

ACCIDENTAL & SLUG DISCHARGE PREVENTION PLAN POLICY

January 15, 2025

Version	Approved By	Effective Date
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Accidental & Slug Discharge Prevention Plan (ASDPP) Policy

1.0 PURPOSE, SCOPE, AND RATIONALE

The general purpose of this policy is to establish requirements to reduce the chance of a slug and/or accidental discharge of substances that may adversely affect the collection, transmission, or treatment systems of Metro Water Recovery (Metro) and its connectors, including:

- 1.1 Pass-through of pollutants,
- 1.2 Interference with the transmission system and/or treatment plant operations,
- 1.3 Contamination of municipal sludge, or
- 1.4 Adverse effects on worker health and/or safety.

Examples include, but are not limited, to accidental spills, non-customary batch discharges such as off-specification product discharges, periodic maintenance or cleaning discharges, discharges related to start up or shut down, emergency discharges, bypasses of treatment, or any other discharge as determined by Metro.

This policy was developed by Metro's Industrial Pretreatment Engineering Division (P&E) under the authority of the National Pretreatment Regulations, 40 CFR 403, and Metro's Rules and Regulations Governing the Operation, Use and Services of the System (Rules & Regulations).

This policy replaces and supersedes Metro's existing Slug Discharge Plan Policy, Spill Prevention Plan Policy, and Accidental Discharge Prevention Plan Policy. Any reference to those documents now refers to this policy.

This document does not relieve the industry from compliance with other applicable federal, state, and local codes, rules, and regulations.

2.0 GENERAL REQUIREMENTS

The following requirements apply to all Industrial Users (IU's) permitted under the Industrial Pretreatment Program. P&E may evaluate and deviate from any set requirement if an equivalent protection is determined to meet the intent of the requirement. All deviations must be in writing from P&E and, if accepted, may include additional requirements not listed in this document in order to meet intent.

2.1 FLOOR DRAINS AND TRENCHES

- 2.1.1 Open floor drains and trenches that drain to the sanitary sewer are prohibited in chemical storage, waste storage, and processing areas. If the IU or P&E determines that any substances or materials of concern as defined in sections 1.1-1.4 of this document can discharge to the drain, the drain must be capped, plugged, raised, hard-piped, or otherwise protected.

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- 2.1.2 If P&E concurs with a facility's need for keeping a drain open, a written variance will be issued to the facility. The variance will include any additional requirements that have been determined necessary by P&E to mitigate the accidental discharge potential presented by the open drain.

2.2 SECONDARY CONTAINMENT / SPILL PROTECTION

- 2.2.1 This section applies to chemical storage, liquid wastes, process equipment, and any substances or materials of concern as defined in sections 1.1-1.4 of this document.
- 2.2.2 Shall be 110% of the totalized maximum potential volume of all containers, piping, conveyance, and processes equipment in a given area.
- 2.2.2.1 In the case of multiple tanks and/or containers in a given area, and in lieu of the requirements of section 2.2.2, the IU may optionally provide secondary containment that is 150% of the volume of the largest tank, or of the largest volume of liquid contained within equipment/machines. The total capacity of secondary containment must still be at least 75% of the totalized volume of all tanks and/or containers in a given area.
- 2.2.3 Shall include 6" of freeboard to prevent splash-over, AFTER accounting for the volumetric requirements detailed above, unless justified otherwise in the industry's proposed ASDPP. This section does not apply to commercially available off the shelf spill containment pallets for containers of 330-gallons or less.
- 2.2.4 Shall account for the displacement volume of any object located inside of the secondary containment area.
- 2.2.5 Shall not contain drains of any type to the sanitary sewer.
- 2.2.6 Shall be appropriate to the location of installation and must be compatible with the materials contained.
- 2.2.7 Shall be properly maintained at all times.
- 2.2.8 Incompatible chemicals shall have separate secondary containment systems to prevent mixing.
- 2.2.9 Shall be designed by a professional engineer licensed in the state of Colorado if the system is not an off-the-shelf option or if the total containment required is over 2,500 gallons.
- 2.2.10 Shall be fully protected from forklifts, trucks, and other vehicular traffic.

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2.2.11 Acceptable containment/protection includes, but is not limited to:

- 2.2.11.1 Capped drains
- 2.2.11.2 Raised drains
- 2.2.11.3 Hard-piped drains
- 2.2.11.4 Double-walled tanks
- 2.2.11.5 Curbs/berms
- 2.2.11.6 Containment pallets
- 2.2.11.7 Diversions outside of the building

2.2.12 P&E recommends, but does not require, that containment/protection measures be designed to account for 20 minutes of fire sprinkler operation.

3.0 ACCIDENTAL & SLUG DISCHARGE PREVENTION PLAN (ASDPP)

If required by P&E, the IU must develop and implement an Accidental & Slug Discharge Prevention Plan (ASDPP) approved by P&E. If P&E requires the IU to submit an ASDPP, the proposed ASDPP must address both accidental discharge prevention and slug discharge control and prevention. The plan must include the following information:

- 3.1 Descriptions of discharge practices, including non-routine batch discharges. Examples of non-routine batch discharges include, but are not limited to:
 - Discharges from “bad” or off-specification batches,
 - Discharges from cleaning and/or maintenance activities,
 - Discharges from chemical or equipment replacements or change outs, etc.
- 3.2 Descriptions of all procedures that are/will be utilized to prevent and/or minimize the impact from accidental spills and batch discharges including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant-site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.
- 3.3 Authorized personnel that will be contacted in the event of a spill, slug discharge, or other related emergency.
- 3.4 Directions to immediately contact Metro’s Compliance and Enforcement (C&E) division in the event of a spill or other related emergency. The notification shall be executed in accordance with Section 6.20.1 of the Rules & Regulations.

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- 3.5 Directions to submit written notification to Metro's C&E division within 5-days of a spill, slug discharge, or other related emergency. The notification shall be executed in accordance with Section 6.20.1 of the Rules & Regulations.
- 3.6 Specific descriptions of all record keeping procedures that are/will be utilized for maintaining adequate documentation for any spills that occur at the facility.
- 3.7 Annual employee training program that describes how and when employees will be trained including refresher/update training. Training shall include emergency response and notification procedures as described in 3.1 through 3.5 above.
- 3.8 Submission of a legible facility site/plumbing plan that at minimum includes the following:
 - 3.8.1 Building outlines, including identifying names/numbers and interior rooms with identifying labels.
 - 3.8.2 Property lines.
 - 3.8.3 North arrow.
 - 3.8.4 All floor drains in the facility - specify whether they are open, capped, raised, or hard-piped. All floor drains shall be identified with drain-specific identifiers (e.g. "FD1, FD2, etc.).
 - 3.8.5 All sinks in the facility.
 - 3.8.6 Storm drains.
 - 3.8.7 Wastewater routing (piping) with directional arrows.
 - 3.8.8 Wastewater drainage discharge points and manholes - include domestic wastewater discharge points.
 - 3.8.9 Locations of all wastewater generating processes or activities, including domestic wastewater.
 - 3.8.10 All long-term and short-term chemical storage locations.
 - 3.8.11 Metro-approved monitoring points, if any.
 - 3.8.12 Wastewater treatment facilities, if any.
 - 3.8.13 Outfall locations to the sanitary sewer.
- 3.9 The completed Accidental & Slug Discharge Evaluation Table included at the end of this document.

EXAMPLE ACCIDENTAL & SLUG DISCHARGE EVALUATION TABLE -

This is an example – fill out the table on the next page with your facility information

Chemical/Process	Location	Maximum Capacity of Storage Container	Containment Volume & Description	Nearest OPEN or RAISED Floor Drain
Chemical A	Warehouse	55-gal	65-gal containment pallet	Floor drain #5 - RAISED
Chemical B Chemical C Chemical D Chemical E Chemical F	Chemical storage room	20-gal 1-gal 1-gal 1-gal 1-gal	65-gal containment pallet	Floor drain #2 - CAPPED
Chemical G	Chemical storage room	5,000-gal	N/A – no drains to discharge to	N/A – no drains to discharge to
Chemical H	Chemical storage room	20,000-gal	N/A – no drains to discharge to	N/A – no drains to discharge to
Chemical I	Boiler room	500-gal	500-gal double walled tank	Floor drain #2 - OPEN
<u>Filling Line</u> -Chemical A -Chemical E -Process water -Closed loop chiller water	Filling Line (Northwest corner of facility)	50,000-gal	N/A – drains are hard piped	N/A – drains are hard piped
<u>Plating Line</u> -Chemical B -Chemical C -Chemical D -Chemical F -Chemical G -Chemical H -Chemical I	Plating Line (Southeast corner of facility)	6,000-gal	7,000-gal, 24" high concrete containment enclosure	Floor drain #3 to treatment - OPEN

