

Synrad/Novanta Mukilteo, WA

Spill Prevention Plan

1. Spill Notification

For any spill that enters a floor drain, process sink or other drainage system, immediately notify the **Plant Manager: Fredrik Haggett, 206.349.0963**

The **VP of Operations: Jeff Fowler, 425-609-5112** will handle all appropriate reports and responses for internal activity and to legal authorities. Because there is so little risk for a small spill to require notification of any authorities, internal reporting is primarily to ensure employee safety, and to review so that there are no repeat spills.

For large internal spills (greater than 10 gallons) to a floor drain or process sink, as a courtesy (see Notes column in materials list below), the **VP of Operations** should notify the sewer district.

Alderwood Water & Wastewater District: 425-743-4605 (operations office)

The **one exception** is for a spill greater than 10 gallons of unused Alcohol, or greater than 20 gallons of waste alcohol mixed with process rinse water, into the floor drain in the Wet Process Room. The **Wastewater District** will need to know immediately about such a spill or discharge because of the risk for fire resulting from a large volume of flammable liquid in the sewer lines, and for the risk of a potential inhalation hazard for sewer district employees – so a notification is needed!

In the very unusual event that any kind of spill should occur outside the building (the risk is primarily at the loading dock) if a spill enters a storm drain, the **VP of Operations** must **immediately** notify **WA Ecology**, and take efforts to minimize the amount of material entering into the storm drain(s). But if the spill does **not** have a risk of entering a storm drain, a simple clean-up is all that is required.

The WA Dept. of Ecology Northwest Regional Office: 425-649-7000

2. Spill Controls (or Why a Spill Will NOT Directly Enter State Waters)

1. All floor drains discharge to the sanitary sewer, not to state waters.
2. All process sinks discharge to the process monitoring line, thence to the sanitary sewer.
3. All other sinks discharge directly to the sanitary sewer.
4. All operations involving process materials are conducted indoors.

Therefore, the risk of a spill directly entering state waters during normal operations is nil.

Note that the only time large quantities of materials could be at risk of entering state waters is prior to becoming the property of this company: i.e. at the loading dock while unloading materials from the courier during receiving. The likelihood of any spill going to the ground is very small since any spill would occur either inside the delivery truck or inside the loading dock area - the likelihood of a spill getting on the pavement and then into a storm drain is vanishingly small.

3. Materials Inventory and Locations

The following pages list all of the materials currently being used and/or stored at this facility. The maps show where in the building the materials are stored. The list gives typical container sizes and opportunity factors for spills to the floor, to sanitary drains, and to spills outside the building.

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Raw Materials List - with spill opportunity**

| Product Name | Material Type | Container Size | Spill on floor ^a | Spill to drain ^b | Spill outside ^c | Notes |
|---------------------------|---------------------------|----------------|-----------------------------|-----------------------------|----------------------------|--|
| Valtron EF5401 | pH Neutral Surfactant | 5 gal | 1 | 1 | 0 | Sewer spill: risk of possible foaming |
| Protex | Aluminum Cleaner | 1 gal | 1 | 1 | 0 | Sewer spill: risk of low pH |
| Alcohol – bulk storage | Flammable Organic Solvent | 55 gal | 1 | 1 | 1 | Sewer spill: risk of flammable material in sewer pipes Floor spills: risk of fire and noxious vapors for employees Outside spill: prevent from entering storm drains Outside spills: if enters drain(s) Alert Dept. of Ecology |
| 50% Sodium Hydroxide | Highly Caustic | 4 liters | 1 | 1 | 0 | Used for adjusting pH of process wastewater Quantities handled are typically small |
| 25% Phosphoric Acid | Highly Acidic | 4 liters | 1 | 1 | 0 | Used for adjusting pH of process wastewater Quantities handled are typically small |
| Alcohol – user quantities | Flammable Organic Solvent | < 1 pt | 1 | 0 | 0 | Minimal risk due to extremely small volumes |
| Acetone | Flammable Organic Solvent | 1 gal. | 1 | 0 | 0 | Minimal risk due to small volumes |
| MEK | Flammable Organic Solvent | < 1 gal. | 1 | 0 | 0 | Minimal risk due to small volumes |

** Risk for spill opportunities: 0=nil 1=minimal 2=fair 3=likely (if folks aren't careful)

^a = Opportunity for a spill to occur on the floor inside the building. Taken as 'likely' for small quantities of all liquids. (does not include wet room floor)

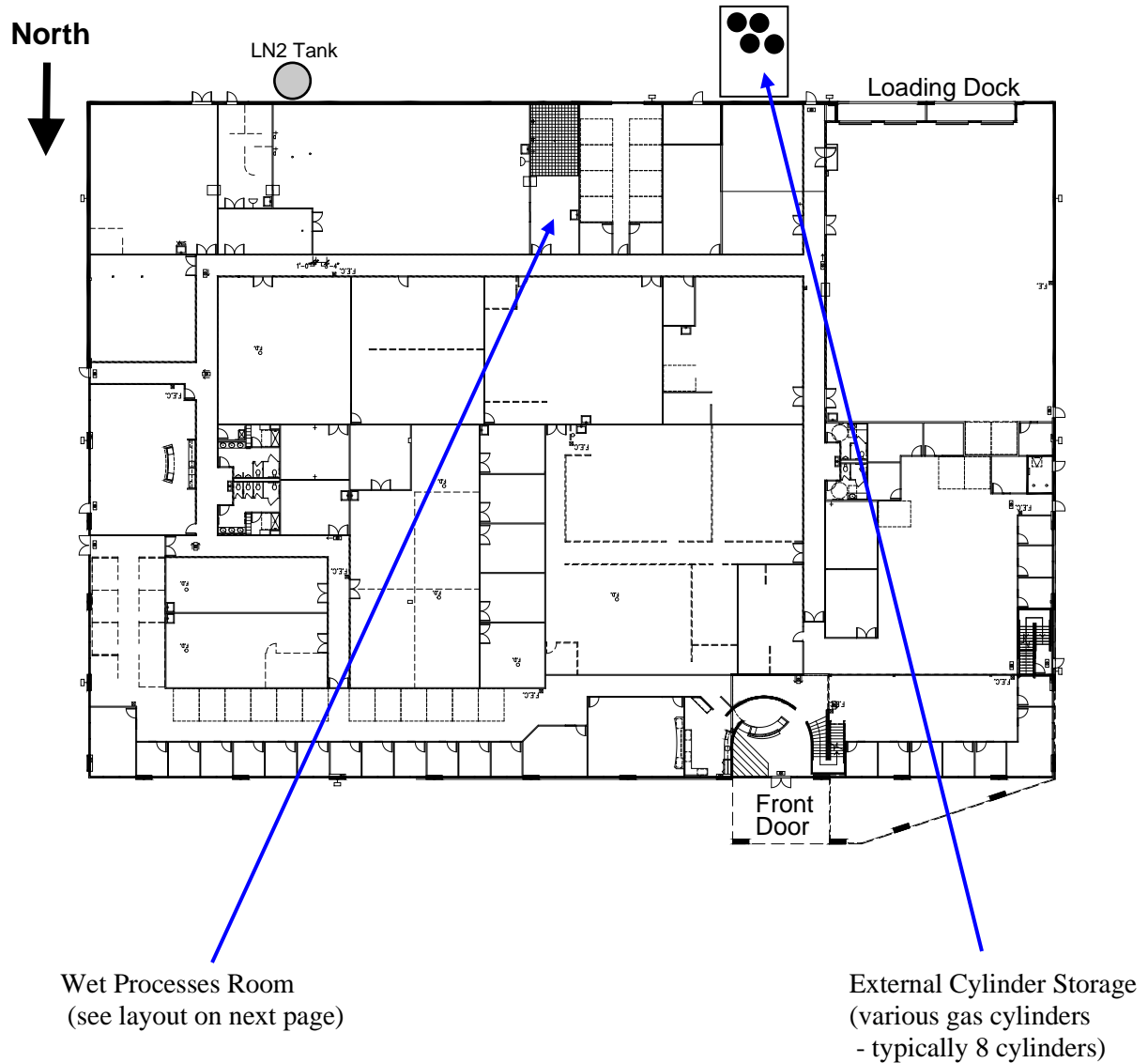
^b = Opportunity for a spill to enter a floor drain (then directly to the sanitary sewer lines). Taken as 'nil' for small volumes as they would have minimal impact on the sewer system. For larger volumes, the likelihood of having the larger container empty all contents is still minimal, but the likelihood of reaching the drain is higher ('fair' or 'likely') - but the likelihood of even having a spill is even less likely as the bulky size and shape of the containers is not conducive to having someone moving containers 'frequently'.

^c = Opportunity for spills outside the building. These are taken as 'nil' for all small container materials since they are normally inside boxes when being handled outside. Likelihood is taken as 'minimal' for 55 gal. drums since a spill would be highly unlikely for the plastic drums in use.

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Fig. 1 Building Layout



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Fig. 2 Wet Process Room Layout – Materials Use and Storage

