4.35 of the Colorado *Rules and Regulations* pertaining to Radiation Control (Volume 6 of the Code of Colorado Regulations, 6 CCR 1007-1, Part 4, et seq.).
- 5. Any garbage other than that received directly into the sewer system of a municipality from domestic and commercial garbage grinders in dwellings, restaurants, hotels, stores, and institutions, by which such garbage has been shredded to such a degree so all particles will be carried freely under flow conditions normally prevailing in public sewers with no particle greater than one half inch  $(\frac{1}{2})$  in any dimension.
- 6. Any night soil or septic tank pumpage, except by permit in writing from the Metro District at such points and under such conditions as the District may stipulate in each permit.
- 7. Sludge or other material from sewage or industrial waste treatment plants or from water treatment plants, except such sludge or other material, the discharge of which to the system shall be governed by the provisions of this agreement herein set forth or as otherwise authorized by the Metro District.
- 8. Water which has been used for cooling or heat transfer purposes without

recirculation, discharged from any system of condensation, air conditioning, refrigeration, or similar use.

- 9. Water accumulated in excavations or accumulated as the result of grading, water taken from the ground by well points, or any other drainage associated with construction.
- 10. Any water or wastes containing grease or oil and other substances which will solidify or become discernibly viscous at temperatures between thirty-two degrees (32°)F and one hundred fifty degrees (150°)F except by permit in writing from the Metro District at such points and under such conditions as the District may stipulate in each permit.
- 11. Any wastes containing a corrosive, noxious, or malodorous material or substance which, either singly or by reaction with other wastes, is capable of causing damage to the System or to any part thereof, of creating a public nuisance, or a hazard, or of preventing entry into the sewers for maintenance and repair.
- 12. Any wastes containing concentrated dye wastes or other wastes which are either highly colored or could become highly colored by reacting with any other wastes, except by permission of the Metro District.
- 13. Any wastes which are unusual in composition; i.e., contain an extremely large amount of suspended solids or BOD; are high in dissolved solids such as sodium chloride, calcium chloride, or sodium sulfate; contain substances conducive to creating tastes or odors in drinking water supplies; otherwise make such waters unpalatable even after conventional water purification treatment; or are in any other way extremely unusual unless the Metro District determines such wastes may be admitted to the system or shall be modified or treated before being so admitted.
- 14. Any substance which may cause the Metro District's effluent or any other product of the District such as residues, sludges or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case, shall a substance discharged to the system cause the District to be in non-compliance with sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Federal Water Pollution Control 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 Sub-stances Control Act, or State criteria applicable to the sludge management method being used.
- 15. Any substance which may cause the District to violate its National Pollutant Discharge Elimination System (NPDES) Permit or the receiving water quality standards.
- 16. Except for existing combined sewer facilities, any stormwater, directly or indirectly, from surface drains, ditches, or streams, storm or combined sewers, roof, areaway, sumps and sump pumps, or foundation drains, or from any other means, including subsurface drainage or groundwater.

17. Any water or wastes potentially contaminated with (1) transmissible spongiform encephalopathy agents from diseases such as chronic wasting disease, bovine spongiform encephalopathy, scrapie, Creutzfeldt-Jakob disease, (2) foot-and-mouth disease agents, or (3) anthrax, except by permission of the Metro District.

#### 6.14 Prohibited Discharges

None of the following described sewage, water, substances, materials, or wastes shall be discharged into the Metro District's system or into the sewer system of any municipality, by any Industrial User. These requirements and prohibitions may be imposed directly on process wastewaters prior to dilution by domestic and other wastewaters discharged by the Industrial Users. Site-specific limitations and/or Best Management Practices may be developed and imposed on Industrial Users to ensure compliance with these *Rules and Regulations*.

- 1. Any 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 Metro District's system, the sewer system of a municipality or any of its connectors, or to the operation of the District. At no time shall any reading on an explosion hazard meter, at the point of discharge into the District's system or the sewer system of a municipality or any of its connectors (or at any point in the systems), or at any monitoring location designated by the District in a Wastewater Discharge Permit, be more than ten percent (10%) 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
- 2. Any solid or viscous material which could cause an obstruction to flow in the sewers or in any way could interfere with the treatment process, including as examples of such materials but without limiting the generality of the foregoing, significant proportions of ashes, wax, paraffin, cinders, sand, mud, straw, shavings, metal, glass, rags, lint, feathers, tars, plastics, wood and sawdust, paunch manure, hair and fleshings, entrails, lime slurries, beer and distillery slops, grain processing wastes, grinding compounds, acetylene generation sludge, chemical residues, acid residues, food processing bulk solids, snow, ice, and all other solid objects, material, refuse, and debris not normally contained in sanitary sewage.
- 3. Any wastewater having a pH less than 5.0 for discharges from Industrial Users into the Metro District's system or the sewer system of a municipality or that of any of its connectors, or less than 6.0 or greater than 9.0 for other discharges into the District's system, or wastewater having any other corrosive property capable of causing damage or hazard to any part of the District's system or the sewer system of a municipality or any of its connectors, or to personnel.
- 4. Any wastewater having a temperature which will inhibit biological activity at the District's treatment plant, but in no case wastewater containing heat in such amounts the temperature at the introduction into the District's treatment plant exceeds forty degrees (40°)C (one hundred four degrees (104°)F).

- 5. Any pollutants, including oxygen demanding pollutants (BOD, etc.) released at a flow rate and/or pollutant concentration which cause pass through or interference. In no case shall a slug load have a flow rate or contain concentrations or qualities of pollutants that exceed for any time period longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration, quantities, or flow during normal operation.
- 6. Any water or wastes containing a toxic substance in sufficient quantity, either singly or by interaction with other substances, to injure or interfere with any sewage treatment process, to constitute a hazard to humans or to animals, or to create any hazard or toxic effect in the waters which receive the treated or untreated sewage.
- 7. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin, each in amounts that will cause Interference or pass through.
- 8. Pollutants which result in the presence of toxic gases, vapors, or fumes within the system in a quantity that may cause acute worker health and safety problems.
- 9. Any trucked or hauled pollutants except at discharge points designated by the Metro District.
- 10. Any water or wastes containing pollutant quantities or concentrations exceeding the limitations in Section 6.18 of these *Rules and Regulations* or the limitations in any applicable Categorical Standards.
- 11. Any wastewater discharges to the Metro District's system, except at locations approved by the Metro District.
- 12. Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters (including, but not limited to, materials which have been removed by catch basins, grease traps, sand traps or pre-treatment systems/devices), or acquired from another person or location.
- 13. Wastewater which alone or in conjunction with other sources causes the Metro District's effluent to fail toxicity testing.
- 14. Detergents, surface-active agents or other substances which alone or in conjunction with other sources cause excessive foaming in the collection system or at the treatment plant.

## **6.15 Specific Discharge Limitations - Municipalities**

No Municipality shall discharge to the system at any time or over any period of time wastewater containing any of the following materials and substances in excess of the limitations provided herein:

#### Limit mg/L

- 1. Cyanides (as HCN) 2
- 2. Oil and Grease (Hexane or approved solvent extractable) 75
- 3. Phenolic compounds (as Phenol) 10

4. Sulfides (as H<sub>2</sub>S) 10

#### 6.16 Reserved

#### **6.17 General Discharge Prohibitions**

No Industrial User shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will pass through or Interfere with the operation or performance of the Metro District. These general prohibitions apply to all Industrial Users of the system whether or not the Industrial User is subject to National Categorical Pretreatment Standards or any other national, state, district, or local Pre-treatment Standards or Requirements: Industrial Users may not discharge any of the sewage, water, substances, materials, or wastes listed in Sections 6.13 or 6.14 of these *Rules and Regulations*. These requirements and prohibitions may be imposed directly on process wastewaters prior to dilution by domestic and other wastewaters discharged by the Industrial Users. Site-specific limitations and/or Best Management Practices may be developed and imposed on Industrial Users to ensure compliance with these *Rules and Regulations*.

#### 6.18 Specific Discharge Limitations - USERS

**6.18.1 Metro District Limitations**. No Industrial User shall discharge into the system or into any sewer system at any time or over any period of time, wastewater containing any of the following materials and substances in excess of the limitations provided herein. These limitations may also be imposed directly on process wastewaters prior to dilution by domestic and other wastewaters discharged by the Industrial User:

#### Limit mg/L

- 1. Arsenic 0.33
- 2. Cadmium 3.4
- 3. Chromium 3.6
- 4. Copper 6.1
- 5. Lead 2.2
- 6. Mercury 0.13
- 7. Molybdenum 0.43\*
- 8. Nickel 5.6
- 9. Selenium 0.66
- 10. Silver 2.9
- 11. Tetrachloroethene 1.5\*\*
- 12. Zinc 15.6
- \* Notwithstanding this numeric limitation, effective January 1, 2007, discharge from cooling towers, boilers, closed-loop heat transfer systems and any other cooling/heating system treated with molybdenum-containing water treatment chemicals is prohibited entirely. Where necessary, the Metro District may require that these wastes be physically prevented from discharging into the sanitary sewer system.

- \*\* Notwithstanding this numeric limitation, the discharge of dry-cleaning process wastes, including new and used tetrachloroethene (perchloroethylene), still bottom oil, and separator water, is prohibited entirely. Where necessary, the Metro District may require that these wastes be physically prevented from discharging into the sanitary sewer system.
- **6.18.2 National Pre-treatment Standards and Requirements**. Once promulgated, Categorical Standards for a particular industrial subcategory, if more stringent, shall supersede all conflicting discharge limitations contained in this Section 6, as they apply to that industrial subcategory. All Industrial Users must comply with all applicable National Pre-treatment Standards and Requirements.
- **6.18.3 State Requirements**. State requirements and limitations on discharges shall apply in any case where they are more stringent than federal requirements and limitations or those contained elsewhere in this Section 6.
- **6.18.4 Dilution Prohibited**. Except where permitted by Categorical Standards, no Industrial User may increase the use of process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to attain compliance with the limitations contained in National Categorical Pre-treatment Standards or any other specific discharge limitations contained in this Section 6. The Metro District may set or require a municipality to set mass limitations or alternate concentration-based limitations for those Industrial Users which are using improper dilution to meet these limitations.

## XIII City of Aurora Code Discharge Limitations – Excerpt from Section 138-263 Use of Public Sewers

Sec. 138-263. Use of public sewers.

- (a) Rules and regulations. It shall be the responsibility of the General Manager of Aurora Water to formulate rules and regulations governing the discharge of wastewater to the POTW consistent with this article.
- (b) Discharge of drainage and unpolluted waters. It shall be unlawful for any person to discharge or cause to be discharged, any stormwater, surface water, groundwater, roof runoff, subsurface drainage, uncontaminated cooling water or unpolluted industrial process waters into any sanitary sewer. Stormwater and all other unpolluted drainage shall be discharged to such drains which are specifically designated as storm drains or to a natural outlet approved by the General Manager of Aurora Water. Industrial cooling water or unpolluted process waters may be discharged, on approval of the General Manager of Aurora Water, to a storm sewer or natural outlet.
- (c) Swimming pools. Persons operating swimming pools which are connected directly or indirectly to the public sewer system shall drain those pools only in accordance with the drainage schedule established by the General Manager of Aurora Water. Such persons shall also notify the General Manager of Aurora Water at least twenty-four (24) hours

before draining their pools.

- (d) General discharge prohibitions.
- (1) No person shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which interferes with the operation or performance of the POTW.
- (2) No person shall contribute the following substances to the POTW:
- a. Any 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. 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.
- b. Solid or viscous substances which 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 grease, garbage with particles greater than one half inch ( $\frac{1}{2}$ ") in any dimension, animal entrails or tissues, paunch manure, bones, hair, hides or fleshings, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, wastepaper, wood, plastics, tar, asphalt residues from refining or processing of fuel or lubricating oil, mud or glass grinding or polishing wastes.
- c. Any wastewater containing toxic pollutants, hazardous wastes as defined by the Resource Conservation and Recovery Act, whether or not they are considered to be hazardous after entering the POTW, or poisonous substances 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 exceed the limitation set forth in a categorical standard.
- d. Sewage of such a nature and delivered at such a rate as to impair the hydraulic capacity of the system, or any part thereof; normal and reasonable wear and usage excepted.
- e. Sewage of such a quantity, quality, or other nature as to impair the strength or the durability of the sewer structures, equipment or treatment works, either by chemical or by mechanical action.
- f. Any night soil or septic tank pumpage, except by permit in writing from the General Manager of Aurora Water at such points and under such conditions as the General Manager of Aurora Water may stipulate in each permit.
- g. Sludge or other material from sewage or industrial waste treatment plants or from water treatment plants, except when authorized by the General Manager of Aurora Water.

- h. Water which has been used for cooling or heat transfer purposes without recirculation, discharged from any system of condensation, air conditioning, refrigeration, or similar use.
- i. Water accumulated in excavations or accumulated as the result of grading, water taken from the ground by well points, or any other drainage associated with construction.
- j. Any water or wastes containing grease or oil or other substances that will solidify or become discernibly viscous within a temperature range set forth in the rules and regulations promulgated by the General Manager of Aurora Water.
- k. Any wastes that contain a corrosive, noxious, or malodorous material or substance which, either singly or by reaction with other wastes, are capable of causing damage to the system or to any part thereof, of creating a public nuisance or hazard, or of preventing entry into the sewers for maintenance and repair.
- I. Any wastes which are unusual in composition, i.e., contain an extremely large amount of suspended solids or BOD; are high in dissolved solids such as sodium chloride, calcium chloride, or sodium sulfate; contain substances conducive to creating tastes or odors in drinking water supplies; otherwise make such waters unpalatable even after conventional water purification treatment; or are in any other way extremely unusual unless the General Manager of Aurora Water determines that such wastes may be admitted to the system or shall be modified or treated before being so admitted.
- m. Any wastes that contain excessive, as determined by the General Manager of Aurora Water, dye waste or others that are either highly colored or could become highly colored by reacting with any other wastes.
- n. Any substance which 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 processes. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with sludge use or disposal criteria, guidelines or regulations developed pursuant to the Solid Waste Disposal Act, the Resource Conservation and Recovery Act, the Clean Air Act, the Toxic Substances Control Act, the Marine Protection, Research and Sanctuary Act, or more stringent state or local criteria, guidelines, or regulations applicable to the sludge management method being used.
- o. Any substance which will cause the POTW to violate its NPDES permit or the receiving water quality standards.
- p. Any wastewater having a temperature which will inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater containing heat or capable of creating heat in such amounts that the temperature at the introduction into the POTW treatment plant exceeds forty degrees (40°) Celsius (one hundred four degrees (104°) Fahrenheit).

- q. Any pollutants, including oxygen demanding pollutants (BOD), etc., released at a flow rate and/or pollutant concentration which will cause pass through or interference. In no case shall a slug discharge have a flow rate or contain concentrations or qualities of pollutants that exceed for any time period longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration, quantities, or flow during normal operation.
- r. Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the General Manager of Aurora Water in compliance with applicable metro district, state or federal regulations.
- (3) The prohibitions in subsection (d)(2) of this section shall apply to all users of the POTW whether or not the user is subject to national categorical pre-treatment standards or any other national, state, or local pre-treatment standards or requirements.
- (4) When the General Manager of Aurora Water determines that a user is contributing any of the enumerated substances in subsection (d)(2) of this section or others not enumerated to the POTW in such amounts as to interfere with the operation of the POTW, the General Manager of Aurora Water shall:
  - a. Advise the user of the impact of the contribution on the POTW; and
  - b. Develop effluent limitations for such user to correct the interference with the POTW.
- (5) If any user violates this subsection, nothing in this subsection shall limit the authority of the General Manager of Aurora Water to seek enforcement of this subsection against the user pursuant to Section 138-293.
- (e) National categorical pre-treatment standards. Upon the promulgation of a national categorical pre-treatment standard for a particular industrial subcategory, if more stringent limitations than those imposed under this article for sources in particular subcategory are promulgated, the national standard shall immediately supersede the limitations imposed under this article. The General Manager of Aurora Water shall notify all affected users of the applicable reporting requirements under 40 CFR 403.12.
- (f) Specific pollutant discharge standards. Specific pollutant discharge standards are to be set forth by the General Manager of Aurora Water in the rules and regulations governing pollutant discharge and wastewater control.A
- (g) State requirements. State requirements and limitations on discharges shall apply in any case where they are more stringent than federal requirements and limitations or those in this article.
- (h) City's right of revision. The City reserves the right to establish more stringent limitations or requirements on discharges to the POTW if deemed necessary to comply with the objectives presented in Section 138-258.

- (i) Excessive discharge. No user shall ever increase the use of process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the national categorical pre-treatment standards, or in any other pollutant specific limitation developed by the City or state.
- (j) Accidental discharges. Each user shall provide protection from accidental discharge of prohibited materials or other substances regulated by this article. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the owner's or user's own cost and expense. 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 by July 1, 1983. No user who commences contribution to the POTW after the effective date of this division 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 any user from the responsibility to modify the user's facility as necessary to meet the requirements of this article. In the case of any accidental or unusual discharge, the user shall immediately telephone and notify the City and the Metro District of the incident. The notification shall include the location, type, concentration, and volume of discharge, and corrective actions.
- (k) Written notice. Within five (5) days following an accidental discharge, the user shall submit to the General Manager of Aurora Water a detailed written report describing the cause of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such 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 article or other applicable law.
- (I) Notice to employees. A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees whom to call if an accidental discharge occurs. Employers shall ensure that all employees, who may cause or suffer such an accidental discharge to occur, are advised of the emergency notification procedure.

(Code 1979, § 39-104; Ord. No. 2005-74, § 1, 10-10-2005)