

8.1 Additional Construction Site Pollution Controls



Description

Although sediment is the primary pollutant of concern resulting from construction activity, other pollutants need to be considered as well. These include petrochemicals: fuel, oil, and asphalt; and construction chemicals and materials: paints, solvents, fertilizer, soil additives, concrete wash water, etc. Also included are solid wastes and construction debris. Keeping these substances from polluting runoff can be accomplished to a large extent through good housekeeping and following the manufacturer's recommendations for their use and disposal.

Condition Where Practice Applies

Wastes generated by construction activities (i.e. construction materials such as paints, solvents, fuels, concrete, wood, etc.) must be disposed of in accordance with ORC 3734 and ORC 3714. Hazardous and toxic substances are used on virtually all construction-sites. Good management of these substances is always needed.

Planning Considerations

Good erosion and sediment control will prevent some pollutants in addition to sediment from leaving the site; however, pollutants carried in solution or as surface films on runoff water will be carried through most erosion and sediment control practices. These pollutants become nearly impossible to control once carried offsite in runoff. Adding to the problem is the fact that construction wastes, many containing toxic chemicals, are routinely buried on-site, dumped on the ground, poured down a storm drain, or disposed of with construction debris. So while typical erosion and sediment-control practices are important for controlling other pollutants, additional preventative measures are needed.

Reducing pollutants other than sediments depends heavily on construction personnel and how they carry out their operations. To help facilitate this, plans should contain standard notes clearly stating requirements to contractors. It also may be appropriate to include requirements for specific provisions for hazardous materials storage, handling and disposal.

Requirements

1. **Educate Construction Personnel**, including subcontractors who may use or handle hazardous or toxic materials, making them aware of the following general guidelines:

Disposal and Handling of Hazardous and Other Construction Waste	
DO:	<ul style="list-style-type: none"> • Prevent spills • Use products up • Follow label directions for disposal • Remove lids from empty bottles and cans when disposing in trash • Recycle wastes whenever possible
DON'T	<ul style="list-style-type: none"> • Don't pour into waterways, storm drains or onto the ground • Don't pour down the sink, floor drain or septic tanks • Don't bury chemicals or containers • Don't burn chemicals or containers • Don't mix chemicals together

2. Waste disposal containers shall be provided for the proper collection of all waste material including construction debris, sanitary garbage, petroleum products and any hazardous materials to be used on-site. Containers shall be covered and not leaking. All waste material shall be disposed of at facilities approved for that material. Construction Demolition and Debris (CD&D) waste must be disposed of in accordance with ORC 3714 at an approved Ohio EPA CD&D landfill.

3. **No construction related waste materials are to be buried on-site.** By exception, clean fill (bricks, hardened concrete, soil) may be utilized in a way that does not encroach upon natural wetlands, streams or their floodplains. Filling of stream side areas is Fill may not result in the contamination of waters of the state. unless prohibited by local ordinance or zoning.
4. **Construction and Demolition Debris (CD&D) Disposal.** CD&D waste must be disposed of in accordance with ORC 3714 at an approved Ohio EPA CD&D landfill. CD&D waste is defined as all materials attached to a structure, which is being demolished (for materials containing asbestos see Item 12).
5. **Handling Construction Chemicals.** Mixing, pumping, transferring or other handling of construction chemicals such as fertilizer, lime, asphalt, concrete drying compounds, and all other potentially hazardous materials shall be performed in an area away from any watercourse, ditch or storm drain.

- 6. Equipment Fueling and Maintenance**, oil changing, etc., shall be performed away from watercourses, ditches or storm drains, in an area designated for that purpose. The designated area shall be equipped for recycling oil and catching spills. Secondary containment shall be provided for all fuel oil storage tanks. These areas must be inspected every seven days and within 24 hrs. of a 0.5 inch or greater rain event to ensure there are no exposed materials which would contaminate storm water. Site operators must be aware that Spill Prevention Control and Countermeasures (SPCC) requirements may apply. An SPCC plan is required for sites with one single aboveground tank of 660 gallons or more, accumulative aboveground storage of 1330 gallons or more, or 42,000 gallons of underground storage. Soils that have become contaminated must be disposed of accordance with Item 8 “Contaminated Soils”.
- 7. Concrete Wash Water/Wash Outs.** Concrete wash water shall not be allowed to flow to streams, ditches, storm drains, or any other water conveyance. A sump or pit with no potential for discharge shall be constructed if needed to contain concrete wash water. Field tile or other subsurface drainage structures within 10 ft. of the sump shall be cut and plugged. For small projects, truck chutes may be rinsed on the lot away from any water conveyances.
- 8. Contaminated Soils.** If substances such as oil, diesel fuel, hydraulic fluid, antifreeze, etc. are spilled, leaked, or released onto the soil, the soil should be dug up and disposed of at licensed sanitary landfill or other approved petroleum contaminated soil remediation facility (not a construction/demolition debris landfill). Please be aware that storm water run off associated with contaminated soils are not authorized under Ohio EPA’s General Storm Water Permit associated with Construction Activities. In the event there are large extensive areas of contaminated soils additional measures above and beyond the conditions of Ohio EPA’s General Construction Storm Water Permit will be required. Depending on the extent of contamination, additional treatment and/or collection and disposal may be required. All storm water discharges associated with the contaminated soils must be authorized under an alternate NPDES (National Pollutant Discharge Elimination System) Permit.
- 9. Spill Reporting Requirements:** Spills on pavement shall be absorbed with sawdust, kitty litter or other absorbant material and disposed of with the trash at a licensed sanitary landfill. Hazardous or industrial wastes such as most solvents, gasoline, oil-based paints, and cement curing compounds require special handling. Spills shall be reported to Ohio EPA (1-800-282-9378). Spills of 25 gallons or more of petroleum products shall be reported to Ohio EPA (1-800-282-9378), the local fire department, and the Local Emergency Planning Committee within 30 min. of the discovery of the release. All spills, which result in contact with waters of the state, must be reported to OHIO EPA’s Hotline.
- 10. Open Burning.** No materials may be burned which contain rubber, grease, asphalt, or petroleum products such as tires, cars, autoparts, plastics or plastic coated wire. (See OAC 3745-19) Open burning is not allowed in restricted areas. Restricted areas are defined as: 1) within corporation limits; 2) within 1000 feet outside a municipal corporation having a population of 1000 to 10,000; and 3) a one mile zone outside of a

corporation of 10, 000 or more. Outside a restricted area, no open burning can take place within a 1000 feet of an inhabited building located off the property where the fire is set. Open burning is permissible in a restricted area for the following activities: heating tar, welding and acetylene torches, smudge pots and similar occupational needs, and heating for warmth or outdoor barbeques. Outside of restricted areas, open burning is permissible for landscape wastes (plant material), land-clearing wastes (plant material, with prior written permission from Ohio EPA), and agricultural wastes (material generated by crop, horticultural, or livestock production practices. This includes fence posts and scrap lumber, but not buildings).

- 11. Dust Control/Suppressants.** Dust control is required to prevent nuisance conditions. Dust controls must be used in accordance with the manufacturer's specifications and not be applied in a manner, which would result in a discharge to waters of the state. Isolation distances from bridges, catch basins, and other drainageways must be observed. Application (excluding water) may not occur when precipitation is imminent as noted in the short term forecast. Used oil may not be applied for dust control.
- 12. Other Air Permitting Requirements:** All contractors and sub contractors must be made aware that certain activities associated with construction will require air permits. Activities including but not limited to mobile concrete batch plants, mobile asphalt plants, concrete crushers, large generators, etc., will require specific Ohio EPA Air Permits for installation and operation. These activities must seek authorization from the corresponding district of Ohio EPA. Notification for Restoration and Demolition must be submitted to Ohio EPA for all commercial sites to determine if asbestos corrective actions are required.
- 13. Process Waste Water/Leachate Management.** All contractors shall be made aware that Ohio EPA's Construction General Permit only allows the discharge of storm water. Other waste streams/discharges including but not limited to vehicle and/or equipment washing, leachate associated with on-site waste disposal, concrete wash outs, etc are a process wastewater. They are not authorized for discharge under the General Storm Water Permit associated with Construction Activities. All process wastewaters must be collected and properly disposed at an approved disposal facility. In the event there are leachate outbreaks associated with onsite disposal, measures must be taken to isolate this discharge for collection and proper disposal. Investigative measures and corrective actions must be implemented to identify and eliminate the source of all leachate outbreaks.
- 14. Permit To Install (PTI) Requirements:** All contractors and sub contractors must be made aware that a PTI must be submitted and approved by Ohio EPA prior to the construction of all centralized sanitary systems, including sewer extensions, and sewerage systems (except those serving one, two, and three family dwellings) and potable water lines. The issuance of an Ohio EPA Construction General Storm Water Permit does not authorize the installation of any sewerage system where Ohio EPA has not approved a PTI.

Specifications
for

Additional Construction Site Pollution Controls

1. Construction personnel, including subcontractors who may use or handle hazardous or toxic materials, shall be made aware of the following general guidelines regarding disposal and handling of hazardous and construction wastes:
 - Prevent spills
 - Use products up
 - Follow label directions for disposal
 - Remove lids from empty bottles and cans when disposing in trash
 - Recycle wastes whenever possible
 - Don't pour into waterways, storm drains or onto the ground
 - Don't pour down the sink, floor drain or septic tanks
 - Don't bury chemicals or containers
 - Don't burn chemicals or containers
 - Don't mix chemicals together
2. **Containers shall be provided for the proper collection of all waste material including construction debris, trash, petroleum products and any hazardous materials used on-site.** Containers shall be covered and not leaking. All waste material shall be disposed of at facilities approved for that material. Construction Demolition and Debris (CD&D) waste must be disposed of at an Ohio EPA approved CD&D landfill.
3. **No construction related waste materials are to be buried on-site.** By exception, clean fill (bricks, hardened concrete, soil) may be utilized in a way which does not encroach upon natural wetlands, streams or floodplains or result in the contamination of waters of the state.
4. **Handling Construction Chemicals.** Mixing, pumping, transferring or other handling of construction chemicals such as fertilizer, lime, asphalt, concrete drying compounds, and all other potentially hazardous materials shall be performed in an area away from any watercourse, ditch or storm drain.
5. **Equipment Fueling and Maintenance,** oil changing, etc., shall be performed away from watercourses, ditches or storm drains, in an area designated for that purpose. The designated area shall be equipped for recycling oil and catching spills. Secondary containment shall be provided for all fuel oil storage tanks. These areas must be inspected every seven days and within 24 hrs. of a 0.5 inch or greater rain event to ensure there are no exposed materials which would contaminate storm water. Site operators must be aware that Spill Prevention Control and Countermeasures (SPCC) requirements may apply. An SPCC plan is required for sites with one single above ground tank of 660

gallons or more, accumulative above ground storage of 1330 gallons or more, or 42,000 gallons of underground storage. Contaminated soils must be disposed of in accordance with Item 8.

6. **Concrete Wash Water** shall not be allowed to flow to streams, ditches, storm drains, or any other water conveyance. A sump or pit with no potential for discharge shall be constructed if needed to contain concrete wash water. Field tile or other subsurface drainage structures within 10 ft. of the sump shall be cut and plugged. For small projects, truck chutes may be rinsed away from any water conveyances.
7. **Spill Reporting Requirements:** Spills on pavement shall be absorbed with sawdust or kitty litter and disposed of with the trash at a licensed sanitary landfill. Hazardous or industrial wastes such as most solvents, gasoline, oil-based paints, and cement curing compounds require special handling. Spills shall be reported to Ohio EPA (1-800-282-9378). Spills of 25 gallons or more of petroleum products shall be reported to Ohio EPA, the local fire department, and the Local Emergency Planning Committee within 30 min. of the discovery of the release. All spills which contact waters of the state must be reported to Ohio EPA.
8. **Contaminated Soils.** If substances such as oil, diesel fuel, hydraulic fluid, antifreeze, etc. are spilled, leaked, or released onto the soil, the soil should be dug up and disposed of at licensed sanitary landfill or other approved petroleum contaminated soil remediation facility. (not a construction/demolition debris landfill). Note that storm water run off associated with contaminated soils are not be authorized under Ohio EPA's General Storm Water Permit associated with Construction Activities.
9. **Open Burning.** No materials containing rubber, grease, asphalt, or petroleum products, such as tires, autoparts, plastics or plastic coated wire may be burned (OAC 3745-19). Open burning is not allowed in restricted areas, which are defined as: 1) within corporation limits; 2) within 1000 feet outside a municipal corporation having a population of 1000 to 10,000; and 3) a one mile zone outside of a corporation of 10,000 or more. Outside of restricted areas, no open burning is allowed within a 1000 feet of an inhabited building on another property. Open burning is permissible in a restricted area for: heating tar, welding, smudge pots and similar occupational needs, and heating for warmth or outdoor barbecues. Outside of restricted areas, open burning is permissible for landscape or land-clearing wastes (plant material, with prior written permission from Ohio EPA), and agricultural wastes, excluding buildings.
10. **Dust Control or dust suppressants** shall be used to prevent nuisance conditions, in accordance with the manufacturer's specifications and in a manner, which prevent a discharge to waters of the state. Sufficient distance must be provided between applications and nearby bridges, catch basins, and other waterways. Application (excluding water) may not occur when rain is imminent as noted in the short term forecast. Used oil may not be applied for dust control.
11. **Other Air Permitting Requirements:** Certain activities associated with construction will require air permits including but not limited to: mobile concrete batch plants, mobile asphalt plants, concrete crushers, large generators, etc. These activities will require specific Ohio EPA Air Permits for installation and operation. Operators must seek authorization from the corresponding district of Ohio EPA. For demolition of all

commercial sites, a Notification for Restoration and Demolition must be submitted to Ohio EPA to determine if asbestos corrective actions are required.

12. Process Waste Water/Leachate Management. Ohio EPA's Construction General Permit only allows the discharge of storm water and does not include other waste streams/discharges such as vehicle and/or equipment washing, on-site septic leachate concrete wash outs, which are considered process wastewaters. All process wastewaters must be collected and properly disposed at an approved disposal facility. In the event, leachate or septage is discharged; it must be isolated for collection and proper disposal and corrective actions taken to eliminate the source of waste water.

13. A Permit To Install (PTI) is required prior to the construction of all centralized sanitary systems, including sewer extensions, and sewerage systems (except those serving one, two, and three family dwellings) and potable water lines. Plans must be submitted and approved by Ohio EPA. Issuance of an Ohio EPA Construction General Storm Water Permit does not authorize the installation of any sewerage system where Ohio EPA has not approved a PTI.