

# Wastewater Program

Santa Clara University 500 El Camino Real Santa Clara, CA 95053 **Program Review Record** 

Revision 1				
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**Program Approval** 

Signature on file in the EHS Office	7/26/10
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### **Wastewater Program**

## 1. Purpose

The purpose of this program is to provide guidance on industrial wastewater discharge that prevent improperly discharging contaminants to the local Publicly Owned treatment Work (POTW) and to comply with the city of Santa Clara's industrial wastewater discharge regulations and to promote best practices.

## 2. Applicability

This program provides the minimum requirements for SCU Staff, Faculty, Student Employees and Contractors for industrial wastewater discharge on campus.

#### 3. Definitions

NOTE: The most pertinent definitions for all users are contained in <u>Attachment I</u>. Review and use as necessary.

## 4. Roles / Responsibilities

The following are the SCU Roles and Responsibilities in regards to wastewater:

Group	Responsibilities
Facilities	<ul> <li>Dispose of commercial products and cleaners according to manufacturers' directions and discharge requirements (consult with EHS regarding allowable discharges).</li> </ul>
Laboratory Supervisors	<ul> <li>Conduct sink chemical disposal only for allowable drain discharges listed in <a href="https://doi.org/10.1001/journal.org/">https://doi.org/10.1001/journal.org/<a></a></a></li> <li>Provide training to students and laboratory staff concerning what can be disposed to drain.</li> </ul>
EHS	<ul> <li>Provide guidance on regulatory requirements and promote best practices for operations and academic areas on industrial wastewater discharge.</li> <li>Notify and submit reports to regulatory agency in the event of an accidental discharge to the sewer.</li> <li>Authorize allowable discharges and keep <u>Attachment 3</u> (List of Allowable Discharges) up to date.</li> <li>Approve any new large scale or continuous discharges.</li> </ul>
Director of Food Service	Comply with Municipal Code Sewer requirements.

### 5. Design and Maintenance Requirements

Each premises producing domestic or industrial wastewater has a duty to connect to the sewer system and it is required to have a separate connection to the sewer system for each building or structure served.

Appropriate cross-connection control is required when there is any potential for backflow contamination of the water distribution system. Backflow protection is needed typically for water distribution system, raw water-storage reservoirs, chemical feed pumps and injectors, filters, surface washers, saturators and dry chemical solution tanks, sampling lines, hose bib connections, and membrane systems. The two types of backflow, backsiphonage and backpressure should be addressed with the proper backflow prevention devices or assemblies.

Sewer connections and sewer lateral(s) must in good order- free from displaced joints, open joints, root intrusions, substantial deterioration of pipe material, cracks, leaks inflow or infiltration of extraneous water, grease and sediment deposits or other similar conditions, defects, or obstructions likely to cause or increase the chance of blockage.

A City inspector shall be admitted at all reasonable hours to any premises connected with the sewer system, for the purpose of checking plumbing fixtures, protecting the rights of the City.

## 6. SCU Discharge Requirements

- Industrial wastewater discharge is regulated by federal and state laws and regulations, and by the Santa Clara Municipal Ordinance. Hazardous materials/hazardous waste, bio-hazardous, and radioactive waste are prohibited from disposal down the drain at SCU unless listed on <u>Attachment</u> 3 (List of Discharges Authorized for Sink Disposal). <u>Attachment 5</u> contains prohibited discharges according to the Santa Clara Ordinance.
- Old, unwanted, or waste chemicals and products are not permitted to be poured down sinks or drains as a means of disposal.
- Other Campus Drain Requirements:
  - Discharge commercially available cleaning products and other commercial products in accordance with the manufacturer instructions (consult with EHS regarding allowable discharges).
  - Food service operations must operate in compliance with Santa Clara Municipal Code requirements (see <u>Attachment 4</u>).

## 7. Reporting

Notify EHS immediately (there is an one hour reporting requirement) when aware of accidentally discharging wastes of potentially reportable quantities (as determined in Title 40, Chapter 1, Subchapter D, Part 117 CFR- see <a href="Attachment 6">Attachment 6</a>) or discharge of any substance, which if otherwise disposed would be hazardous waste (under 40 CFR Part 261), to enable countermeasures to be taken by the City to minimize damage to the sanitary sewer system, the plant, the treatment processes, and/or the receiving waters. EHS will determine if the release is reportable and will conduct the appropriate reporting.

Within five days of the date of occurrence, EHS will submit a detailed written statement describing the causes of the accidental discharge and the measures being taken to prevent future occurrences to City. Note: notification to the City will not relieve of notification SCU of liability for any expense, loss,

or damage to the sanitary sewer system, plant, or treatment process or receiving waters, or for any fines or penalties imposed on the City.

## 8. Training and Awareness

#### **Facilities/Utilities Staff**

Receive awareness training regarding wastewater requirements.

#### **Laboratory Personnel**

 Receive training as part of the Chemical Hygiene Program, Biosafety Program, and/or Radiation Safety Program.

#### Students

Receive training from Principal Investigator and/or Professor.

#### 9. Record Retention

Completed records will be maintained as follows:

Documents and Forms	Location	Retention Period	
Accidental Discharge Reports	EHS Files	Indefinitely	

## 10. Key References and Resources

Santa Clara Municipal Code 13.10

http://www.codepublishing.com/ca/santaclara/frameless/index.pl?path=../html/santcl13/santcl1310 html#13.10

## **Attachment 1- Definitions**

**Biochemical oxygen demand-** the quantity of oxygen expressed in parts per million (ppm) by weight, utilized in the biochemical oxidation of organic matter under standard laboratory conditions for five days at a temperature of twenty degrees centigrade (20° C).

**Discharger-** any person discharging wastewater into the sanitary sewer system.

**Domestic wastewater**- wastewater from private residences and other premises resulting from the use of water for personal washing, sanitary purposes and/or the elimination of human wastes and related matter.

**Food service establishment**- a user that prepares and/or sells food for consumption either on or off the premises or washes utensils or dishes on premises that may contribute grease to the sewer system, including, but not limited to, restaurants, sandwich shops, delicatessens, bakeries, cafeterias, markets, bed and breakfast inns, motels, hotels, meeting halls, caterers, retirement and nursing homes or pizzerias.

**Grease**- liquid or other waste containing floatable and/or dispersed grease, vegetable oil, petroleum oil, nonbiodegradable cutting oil, or fat, oil or grease products of animal, vegetable or mineral origin which is detectable and measurable using analytical test procedures established in the United States Code of Federal Regulations, 40 CFR Section 136.

**Industrial user-** any nonresidential user that discharges industrial wastes to the sanitary sewer system.

**Interference**- a discharge that alone, or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the processes or operation of the sanitary sewer system, including the plant, or causes or significantly contributes to a violation of any requirement of the National Pollutant Discharge Elimination System (NPDES) permit, which is a permit issued to the City pursuant to Section 402 of the Clean Water Act.

**Maximum allowable concentration-** the highest permissible concentration or other measure of pollutant magnitude taken at a specific point in time.

**pH**- the logarithm of the reciprocal of the concentration of hydrogen ions in moles per liter of solution. **Plant-** the San Jose/Santa Clara Water Pollution Control Plant (POTW).

**Priority pollutants**- all pollutants as defined by the "General Pretreatment Regulations" of the Environmental Protection Agency, found at Title 40, Chapter 1, Subchapter W, Parts 401 and 403 of the Code of Federal Regulations.

**Sanitary sewage**- water-carried wastes from residences, business buildings, institutions, and industrial establishments, excluding ground, surface, and stormwaters, subsurface drainage, and also excluding industrial waste.

**Sewer-** a pipe or conduit for carrying sewage.

**Slug load** or "slug discharge" - any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge, which has a reasonable potential to cause interference or pass-through or in any other way cause a violation of the provisions of this chapter or applicable permit conditions.

**Source**- any building, structure, facility or installation from which there is or may be a potential as determined by the Director to discharge pollutants above the local limits included in this chapter or State or Federal limits or wastewater of such volume or strength that is may cause interference, pass-through or operational problems in the sanitary sewer system or at the San Jose/Santa Clara Water Pollution Control Plant.

**Stormwaters-** the flow across any surface or in storm sewers resulting from rainfall. Discharge directly to the bay without any treatment.

**Suspended solids**- solids that either float on the surface of, or are in suspension in, water, sewage, or other liquids and that are removable by laboratory filtering.

**Total toxic organics (TTOs)-** are the sum of the concentrations for each of the regulated toxic organic compounds listed at CFR Title 40, Chapter 1, Subchapter W, Part 401, Section 401.15 and are found in the discharge at a concentration greater than ten micrograms per liter (<u>Attachment 2</u>). Some categorical standards (40 CFR Sections 405 through 471) list the specific toxic organic compounds that are to be included in the summation.

## **Attachment 2- List of Toxic Pollutants**

#### CFR Title 40, Part 401.15

- 1. Acenaphthene
- 2. Acrolein
- 3. Acrylonitrile
- 4. Aldrin/Dieldrin<sup>1</sup>
- <sup>1</sup> Effluent standard promulgated (40 CFR part 129).
- 5. Antimony and compounds<sup>2</sup>
- <sup>2</sup> The term *compounds* shall include organic and inorganic compounds.
- 6. Arsenic and compounds
- 7. Asbestos
- 8. Benzene
- 9. Benzidine<sup>1</sup>
- 10. Beryllium and compounds
- 11. Cadmium and compounds
- 12. Carbon tetrachloride
- 13. Chlordane (technical mixture and metabolites)
- 14. Chlorinated benzenes (other than di-chlorobenzenes)
- 15. Chlorinated ethanes (including 1,2-di-chloroethane, 1,1,1-trichloroethane, and hexachloroethane)
- 16. Chloroalkyl ethers (chloroethyl and mixed ethers)
- 17. Chlorinated naphthalene
- 18. Chlorinated phenols (other than those listed elsewhere; includes trichlorophenols and chlorinated cresols)
- 19. Chloroform
- 20. 2-chlorophenol
- 21. Chromium and compounds
- 22. Copper and compounds
- 23. Cyanides
- 24. DDT and metabolites<sup>1</sup>
- 25. Dichlorobenzenes (1,2-, 1,3-, and 1,4-di-chlorobenzenes)
- 26. Dichlorobenzidine
- 27. Dichloroethylenes (1,1-, and 1,2-dichloroethylene)
- 28. 2,4-dichlorophenol
- 29. Dichloropropane and dichloropropene
- 30. 2,4-dimethylphenol
- 31. Dinitrotoluene
- 32. Diphenylhydrazine
- 33. Endosulfan and metabolites
- 34. Endrin and metabolites
- 35. Ethylbenzene
- 36. Fluoranthene
- 37. Haloethers (other than those listed elsewhere; includes chlorophenylphenyl ethers, bromophenylphenyl ether, bis(dichloroisopropyl) ether, bis-(chloroethoxy) methane and polychlorinated diphenyl ethers)
- 38. Halomethanes (other than those listed elsewhere; includes methylene chloride, methylchloride, methylbromide, bromoform, dichlorobromomethane
- 39. Heptachlor and metabolites
- 40. Hexachlorobutadiene
- 41. Hexachlorocyclohexane
- 42. Hexachlorocyclopentadiene
- 43. Isophorone
- 44. Lead and compounds
- 45. Mercury and compounds
- 46. Naphthalene
- 47. Nickel and compounds
- 48. Nitrobenzene
- 49. Nitrophenols (including 2,4-dinitrophenol, dinitrocresol)
- 50. Nitrosamines

- 51. Pentachlorophenol
- 52. Phenol
- 53. Phthalate esters
- 54. Polychlorinated biphenyls (PCBs)<sup>1</sup>
- 55. Polynuclear aromatic hydrocarbons (including benzanthracenes, benzopyrenes, benzofluoranthene, chrysenes, dibenz-anthracenes, and indenopyrenes)
- 56. Selenium and compounds
- 57. Silver and compounds
- 58. 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)
- 59. Tetrachloroethylene
- 60. Thallium and compounds
- 61. Toluene
- 62. Toxaphene<sup>1</sup>
- 63. Trichloroethylene
- 64. Vinyl chloride
- 65. Zinc and compounds

# Attachment 3- List of Allowable Discharges to Sanitary or Industrial Sewer

#### Laboratories:

- Non-hazardous solutions of salts, sugars and growth media, e.g. PBS or other solutions with a pH between 6-10.
- Low-level (<3 times background) liquid radioactive waste with prior authorization from the Radiation Safety Officer as long as the waste otherwise meets discharge limits.
- Liquid biohazardous waste disinfected with Lysol with prior authorization from the Biohazard Safety Officer (as long as the waste otherwise meets discharge limits).

#### Art:

- Cleaning of latex paint brushes and tools in sinks.
- Photography developer and stop.

NOTE: Cleaning of oil based brushes and tools, disposal of paint (latex or oil base), disposal of photography fixer, and other art materials with hazardous properties are not permitted to be disposed in the sinks or drains.

#### Theatre:

• Cleaning of latex paint brushes and tools in sinks.

NOTE: Cleaning of oil based brushes and tools and other paint supplies with hazardous properties are not permitted to be disposed in the sinks or drains.

Costume Dyes can only disposed in the sinks or drains only if indicated acceptable on MSDS.

#### **Utilities:**

Cooling Tower discharges as long as additives meet the Santa Clara discharge requirements.

#### Facilities:

- External vehicle washing and waste bin washing on washrack only.
- Cleaning of latex paint brushes and tools in sinks.

NOTE: Cleaning of oil based brushes and tools, disposal of paint (latex or oil base), and other paint supplies with hazardous properties are not permitted to be disposed in the sinks or drains.

# Attachment 4- Food Service Requirements from the Santa Clara Municipal Code

- (1) "Food service establishment" means a user that prepares and/or sells food for consumption either on or off the premises or washes utensils or dishes on premises that may contribute grease to the sewer system, including, but not limited to, restaurants, sandwich shops, delicatessens, bakeries, cafeterias, markets, bed and breakfast inns, motels, hotels, meeting halls, caterers, retirement and nursing homes or pizzerias. The term, as used in this chapter, does not refer to food stores or establishments that do not prepare food on premises and do not process food in a manner which may contribute grease to the sewer system.
- (g) "G" definitions:
- (1) "Garbage" means wastes from the preparation, cooking, and dispensing of foods, and from the handling, storage, and sale of produce.
- (2) "Grab sample" means a single discrete sample collected at a particular time and place that represents the composition of the waste stream only at that time and place.
- (3) "Grease" means liquid or other waste containing floatable and/or dispersed grease, vegetable oil, petroleum oil, non-biodegradable cutting oil, or fat, oil or grease products of animal, vegetable or mineral origin which is detectable and measurable using analytical test procedures established in the United States Code of Federal Regulations, 40 CFR Section 136.
- (4) "Grease control device" means a grease interceptor, grease trap, mechanical grease removal device or other device approved for use by the Director.
- (5) "Grease interceptor" means a large tank installed underground and designed to collect and control solid-food wastes and floating grease from wastewater prior to discharge into the sanitary sewer collection system. Grease interceptors are normally installed outside the building and use gravity to separate grease from the wastewater as it moves from one compartment of the interceptor to the next.
- (6) "Grease trap" means a device placed under or in close proximity to sinks or other fixtures likely to discharge grease in an attempt to separate, trap and hold oil and grease substances.

#### 13.10.260 Hot substances.

No person shall discharge, cause, allow, or permit to be discharged into the sanitary sewer system, or any part thereof, any liquid, solid, vapor, gas, or thing having or developing a temperature of one hundred fifty (150) degrees Fahrenheit or more, or that may cause the temperature at the plant to exceed one hundred four (104) degrees Fahrenheit. (Ord. 1853 § 2, 11-24-09).

- 13.10.270 Grease, oils, fats.
- (a) No person shall discharge, cause, allow, or permit to be discharged into the sanitary sewer system any liquid or other waste containing grease in excess of one hundred fifty (150) parts per million by weight.
- (b) No person shall discharge, cause, allow, or permit any grease discharge from a food service establishment into the sanitary sewer system, unless such discharge has first been processed through an approved grease control device.
- (c) No person shall discharge, cause, allow, or permit to be discharged any yellow grease, or any waste or material mixed with yellow grease, into the sanitary sewer system from a food service establishment. No yellow grease from a food service establishment shall be mixed with grease trap or grease interceptor waste. (Ord. 1853 § 2, 11-24-09).
- 13.10.370 Garbage.
- (a) No person shall discharge, deposit, throw, cause, allow, or permit to be discharged, deposited, or thrown into the sanitary sewer system, or any part thereof, (1) any garbage, (2) any fruit,

- vegetable, or animal material, and/or (3) any other solid material from any food-processing plant (or any other industrial plant or retail grocery store), irrespective of whether or not it shall have been first passed through a mechanical grinder.
- (b) No person shall install, operate, use, or maintain upon the premises of any food-processing plant (or any other industrial plant or retail grocery store) any mechanical grinder or waste grinder that is connected directly or indirectly to the sanitary sewer system, or any part thereof.
- (c) No person shall discharge, deposit, throw, or cause, allow, or permit to be discharged, deposited, or thrown into the sanitary sewer system, or any part thereof, any garbage, or fruit, vegetable, animal, or other solid kitchen waste material resulting from the preparation of any food or drinks in any dwelling, restaurant, or eating establishment, unless the same shall have first been passed through a mechanical garbage or waste grinder in conformance with the provisions of the Plumbing and Electrical Code of the City. (Ord. 1853 § 2, 11-24-09).
- 13.10.380 Oil and grease removal devices.
- (a) Any food service establishment, or other type of business or establishment where grease or other viscous, obstructing, or objectionable materials may be discharged into a public or private sewage main or disposal system, shall have a grease control device and related plumbing of a size and design approved by the Director.
  - (1) Grease interceptors shall meet the following minimum requirements:
    - (A) Designed retention time of no less than thirty (30) minutes.
    - (B) The effluent from the device must flow through an approved sample box.
    - (C) Installed per manufacturer's specifications.
    - (D) At least two manholes, situated so all standpipes can be fully observed, and all internal surfaces can be reached, without confined space entry.
    - (E) Double-sweep clean-outs, on the interceptor inlet, and sample box outlet.
    - (F) Shall meet the specifications and be constructed in accordance with the applicable provisions of Chapter <u>15.35</u> SCCC.
  - (2) Grease traps shall meet the following minimum requirements:
    - (A) No injection ports for chemicals or bacteria.
    - (B) Installed per manufacturer's specifications.
    - (C) Appropriate flow restrictors, whether integral or external to the device, must be installed.
    - (D) Shall meet the specifications and be constructed in accordance with the applicable provisions of Chapter <u>15.35</u> SCCC.
  - (3) Mechanical grease removal devices shall be installed in accordance with manufacturers' specifications.
- (b) Each grease control device shall be so installed and connected that it shall be at all times easily accessible for visual inspection, sampling, cleaning and removal of grease, and other matter from all surfaces.
- (c) A grease control device shall be situated on the discharger's premises, except when such a location would be impractical or cause undue hardship on the discharger, the city may issue an encroachment permit to allow the grease control device to be installed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles.
- (d) Waste discharged from fixtures and equipment in establishments which may contain grease or other objectionable materials including, but not limited to, scullery sinks, pot and pan sinks, dishwashers, food waste disposals, soup kettles, and floor drains located in areas where such objectionable materials may exist, may be drained into the sanitary sewer through the grease control device if approved by the Director; provided, however, that toilets, urinals, wash basins, and other fixtures containing fecal material shall not flow through the grease control device.

- (e) Grease control devices shall be maintained in efficient operating condition by periodic removal of the accumulated grease. The use of chemicals, bacteria, enzymes, or other additives that have the effect of emulsifying or dissolving grease is prohibited unless specifically authorized by the Director in writing. No accumulated grease shall be introduced into any drainage piping or public or private sewer.
- (f) Grease control devices shall be cleaned on a sufficient frequency to prevent objectionable odors, surcharge of the grease control device, or interference with the operation of the sanitary sewer system.
- (1) Grease traps shall be cleaned at least once every thirty (30) days.
- (2) Grease interceptors shall be cleaned once every ninety (90) days.
- (3) Mechanical grease removal devices must be maintained in a manner and frequency consistent with manufacturer specifications and guidance.
- (4) Grease control devices shall be cleaned when their last chamber is filled to twenty-five percent (25%) or more of capacity with grease or settled solids. Grease interceptors with a sample box shall be cleaned immediately when grease is evident in the sample box.
- (5) Grease control devices shall be cleaned by being pumped dry and all accumulated sludge on all surfaces shall be removed by washing down the sides, baffles and tees. No water removed from the device during cleaning shall be returned to the grease control device.
- (g) The Director may grant an exception to the requirements of subsections (f)(1) and (2) of this section where the Director finds, based on evidence presented by the discharger, that a less frequent cleaning schedule will be sufficient to assure that not more than twenty-five percent (25%) of the capacity of the grease control device will be filled with grease or settled solids.
- (h) All dischargers shall implement best management practices in their operations to minimize the discharge of grease to the sanitary sewer system.
- (i) Dischargers shall maintain records on site for a period of at least three years as follows:
- (1) Dischargers with an installed grease control device shall maintain records showing that the grease control device has been properly maintained and cleaned as required by subsections (e) and (f) of this section; and
- (2) Food service establishments shall maintain records showing the following related to all grease hauled off site: date and time material removed off site; volume removed; hauler name; truck license number, type of grease removed, and final destination of material collected.
- (j) Abandoned grease control devices shall be emptied and filled as required for abandoned septic tanks. (Ord. 1853 § 2, 11-24-09).

## <u>Attachment 5 - Prohibited Discharges to Sanitary or Industrial Sewer</u> <u>from the Santa Clara Municipal Code</u>

- Stormwater, surface water, or roof runoff.
- Ground water or subsurface drainage.
- Any substance of any kind whatsoever tending to obstruct or injure the sanitary sewer system, or to cause a nuisance or hazard, or which will in any manner interfere with the proper operation or maintenance of the sanitary sewer system.
- Any flammable liquid, solid, vapor, or gas, or any other substance, including, but not limited to, any substance having a closed cup flashpoint of less than one hundred forty (140) degrees Fahrenheit or sixty (60) degrees Celsius, using the test methods specified in 40 CFR Section 261.21.
- Any liquid, solid, vapor, gas, or thing having or developing a temperature of one hundred fifty (150) degrees Fahrenheit or more, or that may cause the temperature at the plant to exceed one hundred four (104) degrees Fahrenheit.
- Any liquid or other waste containing grease in excess of one hundred fifty (150) parts per million by weight.
- Any grease discharge from a food service establishment unless such discharge has first been processed through an approved grease control device.
- Any ashes, cinders, pulp, paper, sand, cement, mud, straw, shavings, metal, glass, rags, feathers, tar, asphalt, resins, plastics, wood, animal hair, paunch manure, or any heavy solid or viscous substance capable of causing obstruction to the flow in the sanitary sewer system, or any part thereof, or that would interfere with the proper operation of the plant or the treatment of sanitary sewage or industrial waste.
- Any liquid, solid, vapor, gas, or thing having a pH lower than 6.0 or more than 12.5, or having any other corrosive property capable of causing damage or hazard to the sanitary sewer system, or any part thereof, or to any personnel operating, maintaining, repairing, or constructing said sanitary sewer system, or any part thereof, or working in or about the sanitary sewer system.
- Any substance of any kind whatsoever that results in the presence of toxic gases, vapors, or fumes within the sanitary sewer system in a quantity that may cause acute health and/or safety problems for workers in the sanitary sewer system.
- Any toxic or poisonous substances or any other pollutant, including biochemical oxygen demand, in sufficient quantity to:
  - o Injure or cause an interference with the sewage treatment process;
  - Constitute a hazard to humans or animals;
  - Create a hazard for humans or aquatic life in any waters receiving effluent from the sanitary sewer system; or
  - o Create a hazard in the use or disposal of sewage sludge.
- The use of diluting waters as a partial or complete substitute for adequate treatment, to achieve compliance, or to meet local limitations for wastewater.
- Any liquid containing suspended solids or dissolved matter of such character and quantity
  that unusual attention or expense is required to handle, process, or treat such matter at the
  plant.
- Any solid, liquid, vapor, gas, or thing that is so malodorous or noxious that its discharge into the sanitary sewer system would cause a public nuisance.
- Any radioactive waste into the sanitary sewer system, except as authorized to use radioactive materials by the State Department of Health Services or other governmental

agency empowered to regulate the use of radioactive materials may discharge, cause to be discharged, or permit to be discharged such wastes; provided, that such wastes are discharged in strict conformance with the California radiation control regulations (California Code of Regulations, Title 17, Division 1, Chapter 5, Subchapter 4 (entitled "Radiation") et seq.) and Federal regulations and recommendations for safe disposal of such radioactive wastes; and does so in compliance with all applicable rules and regulations of all other regulatory agencies having jurisdiction over such discharges.

- Any wastewater with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions.
- Any garbage, or fruit, vegetable, animal, or other solid kitchen waste material resulting from the preparation of any food or drinks in any dwelling, restaurant, or eating establishment, unless the same shall have first been passed through a mechanical garbage or waste grinder in conformance with the provisions of the Plumbing and Electrical Code of the City.
- Any industrial waste containing any of the following toxic substances exceeding the concentrations in Table A below:

## TABLE A INTERFERING SUBSTANCES

Toxic Substance	Stand Discha Maxin Allow Concent	arger num able	Low F Discha Maxim Allowa Concent	rger num able
Antimony	5.0	mg/l	5.0	mg/l
Arsenic	1.0	mg/l	1.0	mg/l
Beryllium	0.75	mg/l	0.75	mg/l
Cadmium	0.7	mg/l	0.7	mg/l
Chromium, total	1.0	mg/l	1.0	mg/l
Copper	2.3	mg/l	2.7	mg/l
Cyanides	0.5	mg/l	0.5	mg/l
Lead	0.4	mg/l	0.4	mg/l
Mercury	0.010	mg/l	0.010	mg/l
Nickel	0.5	mg/l	2.6	mg/l
Phenol and derivatives	30.0	mg/l	30.0	mg/l
Selenium	1.0	mg/l	1.0	mg/l
Silver	0.7	mg/l	0.7	mg/l
Zinc	2.6	mg/l	2.6	mg/l

## **Attachment 6 – Reportable Quantities**

Table 117.3—Reportable Quantities of Hazardous Substances Designated Pursuant to Section 311 of the Clean Water Act

Material	Category	RQ in pounds (kilograms)
Acetaldehyde	С	1,000 (454)
Acetic acid	D	5,000 (2,270)
Acetic anhydride	D	5,000 (2,270)
Acetone cyanohydrin	A	10 (4.54)
Acetyl bromide	D	5,000 (2,270)
Acetyl chloride	D	5,000 (2,270)
Acrolein	X	1 (0.454)
Acrylonitrile	В	100 (45.4)
Adipic acid	D	5,000 (2,270)
Aldrin	X	1 (0.454)
Allyl alcohol	В	100 (45.4)
Allyl chloride	С	1,000 (454)
Aluminum sulfate	D	5,000 (2,270)
Ammonia	В	100 (45.4)
Ammonium acetate	D	5,000 (2,270)
Ammonium benzoate	D	5,000 (2,270)
Ammonium bicarbonate	D	5,000 (2,270)
Ammonium bichromate	A	10 (4.54)
Ammonium bifluoride	В	100 (45.4)
Ammonium bisulfite	D	5,000 (2,270)
Ammonium carbamate	D	5,000 (2,270)
Ammonium carbonate	D	5,000 (2,270)
Ammonium chloride	D	5,000 (2,270)
Ammonium chromate	A	10 (4.54)
Ammonium citrate dibasic	D	5,000 (2,270)
Ammonium fluoborate	D	5,000 (2,270)
Ammonium fluoride	В	100 (45.4)
Ammonium hydroxide	С	1,000 (454)
Ammonium oxalate	D	5,000 (2,270)
Ammonium silicofluoride	С	1,000 (454)
Ammonium sulfamate	D	5,000 (2,270)
Ammonium sulfide	В	100 (45.4)
Ammonium sulfite	D	5,000 (2,270)
Ammonium tartrate	D	5,000 (2,270)
Ammonium thiocyanate	D	5,000 (2,270)
Amyl acetate	D	5,000 (2,270)
Aniline	D	5,000 (2,270)
Antimony pentachloride	С	1,000 (454)
Antimony potassium tartrate	В	100 (45.4)
Antimony tribromide	С	1,000 (454)

Antimony trichloride	С	1,000 (454)
Antimony trifluoride	С	1,000 (454)
Antimony trioxide	С	1,000 (454)
Arsenic disulfide	X	1 (0.454)
Arsenic pentoxide	X	1 (0.454)
Arsenic trichloride	X	1 (0.454)
Arsenic trioxide	X	1 (0.454)
Arsenic trisulfide	X	1 (0.454)
Barium cyanide	A	10 (4.54)
Benzene	A	10 (4.54)
Benzoic acid	D	5,000 (2,270)
Benzonitrile	D	5,000 (2,270)
Benzoyl chloride	С	1,000 (454)
Benzyl chloride	В	100 (45.4)
Beryllium chloride	X	1 (0.454)
Beryllium fluoride	X	1 (0.454)
Beryllium nitrate	X	1 (0.454)
Butyl acetate	D	5,000 (2,270)
Butylamine	С	1,000 (454)
n-Butyl phthalate	A	10 (4.54)
Butyric acid	D	5,000 (2,270)
Cadmium acetate	A	10 (4.54)
Cadmium bromide	A	10 (4.54)
Cadmium chloride	A	10 (4.54)
Calcium arsenate	X	1 (0.454)
Calcium arsenite	X	1 (0.454)
Calcium carbide	A	10 (4.54)
Calcium chromate	A	10 (4.54)
Calcium cyanide	A	10 (4.54)
Calcium dodecylbenzenesulfonate	С	1,000 (454)
Calcium hypochlorite	A	10 (4.54)
Captan	A	10 (4.54)
Carbaryl	В	100 (45.4)
Carbofuran	A	10 (4.54)
Carbon disulfide	В	100 (45.4)
Carbon tetrachloride	A	10 (4.54)
Chlordane	X	1 (0.454)
Chlorine	A	10 (4.54)
Chlorobenzene	В	100 (45.4)
Chloroform	A	10 (4.54)
Chlorosulfonic acid	С	1,000 (454)
Chlorpyrifos	X	1 (0.454)
Chromic acetate	С	1,000 (454)
Chromic acid	A	10 (4.54)
Chromic sulfate	С	1,000 (454)

Chromous chloride	С	1,000 (454)
Cobaltous bromide	С	1,000 (454)
Cobaltous formate	С	1,000 (454)
Cobaltous sulfamate	С	1,000 (454)
Coumaphos	A	10 (4.54)
Cresol	В	100 (45.4)
Crotonaldehyde	В	100 (45.4)
Cupric acetate	В	100 (45.4)
Cupric acetoarsenite	X	1 (0.454)
Cupric chloride	A	10 (4.54)
Cupric nitrate	В	100 (45.4)
Cupric oxalate	В	100 (45.4)
Cupric sulfate	A	10 (4.54)
Cupric sulfate, ammoniated	В	100 (45.4)
Cupric tartrate	В	100 (45.4)
Cyanogen chloride	A	10 (4.54)
Cyclohexane	С	1,000 (454)
2,4-D Acid	В	100 (45.4)
2,4-D Esters	В	100 (45.4)
DDT	X	1 (0.454)
Diazinon	X	1 (0.454)
Dicamba	С	1,000 (454)
Dichlobenil	В	100 (45.4)
Dichlone	X	1 (0.454)
Dichlorobenzene	В	100 (45.4)
Dichloropropane	С	1,000 (454)
Dichloropropene	В	100 (45.4)
Dichloropropene-Dichloropropane (mixture)	В	100 (45.4)
2,2-Dichloropropionic acid	D	5,000 (2,270)
Dichlorvos	A	10 (4.54)
Dicofol	A	10 (4.54)
Dieldrin	X	1 (0.454)
Diethylamine	В	100 (45.4)
Dimethylamine	С	1,000 (454)
Dinitrobenzene (mixed)	В	100 (45.4)
Dinitrophenol	A	10 (45.4)
Dinitrotoluene	A	10 (4.54)
Diquat	С	1,000 (454)
Disulfoton	X	1 (0.454)
Diuron	В	100 (45.4)
Dodecylbenzenesulfonic acid	С	1,000 (454)
Endosulfan	X	1 (0.454)
Endrin	X	1 (0.454)
Epichlorohydrin	В	100 (45.4)
Ethion	A	10 (4.54)

Ethylbenzene	С	1,000 (454)
Ethylenediamine	D	5,000 (2,270)
Ethylenediamine-tetraacetic acid (EDTA)	D	5,000 (2,270)
Ethylene dibromide	X	1 (0.454)
Ethylene dichloride	В	100 (45.4)
Ferric ammonium citrate	С	1,000 (454)
Ferric ammonium oxalate	С	1,000 (454)
Ferric chloride	С	1,000 (454)
Ferric fluoride	В	100 (45.4)
Ferric nitrate	С	1,000 (454)
Ferric sulfate	С	1,000 (454)
Ferrous ammonium sulfate	С	1,000 (454)
Ferrous chloride	В	100 (45.4)
Ferrous sulfate	С	1,000 (454)
Formaldehyde	В	100 (45.4)
Formic acid	D	5,000 (2,270)
Fumaric acid	D	5,000 (2,270)
Furfural	D	5,000 (2,270)
Guthion	X	1 (0.454)
Heptachlor	X	1 (0.454)
Hexachlorocyclopentadiene	A	10 (4.54)
Hydrochloric acid	D	5,000 (2,270)
Hydrofluoric acid	В	100 (45.4)
Hydrogen cyanide	A	10 (4.54)
Hydrogen sulfide	В	100 (45.4)
Isoprene	В	100 (45.4)
Isopropanolamine dodecylbenzenesulfonate	С	1,000 (454)
Kepone	X	1 (0.454)
Lead acetate	A	10 (4.54)
Lead arsenate	X	1 (0.454)
Lead chloride	A	10 (4.54)
Lead fluoborate	A	10 (4.54)
Lead fluoride	A	10 (4.54)
Lead iodide	A	10 (4.54)
Lead nitrate	A	10 (4.54)
Lead stearate	A	10 (4.54)
Lead sulfate	A	10 (4.54)
Lead sulfide	A	10 (4.54)
Lead thiocyanate	A	10 (4.54)
Lindane	X	1 (0.454)
Lithium chromate	A	10 (4.54)
Malathion	В	100 (45.4)
Maleic acid	D	5,000 (2,270)
Maleic anhydride	D	5,000 (2,270)
Mercaptodimethur	A	10 (4.54)

Mercuric cyanide	X	1 (0.454)
Mercuric nitrate	A	10 (4.54)
Mercuric sulfate	A	10 (4.54)
Mercuric thiocyanate	A	10 (4.54)
Mercurous nitrate	A	10 (4.54)
Methoxychlor	X	1 (0.454)
Methyl mercaptan	В	100 (45.4)
Methyl methacrylate	C	1,000 (454)
Methyl parathion	В	100 (45.4)
Mevinphos	A	10 (4.54)
Mexacarbate	C	1,000 (454)
Monoethylamine	В	100 (45.4)
Monomethylamine	В	100 (45.4)
Naled	A	10 (4.54)
Naphthalene	В	100 (45.4)
Naphthenic acid	В	100 (45.4)
Nickel ammonium sulfate	В	100 (45.4)
Nickel chloride	В	100 (45.4)
Nickel hydroxide	A	10 (4.54)
Nickel nitrate	В	100 (45.4)
Nickel sulfate	В	100 (45.4)
Nitric acid	С	1,000 (454)
Nitrobenzene	С	1,000 (454)
Nitrogen dioxide	A	10 (4.54)
Nitrophenol (mixed)	В	100 (45.4)
Nitrotoluene	C	1,000 (454)
Paraformaldehyde	C	1,000 (454)
Parathion	A	10 (4.54)
Pentachlorophenol	A	10 (4.54)
Phenol	C	1,000 (454)
Phosgene	A	10 (4.54)
Phosphoric acid	D	5,000 (2,270)
Phosphorus	X	1 (0.454)
Phosphorus oxychloride	C	1,000 (454)
Phosphorus pentasulfide	В	100 (45.4)
Phosphorus trichloride	C	1,000 (454)
Polychlorinated biphenyls	X	1 (0.454)
Potassium arsenate	X	1 (0.454)
Potassium arsenite	X	1 (0.454)
Potassium bichromate	A	10 (4.54)
Potassium chromate	A	10 (4.54)
Potassium cyanide	A	10 (4.54)
Potassium hydroxide	C	1,000 (454)
Potassium permanganate	В	100 (45.4)
Propargite	A	10 (4.54)
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Propionic acid	D	5,000 (2,270)
Propionic anhydride	D	5,000 (2,270)
Propylene oxide	В	100 (45.4)
Pyrethrins	X	1 (0.454)
Quinoline	D	5,000 (2,270)
Resorcinol	D	5,000 (2,270)
Selenium oxide	A	10 (4.54)
Silver nitrate	X	1 (0.454)
Sodium	A	10 (4.54)
Sodium arsenate	X	1 (0.454)
Sodium arsenite	X	1 (0.454)
Sodium bichromate	A	10 (4.54)
Sodium bifluoride	В	100 (45.4)
Sodium bisulfite	D	5,000 (2,270)
Sodium chromate	A	10 (4.54)
Sodium cyanide	A	10 (4.54)
Sodium dodecylbenzenesulfonate	С	1,000 (454)
Sodium fluoride	С	1,000 (454)
Sodium hydrosulfide	D	5,000 (2,270)
Sodium hydroxide	С	1,000 (454)
Sodium hypochlorite	В	100 (45.4)
Sodium methylate	С	1,000 (454)
Sodium nitrite	В	100 (45.4)
Sodium phosphate, dibasic	D	5,000 (2,270)
Sodium phosphate, tribasic	D	5,000 (2,270)
Sodium selenite	В	100 (45.4)
Strontium chromate	A	10 (4.54)
Strychnine	A	10 (4.54)
Styrene	С	1,000 (454)
Sulfuric acid	C	1,000 (454)
Sulfur monochloride	С	1,000 (454)
2,4,5-T acid	C	1,000 (454)
2,4,5-T amines	D	5,000 (2,270)
2,4,5-T esters	C	1,000 (454)
2,4,5-T salts	С	1,000 (454)
TDE	X	1 (0.454)
2,4,5-TP acid	В	100 (45.4)
2,4,5-TP acid esters	В	100 (45.4)
Tetraethyl lead	A	10 (4.54)
Tetraethyl pyrophosphate	A	10 (4.54)
Thallium sulfate	В	100 (45.4)
Toluene	С	1,000 (454)
Toxaphene	X	1 (0.454)
Trichlorfon	В	100 (45.4)
Trichloroethylene	В	100 (45.4)

Trichlorophenol	A	10 (4.54)
Triethanolamine dodecylbenzenesulfonate	С	1,000 (454)
Triethylamine	D	5,000 (2,270)
Trimethylamine	В	100 (45.4)
Uranyl acetate	В	100 (45.4)
Uranyl nitrate	В	100 (45.4)
Vanadium pentoxide	С	1,000 (454)
Vanadyl sulfate	С	1,000 (454)
Vinyl acetate	D	5,000 (2,270)
Vinylidene chloride	В	100 (45.4)
Xylene (mixed)	В	100 (45.4)
Xylenol	С	1,000 (454)
Zinc acetate	С	1,000 (454)
Zinc ammonium chloride	С	1,000 (454)
Zinc borate	С	1,000 (454)
Zinc bromide	С	1,000 (454)
Zinc carbonate	С	1,000 (454)
Zinc chloride	С	1,000 (454)
Zinc cyanide	A	10 (4.54)
Zinc fluoride	С	1,000 (454)
Zinc formate	С	1,000 (454)
Zinc hydrosulfite	С	1,000 (454)
Zinc nitrate	С	1,000 (454)
Zinc phenolsulfonate	D	5,000 (2,270)
Zinc phosphide	В	100 (45.4)
Zinc silicofluoride	D	5,000 (2,270)
Zinc sulfate	С	1,000 (454)
Zirconium nitrate	D	5,000 (2,270)
Zirconium potassium fluoride	С	1,000 (454)
Zirconium sulfate	D	5,000 (2,270)
Zirconium tetrachloride	D	5,000 (2,270)