

Discharging Ballast Water

- Steel vs. Fiberglass
- Water vs. petroleum ballast
- What's the current, common practice?
- How do you fill the tank with ballast water?
- How full are the tanks?
- When do you install the drop tube, STP and probe? Before or after petroleum is transferred.
- How do you empty the tank, where do you discharge?

Discharging Ballast Water

- Why discharging to the storm sewer is regulated
- Chlorine and its lesser seen cousin chloramine: why we use them
- What are the options to storm sewer?
- What are the pluses and minuses of discharging to the city WWTP?
- What analyses do treatment plants ask for?
- Sampling
- What about land application?
- Infiltration
 - What is it? How is it done? Is it regulated?

Infiltration—How will this Work on Site

- Discharge to the ground surface for infiltration is non-regulated as long as :
 - It does not discharge directly to a water of the US (including tile/stormwater intakes)
 - The discharge does not create an environmental threat (i.e. potential to contaminate soil and groundwater)
 - The discharge remains on the site in which it originated (don't want to impact neighbor's property).
- Regarding ballast water from new tanks: if it is certain that the only pollutant is chlorination, then discharging to the ground surface would be acceptable
- Examples of other activities that discharge to the ground surface:
- Construction contractors dewatering a trench will pump to a location so that that sediment laden water can settle on site and infiltrate into the soil. Some have used a fabric sock to trap most of the sediment in place and then allow the water to infiltrate on site
- Well drillers need to take precautions to ensure spoils from drilling the well (which is in a slurry form) doesn't flow to a stream or storm sewer intake. They typically utilize berms and silt fences to divert or detain the contaminated water on site
- Concrete mixer washout areas are designated areas where the operators can clean the equipment and allow for the sediment to settle in a containment area. The water then infiltrates into the soil on site leaving the sediment behind. They then haul the sediment away for disposal or reuse.

Unattended Self-Service Motor Fuel Dispensing Facilities



Deadline was July 1, 2014



What is an Unstaffed Facility?

“Unstaffed facilities” are those facilities that do not have an operator present on site at all times.



What Does the Rule (135.5(1)"e") State?

- Any UST facility that uses pressurized piping and dispenses product in the absence of a Class A, B or C operator shall comply with the following requirements:
- Employ ALLDs that do one or more of the following:
 - Shut down the STP
 - Triggering an alarm (audible and/or visual),
 - Restrict (slow) to flow of product or

- At facilities implementing 135.5(1)"e"(1)"2" or "3," (alarm or restricted flow) the facility's operator shall be notified or shall conduct a visit through one of the following methods:
 - Notification of Class B by electronic communication
 - Signage that is immediately visible to customer indicating symptoms of a problem (slow flow, audible or visual alarm), directing them to 24/7 contact
 - Daily visit to the site (observe restricted flow, dispense into a proper container or personal vehicle, and log to demonstrate compliance)

Taking a Long Time to fill your vehicle?

There could be a problem with the underground piping

Stop dispensing fuel, return the nozzle

Call the number below

1-800-xxx-xxxx

Facility ID: 74209

In case of a fire or emergency only:

Use the Emergency Red Stop Button Located on the premises

Report the emergency by calling 911

Secondary Containment



Secondary Containment Pre-Testing

- Testing tanks, piping, tank top and piping sumps, spill buckets and UDC for Integrity before placing them into operation
 - Dry Interstice
 - Wet Interstice
 - Soap test
 - Follow manufacturer's recommendations
 - Record the above on manufacturer's installation checklist
 - Consult PEI RP100 and RP1200

Secondary Containment Pre-Testing

- Pre-testing of sumps and UDCs
 - Manufacturer's recommendation
 - DNR Secondary Containment Testing form
- Operational test of sensors
- Piping secondary
 - Manufacturer's checklist
 - DNR Secondary Containment Testing form
- Tank secondary
 - Manufacturer's checklist

Post-Installation Testing

- Monthly monitoring
- Testing upon startup and every two years
- Sensors tested a minimum of every two years
- Does the secondary containment system perform at least as well as it did upon installation

Sensors

Solid State Discriminating Sump Sensor
Discriminating Pan Sensor
Discriminating Sump Sensor
Solid State Discriminating Pan Sensor
Piping Sump Sensor
Solid State Sump Sensor
Interstitial Liquid Sensor for Steel Tanks
Interstitial Sensor for High Alcohol
Micro Sensor
Interstitial Sensor for Fiberglass
Hydrostatic Sensor
Groundwater Sensor
Vapor Sensor
Vacuum Sensor

Registration Form: What's New

- UST System Checklist and Attachments
 - As built
 - Pre-install pressure test results for primary and secondary
 - Spill Bucket hydro test results (PMR)
 - UDC/Sump hydro test results (PMR)
 - Functionality of sensors printout (PMR)
- Secondary containment monitoring (tank top sumps, UDC, transition sumps)
- Dispensers—primary and satellite and line leak detection
- Unstaffed sites
- Spill protection

Improve...Registrations

1. New tank system registration forms and supporting documents (see checklist)
2. Registration form not completed
3. Missing third party installation inspection
4. Piecemeal submittals
5. Registration form unsigned
6. Missing test documentation

Improve...Closures

- Closure notices (early as possible)
- Missing reports
- Late reports
- Tell owners/operators to file claim

Improve...Inspection Database

- Tank selection
- Dispenser selection/add
- Add tank, piping, equipment brand/model
- Changes in owner, contacts, etc.
- Pictures of site, compliance problems noted – leaks, water/fuel in sumps, sensor placement, ATG alarm, rectifier readings, etc.
- Give a deadline for correcting deficiencies – enter into inspection database
- Follow up on corrections - enter the deficiency has been corrected/date into inspection database.