

PDHonline Course C122 (2 PDH)

Stormwater: The No Exposure Exemption for Industrial Activity

Instructor: Robert P. Stevens, P.E., DEE

2012

PDH Online | PDH Center

5272 Meadow Estates Drive Fairfax, VA 22030-6658 Phone & Fax: 703-988-0088 www.PDHonline.org www.PDHcenter.com

An Approved Continuing Education Provider

Stormwater: The No Exposure Exemption For Industrial Activity

Course Content

All facilities that wish to qualify for the No Exposure Exemption must submit a certification to the appropriate agency by March 19, 2003. If a facility can qualify for the No Exposure Exemption, there may be reduced effort and outside costs otherwise expended to meet NPDES permit requirements (e.g., collecting and analyzing stormwater samples; implementing a Storm Water Pollution Prevention Plan). This may be an incentive for a facility that is "close" to no exposure to consider modifying operations to achieve the exemption. Just as important, the activities and conditions that satisfy no exposure requirements may also be effective for any facility interested in reducing pollution in stormwater.

1.0 Regulatory Summary

The October 1990 amendments to the federal NPDES regulations are known as the Phase I Stormwater NPDES Regulations. Phase I rules identified eleven categories of industrial activities that met the definition of "storm water discharge associated with industrial activity". These were not linked to any owner; rather the rules applied to the type of activity. The industrial activity definition is summarized below. A one-page summary is available from US EPA (http://www.epa.gov/npdes/pubs/list.pdf). The regulatory definition is included in Table 1.

Category One (i)	Facilities with effluent limitations
Category Two (ii)	Manufacturing
Category Three (iii)	Mineral, Metal, Oil and Gas
Category Four (iv)	Hazardous Waste, Treatment, or Disposal Facilities
Category Five (v)	Landfills
Category Six (vi)	Recycling Facilities
Category Seven (vii)	Steam Electric Plants
Category Eight (viii)	Transportation Facilities
Category Nine (ix)	Treatment Works
Category Ten (x)	Construction Activity
Category Eleven (xi)	Light Industrial Activity

Table 1 Definition of Industrial Activity

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) in paragraph (b)(14) of this section);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283), 29, 311, 32 (except 323), 33, 3441, 373;

(iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under subtitle D of RCRA;

Table 1 Definition of Industrial Activity (concluded)

(vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (b)(14)(i)-(vii) or (ix)-(xi) of this section are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under R.61-9.403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA;

(x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than five acres of total land area which are not part of a larger common plan of development or sale;

(**xi**) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (ii)-(x);

The Phase I regulations allowed the No Exposure Exemption only for Category Eleven, Light Industrial Activity facilities. This was a self-determined and self-enforced requirement. No information was sent by the facility to the regulatory agency to request this exemption.

In December 1999, the federal rules were amended. These Phase II rules included two major changes regarding the exemption for no discharges associated with industrial activity. The first change is that an industry claiming the exemption must submit a Certification of No Exposure to the regulatory agency that regulates NPDES permits (their state agency or US EPA). This requirement also applies to the Category Eleven Light Industry facilities currently claiming the exemption. The second change is that any industrial category (except Category Ten, Construction Activity) is eligible for the exemption, if the conditions for no exposure can be met.

If a facility is considering this exemption, they need to confirm which agency regulates NPDES permits (their state agency or US EPA). If it is the state agency, verify they have promulgated the Phase II stormwater rules to include the federal exemption.

2.0 Meeting the No Exposure Exemption

No Exposure is defined by the US EPA to mean all industrial materials are protected by a storm resistant shelter from rain, snow, snowmelt, and/or runoff.

2.1 Industrial Materials

Industrial materials cover essentially everything that is handled at a facility which poses the risk of stormwater contamination. These can include:

- Raw materials
- Intermediate products (e.g., partially completed products)
- By-products (e.g., incidentally produced materials)
- Final product

2.2 Industrial Activity

Industrial activity includes any material handling equipment and activities, as well as other industrial machinery. Material handling includes storage, loading and unloading, transportation, or conveyance of any industrial material.

2.3 No Exposure

No exposure is accomplished when all industrial materials and industrial activities are protected by a storm resistant shelter. The shelter accomplishes "no exposure" when it can prevent exposure to rain, snow, snowmelt, and/or runoff.

A storm resistant shelter includes completely roofed and walled buildings or structures. A structure with only a top cover but no side coverings also can qualify for no exposure if it can prevent exposure of the material under the structure to any run-on and subsequent runoff.

Temporary covers, such as tarpaulins, also can achieve no exposure. Since these are considered "temporary", they are for use only until a permanent structure can be completed.

3.0 Activities That Do Not Require a Storm Resistant Shelter

US EPA recognizes several defined industrial activities where the potential for stormwater pollution is such that a storm resistant shelter is not required to meet the No Exposure Exemption requirement.

3.1 Drums, Barrels, Tanks and Similar Containers

If these vessels are sealed, they are not considered as exposed provided they are not deteriorated and do not leak. Sealed means banded or otherwise secured and without operational taps or valves. As guidance for the No Exposure Determination, the following conditions are required:

- Only storage of the container is allowed outside. Any addition or withdrawal of material to or from the vessel while outdoors does not represent no exposure.
- Moving containers outside does not create exposure.
- Inspection of the containers is required to ensure they are not open, deteriorated, or leaking.
- Pallets, racks, containers, and other transport platforms used with drums, barrels, and similar containers that are pollution free can be stored outside and still meet the exemption.

3.2 Above Ground Storage Tanks (ASTs)

ASTs are generally considered not exposed. They also may be exempt from the prohibition against adding or withdrawing material to and from external containers provided:

- The AST is physically separated from and not associated with vehicle maintenance activities.
- There is no piping, pumps or other equipment leaking contaminants that could contact storm water.
- It is recommended that ASTs be surrounded by some type of physical containment to prevent runoff in the event of a structural failure or leaking transfer valve.

3.3 Lidded Dumpsters

Provided these containers are completely covered and nothing can drain out holes in the bottom, they are considered to meet the exemption. Industrial refuse and trash that is stored uncovered is considered exposed.

3.4 Adequately Maintained Vehicles

Trucks, automobiles, forklifts, trailers or other general purpose vehicles found on-site can be considered as meeting the exemption provided they are not leaking or are otherwise a potential source of contaminants. Conveying materials between buildings, even if these materials would otherwise not be allowed to be stored outdoors, does not create a condition of exposure provided the materials are adequately protected from precipitation and could not be released as a result of a leak or spill.

3.5 Final Products

The exemption will apply to these when they are stored outdoors provided they are built for and used outdoors (e.g., automobiles) and have not deteriorated or are otherwise a potential source of contaminants. This exemption **does not** extend to the following:

- Intermediate products that are used in manufacture of final products (such as sheet metal, tubing, and paint used in manufacturing vehicles). The reasoning is that these intermediate products may be chemically treated or are insufficiently impervious to weathering to meet the final product test.
- Products which could mobilize in storm water discharges (e.g., a soluble material such as rock salt)
- Products which when exposed may oxidize, deteriorate, leak or otherwise be a potential source of contaminants (e.g., junk cars; stockpiled train rails)

3.6 Other Potential Sources of Contaminants

The No Exposure Exemption also considers the incidental presence of pollutants at a facility that may derive from activities other than those included in Table 1. These are addressed as follows:

- Particulate emissions from roof stacks or vents **do not create** a condition of exposure, provided they are in compliance with other applicable environmental protection programs (e.g., air quality control programs) and do not cause storm water contamination.
- Acid rain leachate affecting building structures **can create** a condition of exposure if the acidic precipitation causes pollutants to leach from the structures.
- Pollutants potentially mobilized by wind **can create** a condition of exposure, in particular if a structure has open sides and can be affected by wind.

4.0 Certifying a Condition of No Exposure

The federal form for certifying No Exposure is NPDES Form 3510-11 (available from the US EPA web page, <u>http://www.epa.gov/npdes/pubs/noexpoform_app4.pdf</u>). The exemption requires that you declare **none** of the following activities take place at your facility. You must be able to answer **No** to the questions on the form.

(1) Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water.

(2) Materials or residuals on the ground or in storm water inlets from spills/leaks.

(3) Materials or products from past industrial activity.

(4) Material handling equipment (except adequately maintained vehicles).

(5) Materials or products during loading/unloading or transporting activities.

(6) Materials or products stored outdoors (except final products intended for outside use - e.g., new cars - where exposure to storm water does not result in the discharge of pollutants).

(7) Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers.

(8) Materials or products handled/stored on roads or railways owned or maintained by the discharger.

(9) Waste material (except waste in covered, non-leaking containers – e.g., dumpsters).

(10) Application or disposal of process wastewater (unless otherwise permitted).

(11) Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow.

NPDES Form 3510-11 must be signed by a responsible corporate officer.