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Developing A Source Control Plan for High-Load Areas

Applicability

When land use development requires a DES Alteration-of-Terrain (AoT) permit and involves certain activities that release hydrocarbons, metals, or suspended solids in concentrations greater than typically found in stormwater runoff, a source control plan is required. Land use activities, such as petroleum storage, fuel dispensing areas and hazardous waste facilities often have areas (e.g. fuel transfer or loading zones) for activities that may expose “regulated substances” (e.g. oil, gasoline) to precipitation or mix with relatively clean stormwater runoff. These areas are referred to as “High-Load Areas” under the AoT regulations. Sites with no regulated substances being used or demonstrating through the use of best management practices (BMPs) no contact between regulated substances and precipitation/ runoff from any portion of the site do not need to develop a source control plan.

Required Content for a Source Control Plan

A source control plan developed for High-Load Areas must include a narrative and map(s) describing the use of structural and/or non-structural BMPs to minimize the volume of stormwater coming in contact with regulated substances. BMPs related to the storage, transfer and handling of regulated substances should be consistent with Env-Wq 401, Best Management Practices for Groundwater Protection. (See Summary of Env-Wq 401 BMP below)

A source control plan must include the content described within AoT regulations (see Env-Wq 1504.07):

1. An overview of how source controls including structural or operational management practices will prevent or minimize the amount of regulated substances from mixing with clean stormwater.
2. A list of regulated substances expected to be present on the site in quantities of five gallons or more.
3. Groundwater Protection Areas, if any, within 1,000 feet of the site perimeter.
4. A plan depicting the drainage area with exposed regulated substances and the location(s) of stormwater practice(s) or discharge point(s) serving those areas, including latitude-longitude point(s) of the practice or discharge point(s) to within plus or minus 5 meters of

Table 1 High Load Areas Include the Following Land Use Activities per Env-Wq 1502.26
Industrial facilities subject to the NPDES Multi-Sector General Permit
Petroleum storage facilities
Petroleum dispensing facilities
Vehicle fueling facilities
Vehicle service, maintenance and equipment cleaning facilities
Fleet storage areas
Public works storage areas
Road salt facilities
Commercial nurseries
Non-residential facilities having uncoated metal roofs with a slope flatter than 20%
Facilities with outdoor storage, loading, or unloading of hazardous substances, regardless of the primary use of the facility
Facilities subject to chemical inventory under Section 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

the practice or discharge point.

5. The location(s) and containment method(s) to be employed for storage of regulated substances.
6. A plan depicting the location(s) where regulated substances will be handled, including the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product.
7. A plan showing the location(s) of snow storage areas.
8. A description of spill prevention and control or containment measures.
9. A list of the phone numbers and mailing addresses of the owner of the facility.
10. A program of training to familiarize employees with the plan and to ensure its implementation.

Under AoT regulations, stormwater discharge, filtration/infiltration restrictions or additional design requirements apply to sites within certain high-value water supply resources areas. Source control plans should identify water supply well setbacks, Groundwater Protection Areas or Water Supply Intake Protection Areas and indicate how the plan complies with the restrictions or additional design requirements.¹ For a summary of the discharge restrictions and additional design requirements in these areas review Section 3-1 of the New Hampshire Stormwater Manual (Volume 2).

The source control plan is evaluated by DES as to whether the plan meets the following criteria:

- Source controls minimize the volume of stormwater coming into contact with regulated substances and segregate relatively clean stormwater from stormwater with a higher concentration of pollutants.
- Source controls and narrative on plan include necessary information required by Env-Wq 1507.04.
- BMPs applicable to regulated substances in regulated containers (greater than or equal to five gallons) are consistent with Env-Wq 401.
- Plan meets the discharge setbacks, restrictions and additional design requirements within water supply well setbacks, Groundwater Protection Areas and Water Supply Intake Protection Areas.

Summary of Env-Wq 401 BMP Requirements

Storage

- Store regulated substances on an impervious surface.
- Secure storage areas against unauthorized entry.
- Inspect storage areas weekly.
- Have secondary containment areas for outdoor storage that includes a cover.
- Keep containers stored outside more than 50 feet from surface water, 75 feet from private wells, and up to 400 feet from public water supply wells.
- Keep containers at least 50 feet from storm drains, if no secondary containment.
- Label containers clearly and visibly.

Handling

- Maintain good housekeeping practices, e.g., clean up of small spills, within High-Load Areas.
- Keep containers closed and sealed.
- Place drip pans under spigots, valves, and pumps.

¹ Groundwater Protection Areas and Water Supply Protection Areas may be located using DES's One Stop Web GIS after registration with DES. See <http://www2.des.state.nh.us/OneStop/>.

- Use funnels and drip pans when transferring regulated substances; perform transfers over impervious surfaces.

Spill and Release Response

- Employee training and information posted concerning response procedures in the event of a spill.
- Availability and capacity of spill control and containment equipment

Floor Drains and Work Sinks

- Cannot discharge into or onto the ground.

Env-Wq 401, Best Management Practices for Groundwater Protection can be reviewed online at <http://des.nh.gov/organization/commissioner/legal/rules/index.htm#envwq401>

Industry-Specific Requirements

In addition to the BMPs listed above, plans for industrial facilities must evaluate the appropriateness of industry-specific controls, and include provisions for the implementation of those that are found to be appropriate.

Consistency with Other Permits, Plans or Controls

Many land uses or activities already operate under local, state or federal permits that require pollution prevention controls, permits and/or plans. Source control plans should be consistent with other applicable permit requirements, plans or controls including Spill Prevention, Control, and Countermeasures plans (SPCCs) required under 40 CFR 112, National Fire Protection Association (NFPA) standards, specifically NFPA 30 Flammable and Combustible Liquids Code and Stormwater Pollution Prevention Plans (SWPPP) approved by U.S. EPA through the National Pollutant Discharge Elimination System (NPDES) program. EPA-approved SWPPPs may be submitted to the AoT program in lieu of a source control plan.

For Additional Information

For additional information, please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov or visit www.des.nh.gov, click on A-Z List and choose Drinking Water and Groundwater Bureau. All of the bureau's fact sheets are on-line at <http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm>.

Note: This fact sheet is accurate as of August 2010. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.