

# **Davenport Water Pollution Control Pretreatment Office Elements of a Slug/Spill Prevention, Control and Countermeasure Plan**

## **1) Introduction**

- a) All user dischargers to the collection system discharging to the Davenport Water Pollution Control Plant shall notify the Davenport Water Pollution Control Plant immediately upon the occurrence of an accidental discharge of substances prohibited by Section 13.16.200 of the City of Davenport Sewer Ordinance or any slug loads or spills that may enter the public sewer. The City of Davenport Water Pollution Control Plant can be notified by telephone at either 326-7965 or 326-7877 (Weekdays) or 326 7934 (Evenings, Weekends, or Holidays). The notification shall include location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective actions taken. The user discharger notification of accidental releases in accordance with this section does not relieve it of other reporting requirements that arise under local, State, and Federal laws.
- b) Within five days following an accidental discharge, the permittee shall submit to the City of Davenport Water Pollution Control Plant a detailed written report. The report must specify:
  - i) Description and cause of the upset, slug load or accidental discharge, the cause thereof, and the impact on the user discharger compliance status. The description should also include location of the discharge, type, concentration and volume of waste.
  - ii) Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance is continuing, the time by which compliance is reasonably expected to occur.
  - iii) All steps taken or to be taken to reduce, eliminate, and/or prevent recurrence of such an upset, slug load, accidental discharge, or other conditions of noncompliance.
- c) All reports required by this permit shall be submitted to the City of Davenport Water Pollution Control Plant at the following address:

City of Davenport Water Pollution Control Pretreatment Office  
Attn: Dr. Edward F. Askew, Pretreatment Coordinator  
P.O. Box 3606  
Davenport, Iowa 52808-3606

## **2) Slug/Spill Prevention, Control and Countermeasure Plan Minimum Requirements**

- a) Slug / Spill Control Plan (SCP). Dischargers meeting the criteria as a user shall develop a SCP. The plan shall require the approval of the Water Pollution Control Plant Manager and shall contain the following:
  - i) A description of discharge practices, including non- routine batch discharges;
  - ii) A description of stored chemicals;
  - iii) Procedures for immediately notifying the POTW of slug discharges, including any that would violate the discharge prohibitions in section 13.16.200 of the City of

- Davenport Sewer Ordinance. Notification procedures shall comply with paragraphs (c) and (d) of this subsection;
- iv) A description of procedures and structures necessary to prevent adverse POTW impact from accidental spills including:
    - (1) inspection and maintenance of storage areas,
    - (2) handling and transfer of materials,
    - (3) loading and unloading operations, control of plant site run-off, worker training,
    - (4) building of containment structures or equipment,
    - (5) measures for containing toxic organic pollutants (including solvents),
    - (6) and/or measures and equipment for emergency response.
  - v) A schedule for the completion or implementation of necessary procedures and structures. Complete implementation and installation of any procedures or structures shall be according to the shortest possible schedule but in no case longer than one year. Review and approval of such plans and operating procedures shall not relieve the User from the responsibility to modify and operate its facility as necessary to meet the requirements of this chapter.

## **Sections to be Included in Submitted SPC**

### **1) General Information**

- a) Company Name, Address and Telephone Number
- b) Emergency Contact Personnel
  - i) Primary Emergency Coordinator
    - (1) Name
    - (2) Title
    - (3) Work Phone Number
    - (4) 24-Hour Emergency Phone Number
- c) Description of Business
  - i) Standard User Classification Number
  - ii) Applicable Categorical Pretreatment Regulations
  - iii) Days/Shifts/Hours of Operation
  - iv) Number of Employees
  - v) Description of Operations
  - vi) Description of Pretreatment Practices
- d) Discharge Practices
  - i) Average Daily Discharge (gpd)
  - ii) Chemical Constituents of Discharge
  - iii) Nature of Discharge
    - (1) Continuous
      - (a) Daily Discharge Volume
      - (b) Constituents of Discharge
    - (2) Batch
      - (a) Frequency of Batch Discharge
      - (b) Volume of Batch Discharge
      - (c) Constituents of Batch Discharge

## **2) Plant Layout/Flow Diagram**

- a) General Plant Layout
  - i) Property Boundaries
  - ii) Entrances/Exits
  - iii) Manufacturing Area
  - iv) Loading/Unloading Area
  - v) Hazardous Material Storage Area
  - vi) Pretreatment Facilities
  - vii) Waste Handling/Storage Area
  - viii) Security or Warning System Signs
- b) Flow Drainage Diagram
  - i) Identification and location of all floor drains, drainage pipes and channels and their direction of flow
  - ii) Identification and location of final wastewater discharge points, sumps or storage tanks
  - iii) Direction of flow for all sanitary/storm sewers
  - iv) Direction of above ground run-off from:
    - v) Chemical Storage Area
    - vi) Pretreatment Facilities
    - vii) Waste Handling Area

## **3) Material Inventory**

- a) Description and location of stored chemicals, production residues and sludges
- b) Maximum quantity of stored chemicals, production residues and sludge on hand
- c) Description of storage containers, container attachments and transfer equipment
- d) Chemical compatibility of stored material with storage containers and other materials stored in the immediate vicinity

## **4) Spill and Leak Prevention**

- a) Equipment to Prevent or Detect Spills (e.g., holding tanks, pumping equipment, underground seepage protection, cathodic protection of underground tanks, liquid level sensing devices, drip pans, overflow alarms, pH excursion alarms, ORP alarms, collision protection structures, explosion and fire prevention provisions, etc.)
- b) Drainage and Secondary Containment
- c) No floor drains or other direct bypass to the sewer system may exist in wet manufacturing areas, wastewater pretreatment areas, or raw chemical/sludge storage areas which in the event of run-off spillage would result in a violation of any criteria of the Davenport Water Pollution Control Pretreatment Permit or City of Davenport Sewer Ordinance.
- d) Under those situations when floor drains are required by specific building codes or when the elimination of floor drains is not feasible, a detailed explanation of the prohibitive factors along with an acceptable alternative plan to prevent run-off spillage from entering the sewer system must be provided
- e) Adequate secondary containment, such as but not limited to impervious diking, must be provided for all manufacturing, pretreatment operations and raw chemical/sludge storage areas.

- f) Impervious flooring with no direct drainage to the sewer system must be provided for all secondary containment areas
- g) A minimum secondary containment capacity of 100% of the volume of the largest above ground process tank located in wet manufacturing areas which, in the event of run-off spillage, would result in a violation of any criteria of the Davenport Water Pollution Control Pretreatment Permit or City of Davenport Sewer Ordinance must be provided
- h) A minimum secondary containment capacity of 100% of the volume of the largest above ground wastewater pretreatment system process tank which, in the event of run-off spillage, would result in a violation of any criteria of the Davenport Water Pollution Control Pretreatment Permit or City of Davenport Sewer Ordinance must be provided
- i) A minimum secondary containment capacity of 100% of the maximum volume of each of the following:
  - i) stored chemicals,
  - ii) production residues,
  - iii) pretreatment sludge.
  - iv) Outside storage facilities must be covered to prevent storm water from entering secondary containment areas
- j) Supporting documentation.
  - i) Said documentation must include written narratives, sketches, and engineering computations on tank sizing, worst-case scenario spill volumes and secondary containment capacities. Further, said documentation must be prepared by the facility environmental coordinator and must certify that the design and capacities of the secondary containment facilities will satisfy Davenport Water Pollution Control Pretreatment Office requirements and provide adequate protection from run-off spillage entering the sewer system
- k) Preventive Maintenance Procedures and Schedules
- l) Inventory of Pretreatment System Spare Parts (e.g., valves, pumps, gaskets, valve packing material, sensor probes, filters, etc.)

## **5) Emergency Response Equipment and Procedures**

- a) Emergency Response Equipment (e.g., alarm and communication systems, sewer plugs, absorbent materials, fire extinguishers, ventilation and breathing equipment, protective clothing, first aid kits, etc.)
- b) Emergency Response Procedures
  - i) Notification to in-house emergency response coordinator on a 24-hour basis
  - ii) Designated chain of command listing names, titles and telephone numbers for contact on a 24-hour basis
  - iii) Posted listing of spill/emergency response agencies with telephone numbers and applicable notification procedures
  - iv) Procedures for stopping flow (e.g., shutting off water supply, shutting off pumps, closing influent/effluent valves, plugging outlets, etc.)
  - v) Description of site remediation procedures
  - vi) If cleanup is performed with in-house resources, describe treatment/disposal methodologies
  - vii) If cleanup is contracted to an outside party, list names and phone numbers of all contractors and consultants as well as names and night and daytime telephone

numbers of company personnel with the authority to commit the company to financial participation in cleanup and remediation

## **6) Spill Reporting Procedures**

- a) Describe procedures for reporting and documenting spills and slug discharges
  - i) Reporting procedures must conform with Davenport Water Pollution Control Pretreatment Permit or City of Davenport Sewer Ordinance
- b) Provide listings of all agencies to be notified in the event of a spill of slug discharge, include telephone number

## **7) Employee Training Program**

- a) Outline of Employee Training Program to include the following:
  - i) Plant Processes
  - ii) Toxic/Hazardous Material Usage
  - iii) Potential Safety Hazards
  - iv) Practices for Preventing Spills/slug Discharges 5. Procedures for Responding to Spills/slug Discharges
- b) Schedule for Employee Training
- c) Maintain Records on All Employee Training

## **8) SPC Plan Certification**

- a) Each SPC Plan must be certified by the facility environmental coordinator and indicate that the plan will provide adequate protection from spills and slug loadings when used and maintained properly, and that the plan and containment facilities conform to all applicable federal, state, county and municipal regulations
- b) Each SPC Plan must be certified by an officer of the company and indicate that the plan has been implemented