

City of Columbus
Division of Sewerage & Drainage
Pretreatment Section

SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN

SPCC PLAN

1145.36 SPILL PREVENTION, CONTROL AND COUNTERMEASURES PLANS:

The Director may require any User, that he deems has potential to adversely affect the sewerage system, appurtenant devices, or POTW resultant sludges and effluents, by accidental or intentional release of any toxic or other deleterious substance on the User's premises; to develop, submit, and maintain a Spill Prevention, Control, and Countermeasures (SPCC) Plan. The elements of such plan shall be as established in regulations by the Director.

DIRECTOR'S REGULATION, Published 12/11/93, Effective 12/21/93:

SPCC Plans must include all minimum elements as published in the City Bulletin on 11/24/90. Additionally a Certification Statement must accompany the submittal such as:

"I have reviewed the attached Spill Prevention Control and Countermeasure Plan for _____
Company Name_____. The facility has been examined and I certify that the SPCC Plan is prepared in accordance with good engineering practices."

Reviewed and approved by:

_____, P.E.

Registration Number:

All SPCC Plans need updated every 3 years. For changes of phone numbers, names and responsibility designations, no certification statement is required. A Certification Statement is required for any changes regarding technical matters, only.

DIRECTOR'S REGULATION, Published 11/24/90, Effective 12/3/90:

SPCC plans must contain, at a minimum, the following elements:

- (A) description of discharge practices, including non-routine batch discharges;
- (B) description and quantity of stored chemicals;
- (C) procedures for promptly notifying the POTW of slug discharges as defined under the Definition Section of City Code Chapter 1145 with procedures for follow-up, written notification within five (5) days;
- (D) procedures used to prevent accidental spills, including maintenance of storage areas, handling and transfer of materials, loading and unloading operations, and control of plant site run-off;
- (E) any necessary measures for building containment structures or providing containment equipment;
- (F) any necessary measures for controlling toxic organics (including solvents);
- (G) any necessary procedures and equipment for emergency response;
- (H) any necessary follow-up practices to limit the damage suffered by the POTW or the environment, and to prevent recurrence of the type of spill that occurred;
- (I) the name of the person responsible for developing, implementing, and maintaining the plan, and who will serve as the current contact person for the plan; and
- (J) any other element deemed necessary by the Director, subsequent to the review of circumstances existing at the subject premises.

The pages that follow will help prepare a SPCC Plan under Columbus City Code 1145.36 and for Slug Control Plans under 40 CFR 403.8 (f) (2) (v). Other related plans are Stormwater and RCRA Emergency/Contingency Plans.

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN OUTLINE

- 1) Regulatory Mandate and Purpose** - Columbus City Code 1145.36 and 40 CFR 403
- 2) Plan Availability** - (in house) and other agencies
- 3) Management Approval**
 - A) Written management commitment of manpower, equipment and materials with company official signature
 - B) P.E. Certification
 - C) RCRA Emergency/Contingency Plan statement, where applicable
- 4) Facility Information**
 - A) Name, location and history of facility
 - B) Name, address and home telephone number of emergency, alternate and other shift coordinators
 - C) List of emergency agencies and their telephone numbers
 - D) Policies for notification of correct agency when emergency occurs
 - E) List of required information when making an emergency call
- 5) Responsibilities of the emergency coordinator**
 - A) Background and responsibilities (derived from 40 CFR and City Code)
 - B) When emergency occurs
 - C) After the emergency – reporting to appropriate agencies, list of required information
- 6) Facility Description**
 - A) Description of plant location and property configuration (**schematic**)
 - B) Description of security measures
 - a) Fencing
 - b) Lighting
 - c) Alarm systems
 - d) Guards
 - e) entrance/exits and alternative accesses
 - C) Internal communication system
 - D) Housekeeping program
 - E) Proper work practices – company policies
 - a) General work practices
 - b) Protection of the employee
 - c) Safety
 - F) Inspection procedures of process lines, tanks, pipe work, chemical storage areas, pretreatment facilities and hazardous waste storage
 - G) Description of the sanitary and storm drainage system (**schematic**)
 - H) Truck loading and unloading, including storm sewer arrangement in loading docks and policy for reporting hazardous material incidents
 - I) Material compatibility – company policies
 - J) Spill cleanup contractor – name and telephone number
 - K) Spill and leak prevention policies, including inspection requirements
 - L) Employee training program – company policies

7) Prediction of spill parameters

- A) List of priority pollutants, with those on the premises marked
- B) Description of production lines, including locations and tank contents and volumes (**schematics**)
- C) General description of potential problems and planned remedies, **location maps** and information specific to:
 - a) Storage tanks – underground, overhead and at ground level (**site plan**)
 - b) Chemical storage in the same room or area as boilers and/or steam generation or delivery system
 - c) Pipe work – types of support, inspection procedures and schedules
 - d) Dikes at entrances and docks and how to prevent illicit spills from entry into storm sewer, sanitary sewer or ground
 - e) Channels – where to locate and how to keep free from obstructions and debris
 - f) Pretreatment plant – physical description, process description, chemicals used and stored in the area, tank contents and capacities and spill control procedures (**site plan**)

8) Hazardous material and waste storage

- A) In depth description of storage tanks
 - a) Materials of construction
 - b) Size and capacity
 - c) Contents
 - d) Type, overhead and underground
- B) Chemical storage areas, inside and outside (**site plan**)
 - a) Location, including satellite storage
 - b) Types of chemicals stored, by chemical ‘families’
- C) Hazardous waste pads, description of location and containment – dikes existing or proposed
 - a) Inside and outside hazardous waste drum storage
 - b) Inspection schedule of hazardous waste areas
 - c) Empty drum handling and disposal practices

Appendix A

- 1) Location Maps – security measures, sanitary and storm sewer drainage systems, chemical and hazardous waste storage areas, pretreatment plant
- 2) Schematics – proposed alterations, production processes, containment arrangements and spill prevention arrangements

Appendix B – ongoing compliance documentation forms

- 1) Emergency response agencies and internal distribution
- 2) Spill incident report
- 3) Training documentation
- 4) Discharge incident reporting list and timetable – city, state and federal

Appendix C – compliance maintenance

- 1) Corrective action plan for the next six months
- 2) Inspection checklist to be used by in-house personnel

Plan Availability

A copy of this SPCC Plan will be available in the Emergency Coordinators office during normal working hours of _____am to _____pm. During a second shift operation, _____pm to _____am, the Secondary Emergency Coordinator will be responsible for this Plans availability and implementation.

Management Approval

This SPCC Plan will be implemented as herein described and the Emergency Coordinators have the authority to commit **(Company Name)** resources as may be required to protect public health and safety and/or the environment.

(Signature)

(Date)

(Name printed)

(Title)

P.E. Review and Certified Statement

“I have reviewed the attached Spill Prevention Control and Countermeasure Plan for COMPANY NAME. The facility has been examined and I certify that the SPCC Plan has been prepared in accordance with good engineering practices”

REVIEWED and APPROVED BY:

RCRA Emergency/Contingency Plan

COMPANY NAME has a RCRA Emergency/Contingency Plan that describes the safe handling of hazardous materials and wastes and the emergency procedures for containment and cleanup. Company procedures for personal protective equipment, hazardous waste spill contingency, medical emergencies, fire and evacuation among others are located in it. The RCRA Emergency/Contingency Plan and SPCC Plan will be kept in locations accessible to all employees during their working hours. All supervisors will periodically be trained in the procedures to be implemented by both plans.

Facility Information

Name of Facility _____

Address of Facility _____

Telephone Number _____ EPA I.D. Number _____

City of Columbus Industrial Wastewater Discharge Permit
Number _____ Expiration Date _____

Any other environmental permits
Number _____ Expiration Date _____

Emergency Coordinator _____
Office Telephone # _____ Home Telephone # _____

Alternate Emergency Coordinator _____
Office Telephone # _____ Home Telephone # _____

Secondary Emergency Coordinator _____
Office Telephone # _____ Home Telephone # _____

Emergency Telephone Numbers

<u>FIRE DEPARTMENT</u>	911
<u>AMBULANCE SERVICE</u>	911
<u>POLICE DEPARTMENT</u>	911
<u>HOSPITAL</u>	
<u>HOSPITAL (Secondary)</u>	
<u>POISON CENTER</u>	228-1323
<u>OHIO STATE HIGHWAY PATROL</u>	466-2660
<u>OHIO EPA (Central Office)</u>	728-3778
<u>OHIO EPA EMERGENCY RESPONSE TEAM (24 Hours/day)</u>	1-800-282-9378
(8:00 a.m. – 4:30 p.m.).....	224-0946
<u>COLUMBUS PRETREATMENT SECTION</u>	645-5876
<u>SEWER MAINTENANCE SECTION (If no answer at Pretreatment)</u>	645-7102
<u>JACKSON PIKE WASTEWATER TREATMENT PLANT</u>	645-3138
<u>SOUTHERLY WASTEWATER TREATMENT PLANT</u>	645-3248
<u>COLUMBUS HEALTH DEPARTMENT</u>	645-8191
<u>NATIONAL RESPONSE CENTER (To report reportable quantity spills)</u>	1-800-424-8802
<u>EMERGENCY MANAGEMENT AGENCY (To report reportable quantity spills)</u> ..	469-9700

NOTE: All area codes are 614 unless otherwise noted

Company policies to be followed when emergency occurs

- 1) In emergencies where there is danger of fire, explosion or toxic materials being discharged onto land, into air or water that would threaten human life, call the fire department first (911).
- 2) For emergencies that consist of liquid material spills that do not threaten human life or the environment, call the City of Columbus Pretreatment Section at 645-5876.
- 3) The City requires the generator to notify the Pretreatment Section at 645-5876, immediately of any discharge that gets into the sewer system, to enable countermeasures to be taken to minimize damage to the wastewater treatment system and/or the receiving waters. If no one is available to accept the telephone notification, call the Sewer Maintenance Section at 645-7102, which is answered twenty-four hours a day.
- 4) When reporting any discharge incident over the telephone (initial reporting requirement), give the following information:
 - A) Name of person making the report
 - B) Name and location of the facility
 - C) Telephone number where the person reporting can be reached
 - D) Date and time of discharge incident
 - E) Brief description of the incident and any possible hazards to human health and/or the environment
 - F) Estimated quantity of material or waste involved
 - G) Extent of contamination
 - H) Request that the fire chief report the incident to other appropriate emergency agencies

Emergency Coordinator Background and Responsibilities

At all times, there must be at least one (1) employee either on the facility premises or on call (i.e. available to respond to an emergency by reaching the facility within a short period of time) with the responsibility of coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facilities Contingency Plan, SPCC Plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the Contingency Plan.

When Emergency Occurs

Whenever there is an imminent or actual emergency situation, the Emergency Coordinator must immediately:

- 1) Activate facility alarms or communication systems to notify personnel
- 2) Notify local emergency response agencies

Whenever an emission, discharge, spill, fire or explosion occurs, the Emergency Coordinator must immediately:

- 1) Identify the character, exact source, amount and extent of the affected area

Concurrently, the Emergency Coordinator must assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment must consider both direct and indirect effects (e.g. the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water runoff from water or chemical agents used to control fire and heat induced explosions).

If the Emergency Coordinator determines that the facility has had an emission, discharge, spill, fire or explosion, which would have the potential to threaten human health or the environment, the applicable local authorities must be notified immediately.

If the facility stops operations in response to a fire, explosion or release, the Emergency Coordinator must monitor for leaks, pressure buildup, gas generation or rupture in valves, pipes or other equipment, wherever this is appropriate.

Always use the standard reporting procedure (verbal and written)

- A) Name of person making the report
- B) Name and location of the facility
- C) Telephone number where the person reporting can be reached
- D) Date and time of discharge incident
- E) Brief description of the incident and any possible hazards to human health and/or the environment
- F) Estimated quantity of material or waste involved
- G) Extent of contamination
- H) Request that the fire chief report the incident to other appropriate emergency agencies

During the emergency, the coordinator must take all reasonable measures necessary to ensure that further discharge, fire or explosion do not occur, or spread to other materials or wastes at the facility. These measures shall include, where applicable:

- 1) Stopping manufacturing processes and operations
- 2) Collecting and containing released materials or wastes
- 3) Removing or isolating containers

After the Emergency

Immediately after an emergency, the Emergency Coordinator, with OEPA approval, must provide for treating, storing or disposal of residues, contaminated soil, etc., from an emission, discharge, spill, fire or explosion at the facility.

The Emergency Coordinator must ensure that, in the affected areas of the facility, no material or waste incompatible with the emitted or discharged residues is processed, stored, treated or disposed of until cleanup procedures are completed and all emergency equipment listed in the SPCC Plan is cleaned and fit for its intended use before normal operations are resumed.

Within fifteen (15) days of the incident, the Emergency Coordinator (or designee) must submit a written report of the incident to the **OEPA**, Central District Office, Division of Surface Water, Pretreatment Coordinator, 3232 Alum Creek Drive, Columbus Ohio 43207-3461. The report must include the following information:

- 1) Name, address and telephone number of the person filing the report
 - 2) Name, address and telephone number of the facility at which the incident occurred
 - 3) Date, time and location of the incident
 - 4) A brief description of the circumstances surrounding the incident
 - 5) A description and estimated quantity, by weight or volume, of materials or wastes involved
 - 6) An assessment of any contamination of land, water or air that has occurred due to the spill incident
 - 7) Estimated quantity and disposition of recovered materials or wastes that resulted from the incident
 - 8) A description of what actions the management of the facility intends to take to prevent a similar occurrence in the future
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The City of Columbus further requires a written follow up report, filed by the generator within five (5) calendar days of the incident, with the Pretreatment Section. The report shall contain the following:

- 1) A description of the discharge, the cause of the upset and the upsets impact upon the user's compliance status.
- 2) The period of noncompliance, including the exact dates and times of noncompliance, and if the noncompliance continues, the time by which the noncompliance is expected to be corrected.
- 3) Any and all steps taken, or to be taken, to reduce, eliminate and prevent recurrence of the noncompliance.

This written report is to be sent to:

City of Columbus
Sewerage and Drainage Division
Pretreatment Section
1250 Fairwood Avenue, Room 186
Columbus, Ohio 43206-3372

Compliance Maintenance – Inspection Checklist

The inspector shall note significant observations made during each inspection, as well as, corrective action to be taken, when and by whom.

It is recommended that the following be checked at least monthly, along with any corrective action called for during the previous inspection.

Check:

- 1) The integrity of containment structures
- 2) All pipe work and valves for leaks or potential failure (unions and valve seating)
- 3) All pipe work and plating tanks for corrosion
- 4) That all drains are operating properly
- 5) That all pits and floor trenches are clear of accumulated solids, etc.
- 6) Steam traps and steam heating coils
- 7) That all chemicals are in designated storage areas
- 8) That correct absorbents are available and in proper storage areas
- 9) That used absorbents are drummed and labeled correctly
- 10) That labels on chemical containers and tanks are properly attached and readable
- 11) That any chemicals in drums/tanks that have been set aside (or are no longer used) are properly labeled and the containers are closed or covered
- 12) Any unusual usage of a process chemical
- 13) That empty drums are inspected, cleaned and stored only in designated areas while awaiting removal
- 14) That all catch pits are clear of debris
- 15) That the integrity of chemical transfer practices is maintained, including overhead tank filling by suppliers
- 16) Any unusual discoloration of floor and walls which could indicate leaks, or contamination sources
- 17) That the separation of regular trash from hazardous waste (such as filter elements) is assured
- 18) That cleanup of all leachate from dumpsters is assured
- 19) All gates, fencing and security systems for signs of vandalism
- 20) That all empty, open topped drums and/or tanks are properly stored
- 21) The integrity of plumbing of overhead chemical storage tanks
- 22) The correct operation of the discharge, flow measurement/sampling station
- 23) That hazardous waste storage is correct, removal offsite is timely and duly recorded in the RCRA hazardous waste notebook
- 24) That maintenance and operation of the pretreatment plant are sustained in accordance with good engineering practices
- 25) That nothing is placed so as to threaten the integrity of storm water drainage

NOTE: There may be other areas of concern to check periodically. Use this list as a guide and add to it as appropriate.

Description of Hazardous Materials and Waste Storage

The location of hazardous materials and/or waste storage may be found on the location map. This location map indicates all of the major process areas within the factory as well as the office complex.

Storage Tank Descriptions

<u>Tank # and Construction</u>	<u>Capacity</u>	<u>Contents</u>	<u>Type</u>
#1 Steel	5500 gal	Boiler blow down	Overhead
#2 Fiberglass	850 gal	Muriatic acid	Overhead
#3 Steel	900 gal	Sulfuric acid	Overhead
#4 Polypropylene	900 gal	Liquid caustic soda	Overhead
#5 Steel	1000 gal	Not in use	Roof top
#6 Fiberglass	1500 gal	Gasoline	Underground

Other areas of chemical/ waste storage, inside/outside the plant

<u>Area</u>	<u>Types of Chemical stored</u>
A	Acids (liquid) (Fluoroborates, Sulfate, Strippers)
B	Section a – Oxidizers Section b – Chromates Section c – Alkalies and bases
C	Brighteners and acids
D	Cyanides and Cleaner Storage (dry)
E	Empty Drums
F	Acids (liquid) and Alkalines
G	Hazardous Wastes
H	Acids (liquid)
I	Sulfates (pretreatment plant)
J	Hazardous Waste Sludge
K	Proposed Hazardous Waste Pad
L	Miscellaneous substances in unsecured containers, all within the perimeter fence

“Satellite” chemical storage throughout the production areas, for immediate use on the production line.

Training Documentation

Name _____

Length of employment _____ Date of Training _____

Location of training _____

Name of trainer _____

Trainers company _____

Subject covered: _____

I attended the training session on the date listed and have a reasonable understanding of the subject covered.

(Signature)

(Date)

Priority Pollutants

CAS #	POLLUTANT	CAS #	POLLUTANT
<u>Acids (11)</u>		<u>Base Neutrals (continued)</u>	
95-57-8	2-Chlorophenol	84-66-2	Diethyl phthalate
120-83-2	2,4-Dichlorophenol	131-11-3	Dimethyl phthalate
105-67-9	2,4-Dimethylphenol	84-74-2	Di-n-butyl phthalate
534-52-1	4,6-Dinitro-o-cresol	121-14-2	2,4-Dinitrotoluene
51-28-5	2,4-Dinitrophenol	606-20-2	2,6-Dinitrotoluene
88-75-5	2-Nitrophenol	117-84-0	Di-n-octyl phthalate
100-02-7	4-Nitrophenol	122-66-7	1,2-Diphenylhydrazine
59-50-7	p-Chloro-m-cresol	206-44-0	Fluoranthene
87-86-5	Pentachlorophenol	86-73-7	Fluorene
108-95-2	Phenol	118-74-1	Hexachlorobenzene
88-06-2	2,4,6-Trichlorophenol	87-68-3	Hexachlorobutadiene
		77-47-4	Hexachlorocyclopentadiene
		67-72-1	Hexachloroethane
		193-39-5	Indeno (1,2,3-cd) pyrene
		78-59-1	Isophorone
		91-20-3	Naphthalene
		98-95-3	Nitrobenzene
		62-75-9	N-nitrosodimethylamine
		621-64-7	N-nitroso-di-n-propylamine
		86-30-6	N-nitrosodiphenylamine
		85-01-8	Phenanthrene
		129-00-0	Pyrene
		120-82-1	1,2,4-Trichlorobenzene
<u>Base Neutrals (46)</u>			
208-96-8	Acenaphthylene		
120-12-7	Anthracene		
103-33-3	Azobenzene		
92-87-5	Benzidine		
56-55-3	Benzo (a) anthracene		
50-32-8	Benzo (a) pyrene		
205-99-2	3,4-Benzofluoranthene		
191-24-2	Benzo (g,h,i) perylene		
207-08-9	Benzo (k) Fluoranthene		
111-91-1	Bis (2-chloroethoxy) methane		
111-44-4	Bis (2-chloroethyl) ether		
102-60-1	Bis (2-chloroisopropyl) ether		
117-81-7	Bis (2-ethylhexyl) phthalate		
101-55-3	4-Bromophenyl phenyl ether		
85-68-7	Butyl benzyl phthalate		
91-58-7	2-Chloronaphthalene		
7005-72-3	4-Chlorophenyl phenyl ether		
218-01-9	Chrysene		
53-70-3	Dibenzo (a,h) anthracene		
95-50-1	1,2-Dichlorobenzene		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
91-94-1	3,3-Dichlorobenzidene		

CAS #	POLLUTANT	CAS #	POLLUTANT
<u>Volatiles (28)</u>		<u>Pesticides (26)</u>	
107-02-8	Acrolein	309-00-2	Aldrin
107-13-1	Acrylonitrile	319-84-6	Alpha-BHC
71-43-2	Benzene	319-85-7	Beta-BHC
75-25-2	Bromoform	319-86-8	Delta-BHC
56-23-5	Carbon Tetrachloride	58-89-9	Gamma BHC
108-90-7	Chlorobenzene	57-74-9	Chlordane
124-48-1	Chlorodibromomethane	50-29-3	4,4-DDT
75-00-3	Chloroethane	72-55-9	4,4-DDE
110-75-8	2-Chloroethyl vinyl ether	72-54-8	4,4-DDD
67-66-3	Chloroform	60-57-1	Dieldrin
75-27-4	Dichlorobromomethane	115-29-7	Alpha endosulfan
75-34-3	1,1-Dichloroethane	115-29-7	Beta endosulfan
107-06-2	1,2-Dichloroethane	1013-07-8	Endosulfan sulfate
75-35-4	1,1-Dichloroethylene	72-20-8	Endrin
78-87-5	1,2-Dichloropropane	7421-93-4	Endrin aldehyde
542-75-6	1,3-Dichloropropylene	76-44-8	Heptachlor
100-41-4	Ethylbenzene	1024-57-3	Heptachlor epoxide
74-83-9	Methyl bromide	53469-21-9	PCB-1242
74-87-3	Methyl chloride	11097-69-1	PCB-1254
75-09-2	Methylene chloride	11104-28-2	PCB-1221
79-34-5	1,1,2,2-Tetrachloroethane	11141-16-5	PCB-1232
127-18-4	Tetrachloroethylene	12672-29-6	PCB-1248
108-88-3	Toluene	11096-82-5	PCB-1260
156-60-5	1,2-trans-Dichloroethylene	12674-11-2	PCB-1016
71-55-6	1,1,1-Trichloroethane	8001-35-2	Toxaphene
79-00-5	1,1,2-Trichloroethane	1764-01-6	2,3,7,8-Tetrachloro-dibenzo -p-dioxin
79-01-6	Trichloroethylene		
75-01-4	Vinyl chloride		