



Stormwater Best Management Practices Guide

“An ounce of prevention is worth a pound of cure.”
- Benjamin Franklin

INTRODUCTION

Stormwater runoff from construction sites can cause significant harm to New Jersey’s rivers, lakes, and coastal waters if not managed properly. To address these impacts it is necessary to control soil erosion and sedimentation during land disturbance, as well as minimize stormwater contamination from other construction related activities. This Stormwater Best Management Practices (BMP) Guide has been prepared by the New Jersey Department of Environmental Protection (NJDEP) to help the regulated community comply with the requirements of the Statewide Stormwater Permitting Program for Construction Activities in New Jersey. It is adapted from guidance prepared by the U.S. Environmental Protection Agency (USEPA) and the Freehold Soil Conservation District.

BACKGROUND

When the U.S. Environmental Protection Agency and states throughout the nation were given a federal Clean Water Act mandate to address this problem, New Jersey set out to craft a streamlined approach that would meet the federal requirement without adding overly burdensome regulations. To implement this program the NJDEP adopted amendments to the N.J. Pollutant Discharge Elimination System (NJPDES) rules, along with the development and adoption of the Construction Activity Stormwater (5G3) General Permit (NJ0088323). The result of this effort is a program that emphasizes local delivery and maximum utilization of existing requirements and resources. A copy of the most recent permit may be obtained at http://www.state.nj.us/dep/dwq/pdf/5g3_finalpermit.pdf

The program is administered by the NJDEP, Bureau of Nonpoint Pollution Control in coordination with the New Jersey Department of Agriculture (NJDOA) and the State Soil Conservation Committee through its 15 Soil Conservation Districts (SCDs) located throughout the State. This document is intended for guidance only and does not constitute an endorsement of any particular practice or product by the NJDEP, NJDOA or any SCD. Design of any BMP or erosion control should be completed by a licensed professional engineer or other competent person. Likewise, BMP implementation and maintenance on a construction site should be the responsibility of a competent individual who understands the regulatory requirements and can apply proper soil erosion and sediment control techniques and on site waste management control during all phases of construction.

HOW TO APPLY FOR PERMIT COVERAGE

Applicants should first submit a copy of their Soil Erosion and Sediment Control Plan (SESCP) to the appropriate Soil Conservation District Office for the area in which the project is located. After the District reviews and certifies the plan, they shall issue the applicant a set of two codes (SCD certification code and 251 identification code). At this point the applicant can submit a Request for Authorization (RFA) for the NJDEP Stormwater Construction General Permit (5G3).

The applicant must become a registered user of the NJDEP online system. This allows access to all of the NJDEPs online permit applications. Once registered, the applicant must select “stormwater construction general authorization” from the list of available services. The applicant will then be prompted with a list of all required information needed to complete the RFA. Once the RFA is completed, the applicant will receive a temporary authorization. This authorization is sufficient to start construction. The applicant will later receive an email containing their final authorization and a summary of the RFA. These documents should be printed and maintained on-site.

Access to and guidance for the NJDEP online E-permitting system can be found at:

<http://nj.gov/dep/dwq/5g3.htm>

PERMIT SUMMARY

Eligibility

The permit may authorize all new and existing stormwater discharges associated with industrial activity and small construction activities as defined in N.J.A.C. 7:14A-1.2.

Stormwater discharges not authorized by the permit can be found in Part I.A.2.b of the permit document.

Fees

Permit fees are separated into two categories. Projects with an area of disturbance less than five(5) acres require a \$450 dollar fee. Projects with an area of disturbance greater than or equal to five(5) acres require a \$650 fee.

Effluent Limitations, Inspections and Reporting Requirements

Construction activity that may result in stormwater discharge authorized by this permit shall be executed only in accordance with a Stormwater Pollution Prevention Plan (SPPP). This plan consists of a certified soil erosion and sediment control plan and a construction site waste component set forth in Attachment B of the permit document. This document must be maintained by the permittee for a period of at least five(5) years after the completion of the project.

Routine weekly inspection, identifying the effectiveness of the SPPP, shall be conducted by the permittee, at a minimum.

Permittees shall prepare an annual report summarizing the routine inspections, incidents of noncompliance, and corrective measures taken on site. This report should be included with the annual certification form.

Notice of Completion

The permittee shall notify the soil conservation district office responsible for certifying their soil erosion sediment control plan upon completion of the project.

Copies of the permit document can be obtained at:

http://www.state.nj.us/dep/dwq/pdf/5g3_finalpermit.pdf

TRANSFER OF OWNERSHIP

In many residential developments, an overall developer applies for stormwater permit coverage, conducts grading activities, and installs the basic infrastructure (e.g., utilities, roads). Individual lots are then sold to builders who then construct the houses. Unless the developer is still responsible for the stormwater discharges from these individual lots (which is typically not the case), then the builder will need to apply for permit coverage on their own.

In cases where the entire project site is transferring ownership and permit authorization has already been obtained, it is possible to transfer the authorization to the new owner. However, the new owner would be responsible for ensuring that the SPPP, containing the soil erosion and sediment control plan, sufficiently addresses all the activities conducted by the new owner. Also the new owner would be responsible for all permit actions and, potentially, violations which have occurred under the authorization. It is recommended to simply apply for a new authorization.

Transfer of ownership form: <http://www.state.nj.us/dep/dwq/pdf/transfer.pdf>

MULTIPLE OPERATORS

In many instances, there may be more than one party at a site performing tasks related to operational control and more than one operator may need to submit an RFA. Depending on the site and the relationship between the parties (e.g., owner, developer, general contractor), they can be either be a single party acting as a site operator and consequently responsible for obtaining permit coverage, or there can be two or more operators all needing permit coverage. Exactly who is considered an operator is largely controlled by how the owner of the project chooses to structure the contracts with the contractors hired to design and/or build the project. The following are three general operator scenarios (variations on these three are possible, especially as the number of owners and contractors increases):

Owner as sole permittee. The property owner designs the structures for the site, develops and implements the SPPP, and serves as general contractor (or has an on-site representative with full authority to direct day-to-day operations). The owner may be the only party that needs permit coverage under these circumstances. Everyone else on the site may be considered subcontractors and might not need coverage.

Contractor as sole permittee. The property owner hires one company (i.e., a contractor) to design the project and oversee all aspects of the construction project, including preparation and implementation of the SPPP and compliance with the permit. Here, the contractor would likely be the only party needing a permit. It is under this scenario that an individual having a personal residence built for his own use (e.g., not those to be sold for profit or used as a rental property) would not be considered an operator. However, individual property owners would meet the definition of operator and may require permit coverage if they perform general contracting duties for construction of their personal residences.

Owner and contractor as co-permittees. The owner retains control over any changes to the site plans, SPPP, or stormwater conveyance or control designs; but the contractor is responsible for

overseeing actual earth disturbing activities and daily implementation of SPPP and other permit conditions. In this case, which is the most common scenario, both parties may need to apply for permit coverage.

However, you are probably not an operator and subsequently would not need permit coverage if one of the following is true:

You are a subcontractor hired by, and under the supervision of, the owner or a general contractor.

The operator of the site has indicated in the SPPP that someone other than you (or you subcontractor) is responsible for your activities as they relate to stormwater quality. This is typically the case for many, if not most, utility service line installations.

In addition, owner typically refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline). Likewise, if the construction of a structure has been contracted for, but possession of the title or lease to the land or structure does not occur until after construction, the would-be owner may not be considered an operator (e.g., having a house built by a residential homebuilder).

CONTACTS

New Jersey Department of Environmental Protection

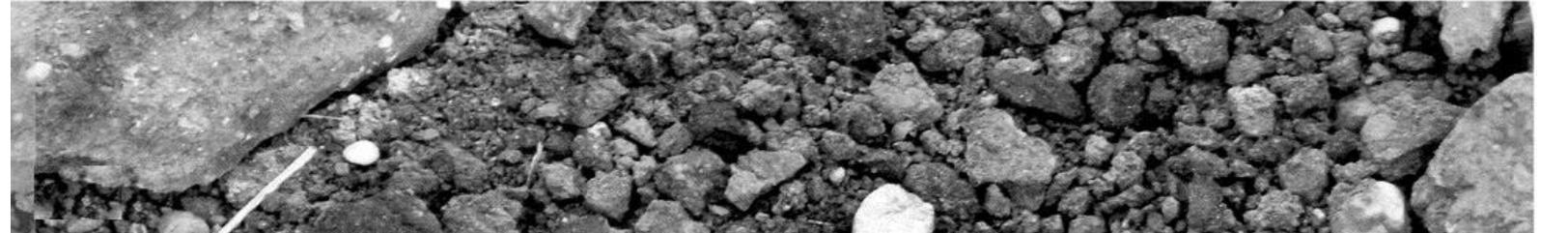
Bureau of Nonpoint Pollution Control
(609)633-7021
<http://www.nj.gov/dep/dwq/5g3.htm>

New Jersey Department of Agriculture

NJ State Soil Conservation committee
(609)292-5540
<http://www.nj.gov/agriculture/divisions/anr/nrc/soil.html>

Local Soil Conservation Offices

Bergen	(201)261-4407	www.bergenscd.org
Burlington	(609)267-7410	http://www.bscd.org/
Camden	(856)767-6299	www.camdenscd.org
Cape-Atlantic	(609)625-3144	www.capeatlantic.org/
Cumberland-Salem	(856)451-2422	cumberland-soil.deeweb.com
Freehold	(732)683-8500	www.freeholdscd.org
Gloucester	(856)589-5250	gloucesterscd.org
Hudson, Essex, & Passaic	(973)364-0786	www.hepsoilnj.org/
Hunterdon	(908)788-9466	
Mercer	(609)586-9603	http://mercerscd.org/
Morris	(973)285-2953	mcscd.org
Ocean	(609)971-7002	www.ocscd.org/index.htm
Sommerset-Union	(908)526-2701	http://www.co.somerset.nj.us/publicworks/soil/index.html
Sussex	(973)579-5074	http://home.earthlink.net/~sussexscd2/
Warren	(908)852-2579	www.warrencountyscd.org



Construction Sequence Schedule

CONDITIONS WHERE PRACTICE APPLIES

All land development projects that expose soil.

Statewide soil erosion and sediment control regulations and/ or municipal ordinances may further define where practices apply.

PLANNING CONSIDERATIONS

A site specific and detailed work schedule that coordinates the timing of soil disturbing activities and the installation of soil erosion and runoff controls is perhaps the most cost-effective way of controlling erosion and runoff while soil is exposed and subject to construction activity.

Construction procedures that limit soil exposure and promote the installation of soil erosion and sediment controls to stabilize disturbed areas in a timely fashion can significantly reduce the erosion potential of a construction site. The construction schedule sequence is not only a guide for the contractor, but also a proactive approach to control and minimize soil erosion and runoff.

EXAMPLES OF A CONSTRUCTION SEQUENCE SCHEDULE AS FOUND ON A SOIL EROSION CONTROL PLAN

Chronological Timeline

Days Phase 1 Construction

- | | |
|-----|--|
| -30 | 1. Notify the NJDEP Land Use Regulation Program, Bureau of Stream Encroachment 30 days prior to any land disturbance relating to construction of the by-pass drainage pipe. <i>Duration: 1 Day</i> |
| -3 | 2. Notify local Soil Conservation District 72 hours before any land disturbance. <i>Duration: 1 Day</i> |
| 0-1 | 3. Construct/ reconstruct access road entrances. <i>Duration: 1 Day</i> |

DEFINITION

A specified work schedule that coordinates the timing of soil disturbing activities and the installation of soil erosion and sediment control measures.

PURPOSE

To reduce on-site erosion and off-site sedimentation when performing land disturbing activities and installing erosion and sedimentation control practices in accordance with a planned schedule.

**Chronological
Timeline
Days**

- 1-30 4. Install erosion control measures for Phase 1 and along the by-pass alignment and as shown on the Soil Erosion and Sediment Control plans. Construct temporary sediment basin 1. Construct diversion swale 1 and berm with temporary grass seeding applied immediately. Construct permanent infiltration basin. *Duration: 30 Days*
-
- 6-8 5. Strip topsoil for path of by-pass drainage line and new drainage system. Store stripped topsoil and excess fill material in temporary stockpile and surround stockpile with silt fence. If stockpile or other disturbed areas are to remain in a disturbed state for more than 30 days and will not be subject to traffic, they are to receive temporary seeding immediately. If the season prevents the establishment of a vegetative cover, then disturbed areas shall be mulched with straw or equivalent material at a rate of 2 tons per acre. *Duration: 2 Days*
- 8-68 6. Install by-pass drainage line and proposed drainage pipeline. *Duration: 60 Days*
- 14-28 7. Connect offsite 66" RCP to the on-site infiltration basin. *Duration: 14 Days*
- 15-36 8. Strip area for Phase 1 building, parking and driveway. Grade area to proposed (subgrade) elevations. *Duration: 21 Days*
- 25-40 9. Construct Phase 1 drainage system and utilities. Install sub-base stone courses in building location and stone and bituminous stabilize courses in parking and driveway locations. Construction of concrete floor pads and superstructure for building to be on-going. *Duration: 15 Days*

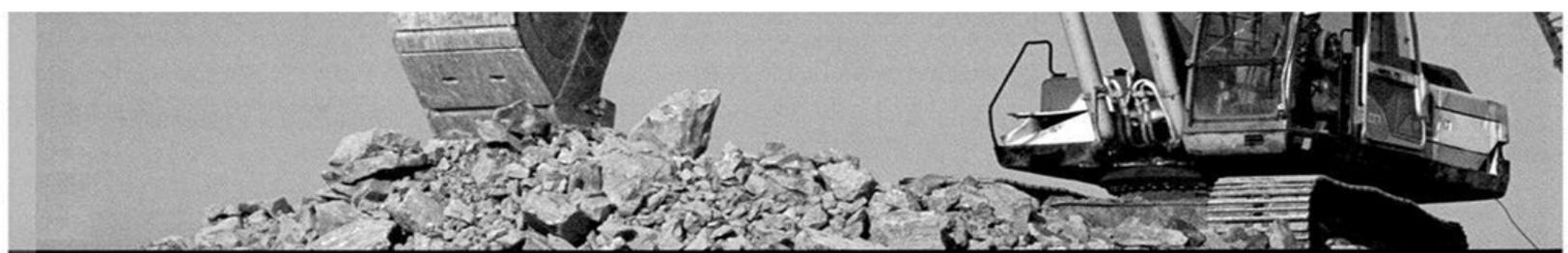
Phase 2A Construction

- 33-35 1. Install erosion control measures for Phase 2 as shown on SESC plans and construct temporary sediment basin 2. Construct diversion swale 2 and berm with temporary grass seeding applied immediately. *Duration: 2 Days*
- 35-56 2. Strip area for Phase 2A building, parking and driveway. Grade area to proposed (subgrade) elevations. *Duration: 21 Days*
- 45-60 3. Construct Phase 2A drainage system and utilities. Install sub-base stone courses in building location and stone and bituminous stabilize courses in parking and driveway locations. Construction of concrete floor pads and superstructure for building to be on-going. *Duration: 15 Days*

Phase 2B Construction

- 60-63 1. Upon completion and final connection of by-pass drainage line to existing four 8'x4' box culverts, strip area for Phase 2B building, parking and driveway. Dismantle sediment basin 2 and grade to proposed (subgrade) elevations. *Duration: 3 Days*
- 63-73 2. Construct retaining walls. *Duration: 10 Days*
- 63-78 3. Install Phase 2B stone courses in building location and stone and bituminous base courses in parking and driveway locations. Construction on concrete floor pads and superstructure for building to be on-going. *Duration: 15 Days*

- 63-84 4. Continue constructions of building to completion. *Duration: On-going 21 Days*
- 78-80 5. Dewater and dismantle sediment basin 1. Fine grade areas and connect sediment basin 1 to infiltration basin. Excavate remaining 2 feet of entire infiltration to elevation 92.00.
Duration: 2 Days
- 79-82 6. Stabilize all disturbed areas, over seed all bare areas and install permanent stabilization where required. *Duration: 3 Days*
- 82-84 7. Construct final surface pavement course over base pavement in parking areas and access driveways. *Duration: 2 Days*
- 80-84 8. Apply pavement striping and signage. Install permanent landscaping and appurtenances.
Duration: 4 Days



New Jersey Construction Site Inspection Glossary

By installing and maintaining basic Best Management Practices (BMPs) construction site operators can do their share to protect New Jersey's water resources from harmful effects of construction site stormwater runoff. The conditions and needs of individual sites will dictate which of these practices are applicable. Please refer to the certified soil erosion control plan for greater detail. *The Standards for Soil Erosion and Sediment Control in New Jersey* contains greater detail on erosion and sediment control practices. Copies of the standards are available for purchase from the local soil conservation district.

TEMPORARY STABILIZATION

Provides temporary protection against the impacts of wind and rain, slows the overland movement of stormwater runoff, increases infiltration and retains soil and nutrients on-site.

STABILIZED CONSTRUCTION ACCESSES

Construction accesses are installed to minimize off-site tracking of sediments. A stone access drive should be installed at every point where vehicles enter or exit the site. Every individual lot should also have its own stone drive once construction of the lot begins.

SEDIMENT BASINS

Used to prevent the undesirable sediment deposition on bottom-lands and developed areas; to trap sediment originating from critically eroding areas and construction sites; and to reduce or abate pollution by providing basins for deposition and storage of silt, sand, gravel and stone.

SEDIMENT BARRIERS

Typically used at the perimeter of a disturbed area. The purpose of a sediment barrier is to intercept and detain small amounts of sediment from unprotected areas of limited extent.

INLET PROTECTION

The primary benefit to water quality is the removal of sediment from stormwater runoff prior to entering the storm sewer system. As an added benefit, other floatable debris, such as vegetative matter and litter may also be filtered out of the runoff. This must be installed on all yard drains and curb drains. Even if there is a sediment trap or basin, inlet protection is still recommended, as it will increase the overall sediment removal efficiency.

PERMANENT STABILIZATION

All areas at final grade must be permanently stabilized within ten (10) days of reaching final grade. This is usually accomplished by using seed and mulch, but special measures are sometimes required. This is particularly true in drainage ditches or steep slopes. These measures include the addition of topsoil, erosion control matting, rip-rap or retaining walls. Permanent seeding should be done February 15 to May 15 and August 15 to October 15. Dormant seeding can be done from November 20 to March 15. At all other times of the year, the area should be irrigated, or temporarily stabilized, until permanent seeding can be applied.

CONSTRUCTION SITE WASTE CONTROL

Although sediment is the pollutant of greatest concern on most construction sites, there are other sources of pollution present such as construction debris, litter, hazardous materials, chemicals, fuel, sanitary and septic waste, concrete waste, etc. which must be properly addressed.

Attachment B, of the permit document, lays out the requirements and BMPs required to handle these materials on site. Most of these BMPs are easy to implement. With a little bit of planning, they can go a long way toward keeping your site clean, organized and in compliance with the permit. Please be sure to inform all subcontractors how these BMPs affect their operations on the site, particularly those that will be working near storm drains and water courses.



Soil Erosion, Sediment & Runoff Controls

CONDITIONS WHERE PRACTICE APPLIES

All land development projects that expose soil.

Statewide soil erosion and sediment control regulations and/or municipal ordinances may further define where practices apply.

PLANNING CONSIDERATIONS

Runoff Control

- Minimize disturbed areas and protect natural features and soil.
- Phase construction activity.
- Control stormwater flowing onto and through the project
- Stabilize soils promptly
- Protect slopes

Soil Erosion and Sediment Control

- Protect storm sewer inlets.
- Install perimeter controls.
- Retain sediment on-site
- Install stabilized construction accesses.
- Inspect and maintain controls routinely and after storm events.

EXAMPLES OF RUNOFF CONTROLS

- Permanent Slope Diversions.
- Temporary Diversions.
- Land Grading
TIP *Divert stormwater run-on and runoff away from disturbed areas.*

DEFINITION

Soil erosion and sediment controls are structural and non structural practices used during construction to keep soil in place and to capture sediment that is moved by storm water before it leaves the site.

PURPOSE

To protect rivers, estuaries, lakes, wetlands and coastal waters from pollutants in storm water runoff. Uncontrolled stormwater runoff from construction sites can have a significant impact to the environment. Sediment in waterbodies from construction sites can reduce the amount of sunlight reaching aquatic plants, clog fish gills, smother aquatic habitat and spawning areas, and impede navigation.



Filtration Tubes in a Channel



Slope Stabilization



Inlet Protection

- Slope Protection

TIP *Erosion control mats, geotextiles and erosion control blankets are just a few examples of erosion control products used to stabilize slopes, channels and stream banks.*

- Temporary stabilization of areas not under construction activity

- Permanent stabilization of areas no longer subject to construction activity.

TIP *Once soil disturbing activity is completed, and the area is stabilized, inspection and maintenance becomes minimal.*

- Construction roadway, staging and parking area stabilization.

TIP *Require employees and subcontractors to use designated construction accesses only*

- Grass lined Channels.

- Vegetated Buffers.

- Vegetated Filter Strips

TIP *Design and construction of the above can aid in satisfying NJDEP water quality requirements*

- Controlled Dewatering

EXAMPLES OF SOIL EROSION AND SEDIMENT CONTROLS

- Sediment Basins and Sediment Traps.

- Stabilized Construction Accesses.

- Sediment Barriers (e.g. silt fence and hay bales)

- Storm Sewer Inlet Protection

- Sediment Retention On-site

- Dust Control (e.g. mulch, vegetative cover, spray-on adhesives, tillage, sprinkling and calcium chloride).

- Turbidity Barriers.

- Armor Protection (e.g. rip rap)

- Filtration Tubes

- Soil Bio-Engineering Techniques.

TIP *A proactive approach and timely installation of the necessary and appropriate controls can reduce costly soil erosion and sediment control repairs on and offsite.*



Construction Site & Land Disturbance Dewatering

CONDITIONS WHERE PRACTICE APPLIES

Where excavated facilities, due to construction, need to be dewatered to facilitate or complete the construction process.

PLANNING CONSIDERATIONS

The water pumped out of excavated areas contains sediments that must be removed prior to discharging to receiving bodies of water. The dewatering technique, location and duration must be considered to ensure the water will be discharged in a non-erosive manner.

EXAMPLES OF DEWATERING PROCESSES

Removable Pump Stations

- Commonly used when long durations of pumping are required.
- Water pumped from the station shall be discharged into a sediment basin or suitable filter area.

Sump Pits

- Temporary pits used to remove excess water while minimizing sedimentation.
- Water is pumped from a perforated vertical standpipe backfilled with filter material and then discharged to a suitable discharge area.

Portable Sediment Tank and Silt Control Bags

- Movable containers through which sediment laden water is pumped to trap and retain sediment.
- A sediment tank or a silt control bag is used on sites where excavations are deep, and space is limited and where direct discharge of sediment laden water to resource areas is to be avoided.

See *Standards for Soil Erosion and Sediment Control in New Jersey for construction details.*

DEFINITION

The removal and discharge of sediment-laden water from an excavated area, construction site or sediment basin.

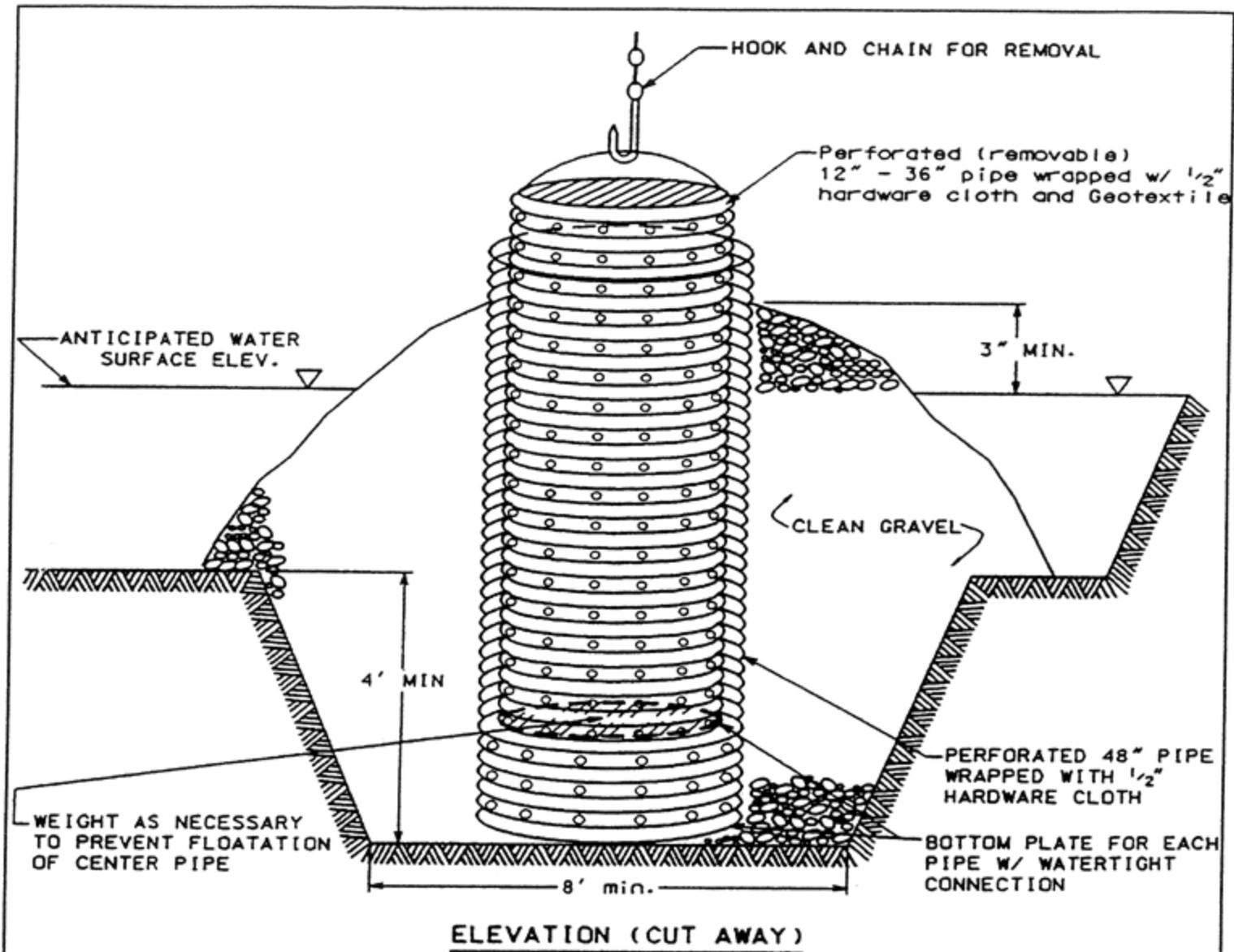
PURPOSE

To properly remove suspended sediments and water from excavated areas through filtration and/or settlement prior to discharging water to a receiving water course or body.



Example of a Silt Bag

Detail 14-1 Removable Pumping Station

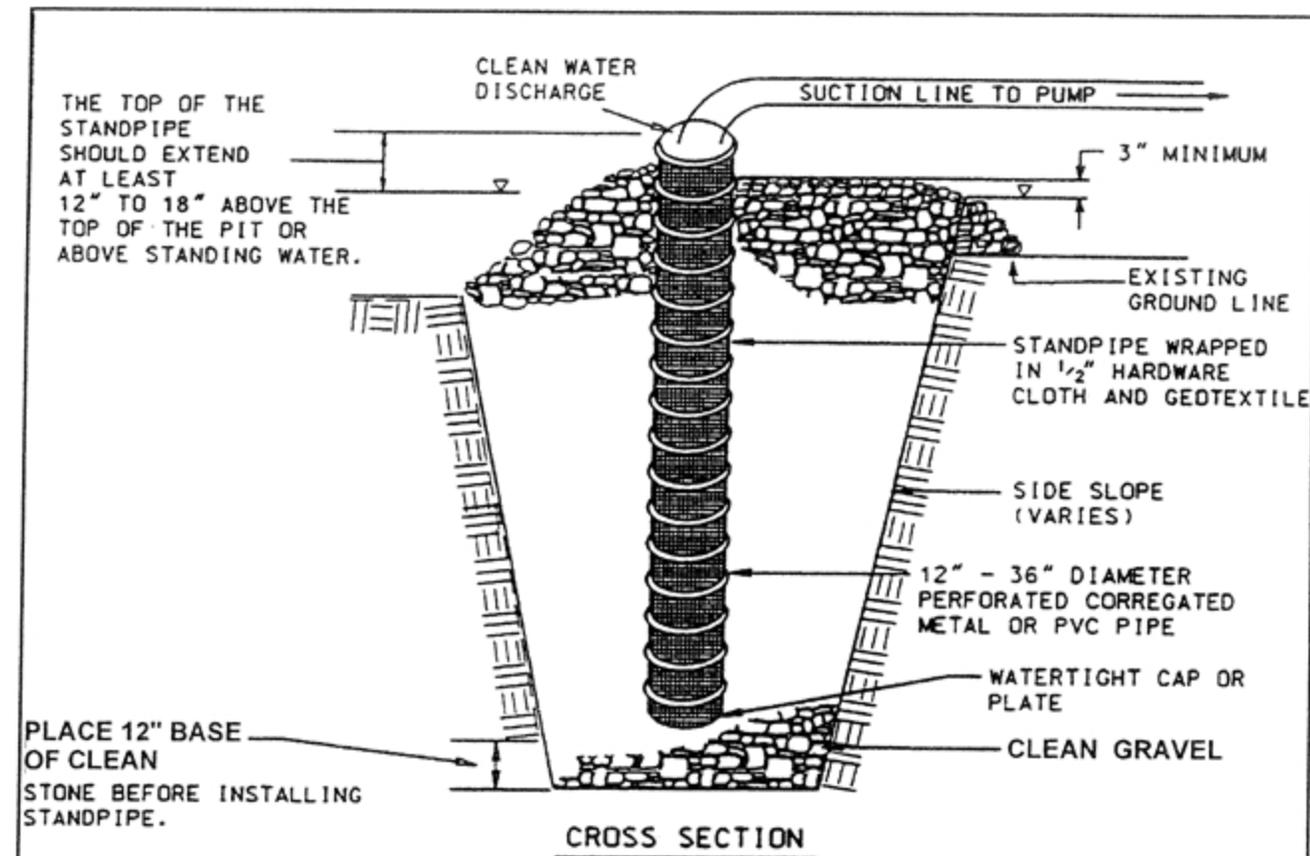


Construction Specifications

1. The outer pipe should be 48" dia. or shall, in any case, be at least 4" greater in diameter than the center pipe. The outer pipe shall be wrapped with 1/2" hardware cloth to prevent backfill material from entering the perforations.
2. After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel.
3. The inside stand pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12" and 36" in diameter. The perforations shall be 1/2" X 6" slits or 1" diameter holes 6" on center. The center pipe shall be wrapped with 1/2" hardware cloth first, then wrapped again with Geotextile Class E.
4. The center pipe should extend 12" to 18" above the anticipated water surface elevation or riser crest elevation when dewatering a basin.

Source: USDA NRCS 1994

Detail 14-2: Sump Pit

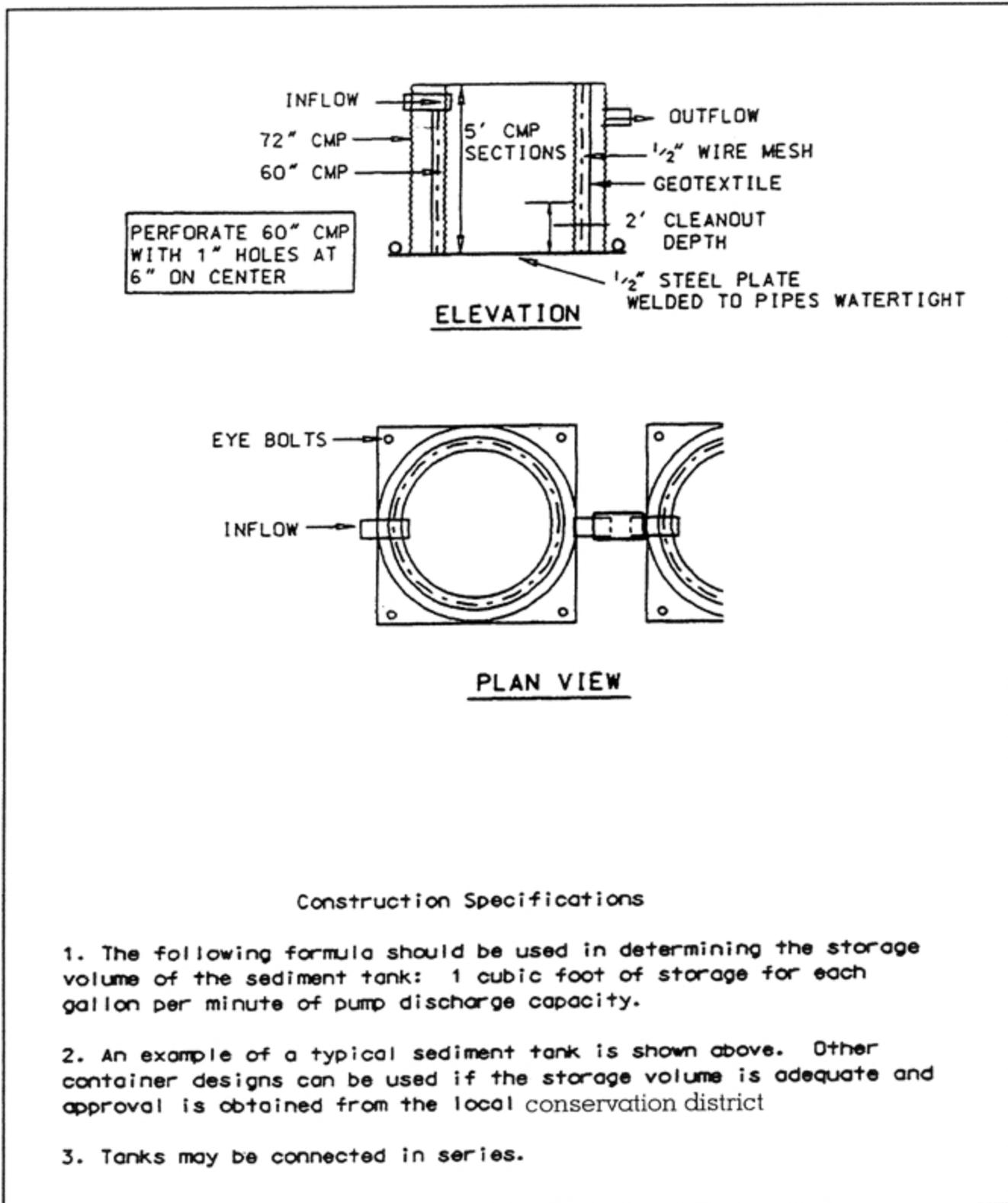


Construction Specifications

1. Pit dimensions are variable, with the minimum diameter being 2 times the standpipe diameter.
2. The standpipe should be constructed by perforating a 12" to 24" diameter corrugated or PVC pipe. Then wrapping with 1/2" hardware cloth and Geotextile fabric. The perforations shall be 1/2" x 6" slits or 1" diameter holes.
3. A base of filter material consisting of clean gravel or ASTM C 33 stone should be placed in the pit to a depth of 12". After installing the standpipe, the pit surrounding the standpipe should then be backfilled with the same filter material.
4. The standpipe should extend 12" to 18" above the lip of the pit or the riser crest elevation (basin dewatering only) and the filter material should extend 3" minimum above the anticipated standing water elevation.

Source: USDA NRCS 1994

Detail 14-3 Portable Sediment Tank



Source: USDA NRCS 1994



Spill Prevention Plan & Response

CONDITIONS WHERE PRACTICE APPLIES

Land development projects one (1) acre or more that consume, store, transfer and utilize chemical and hazardous material.

PLANNING CONSIDERATIONS

The Spill Prevention Plan (SPP) should define handling procedures and storage requirements to reduce spill potential and impacts on stormwater quality. The following actions can be used in devising a SPP:

- Identify specific types and quantities of chemical and/ or hazardous material to be on-site.
- Locate any hazardous material storage away from on-site storm drains, tributary drainage areas and water courses.
- Recycle, reclaim or reuse process material, reducing the amount of process materials that are brought on-site.
- Install leak detection devices, overflow controls and diversion berms at the storage areas.
- Perform preventative maintenance on storage equipment.
- Utilize material transfer and filling procedures that will minimize spill potential.
- Utilize less or nontoxic materials on-site if applicable.

The SPP should document response procedures and criteria required to reduce the effects in the event of a spill. The following should be included in a SPP:

- Educate and train personnel and employees on potential dangers and identify individuals responsible for implementing spill prevention and control measures.
- Specify methods of how to notify appropriate authorities in the event of a spill.

DEFINITION

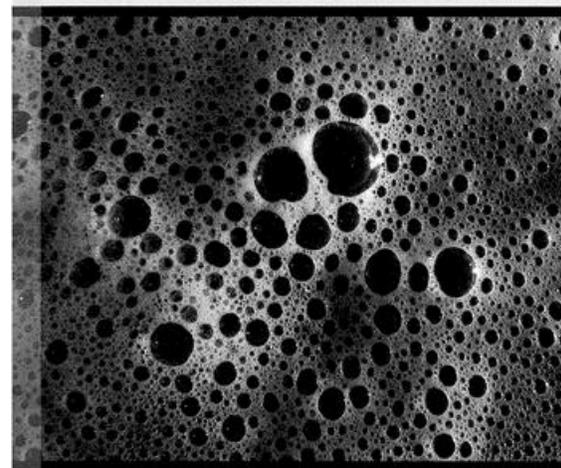
A specified strategy documenting the procedures in place to prevent, control and respond to the discharge of pollutants on a construction site, drainage system or waterway.

PURPOSE

To prevent or reduce the discharge of pollutants and provide for measures to stop the source of a spill, contain a spill, cleanup a spill, dispose of contaminated materials and identify personnel responsible for implementing the appropriate measures in the event of a spill.



Spilled Storage Drum



Prevent Spills from Entering Waterways

- Document specific procedures to be used in response to a spill and provide locations of spill response equipment on-site (i.e. spill kits).
- Provide spill response equipment to be used, including safety and cleanup equipment.
- The plan should be site specific. Appropriate procedures and practices should always be documented for the specific materials to be on-site. The plan should be updated, as necessary, for each phase of development.

SPILL PREVENTION AND RESPONSE TIPS

- Designate individuals responsible for enforcing proper spill prevention and control measures.
- Provide storage, response and spill reporting instructions for the chemical/ hazardous materials on the site.
- Locate chemical/ hazardous materials away from storm drains and sensitive environmental areas.
- Minimize on-site storage of chemicals and hazardous materials.
- Perform regular inspections and maintenance of on-site materials and storage areas.
- Locate spill cleanup equipment in an area where it can be readily accessed from the entire site.
- Respond, contain and cleanup spills immediately, following the appropriate response measures for the specific material spilled.
- Store, clean and dispose of the used 'cleanup' materials appropriately and document waste manifests.

The above tips should be used as guidance and are general practices associated with spill prevention and control as it relates to stormwater runoff. ALWAYS identify and determine the specific requirements needed for site specific chemicals and hazardous material.



Concrete Washouts

CONDITIONS WHERE PRACTICE APPLIES

Concrete washouts are required on all land development projects with concrete and stucco in use.

PLANNING CONSIDERATIONS

- Washout facilities should be located at least 50 yards away from storm drain inlets, gutters, open ditches, and water courses.
- Appropriate gravel or rock should cover paths to concrete washouts.
- The number of facilities installed should depend on the expected demand for storage capacity. On large sites, with extensive concrete work, washouts should be placed in multiple locations for ease of use by concrete truck drivers.
- Advertise washout area locations by posting multiple signs on your project site.
- Include requirements in contracts with concrete delivery companies that drivers must use designated concrete washout facilities.
- Prefabricated washout containers are available.
 - Prefabricated containers are sturdy and provide a more reliable option for preventing leaks and spills of wash water than self-constructed washouts.
 - Some vendors provide just the container while others may offer complete services that include delivery of containers and regular pick-ups of solid and liquid waste materials.

CONSTRUCTING YOUR OWN WASHOUT AREA

- Dig a pit and line it with 10 mil plastic sheeting

DEFINITION

To contain concrete and liquids when the chutes of concrete mixers and hoppers of concrete pumps are rinsed out after delivery.

PURPOSE

The practice of utilizing a concrete washout provides for wastewater containment, recycling, reduction of debris and protection of stormwater drainage systems from potential illegal discharges.

- Concrete wash water is alkaline and contains high levels of chromium, which can leach into the ground and contaminate groundwater.
- Suitable concrete washout facilities not only prevent pollution, but are also a matter of good housekeeping at your construction site and are a requirement of your Permit.



Pre-Fabricated Washout Container



Example of Non-Compliant Washout Area

- Create an above ground structure from straw bales or sandbags, with 10 mil plastic lining, sized to a 12'x 12'x 2' area.

** If you create your own structure, you should inspect it daily for leaks or tears in the plastic because these structures are prone to failure.*

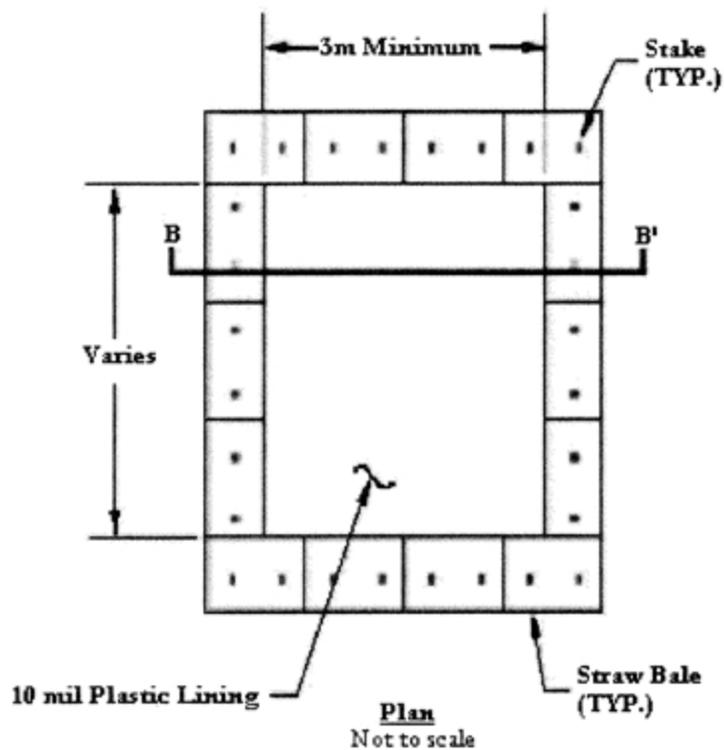
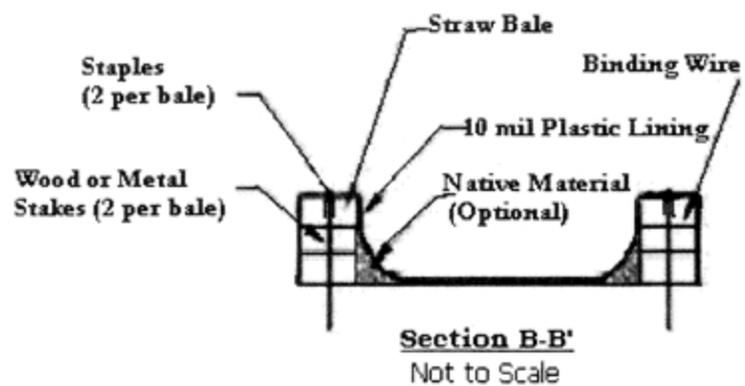
SUCCESS OF CONCRETE WASHOUTS

- Regular inspection and maintenance are key.
 - Check daily for leakage.
 - Check to see they have been filled to 75% capacity.
 - Inspect for evidence that the contractors are using the washout areas and not dumping materials onto the ground or into drainage facilities.
 - If facilities are not being properly used consider the following:
 - Post additional signage.
 - Relocate the washouts to more convenient locations.
 - Provide training to workers and contractors.

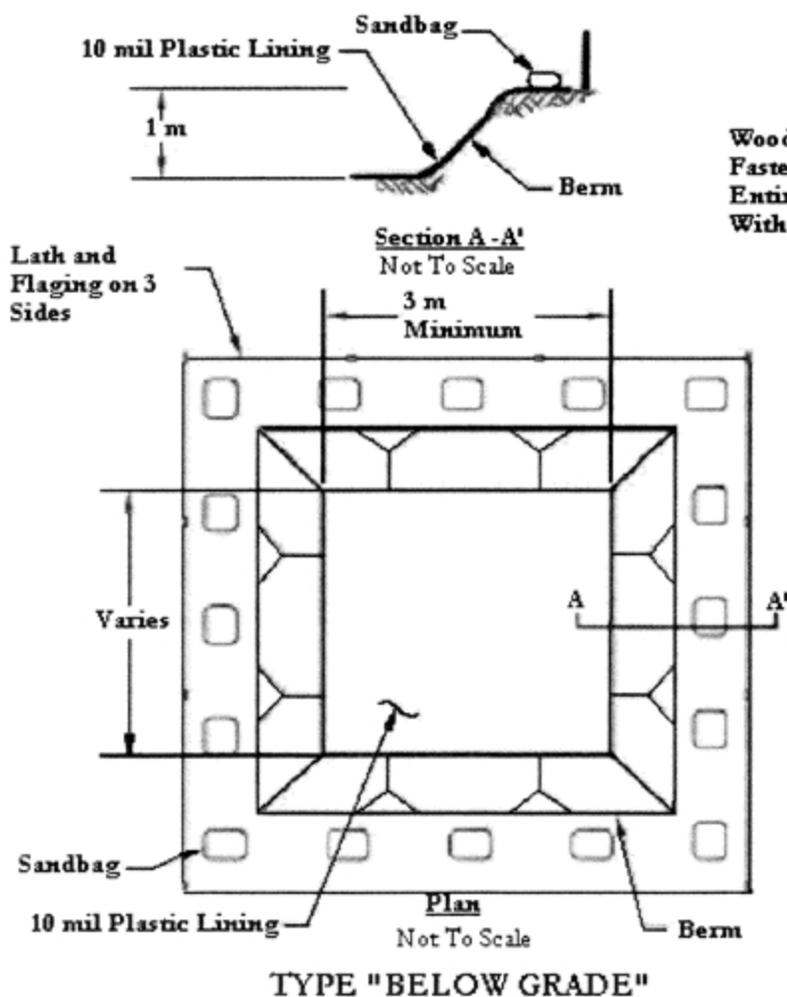
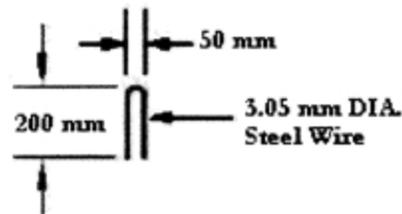
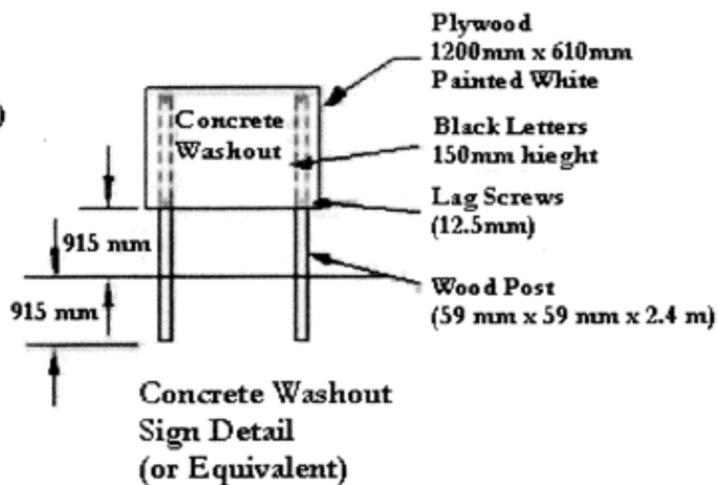
MATERIAL REMOVAL AND PROPER DISPOSAL

- Plan for removal and disposal when a washout has been filled to 75% capacity.
- The preferred method of washouts is to allow water to evaporate and to recycle the hardened concrete.
 - Check with local recycling programs to identify opportunities for concrete recycling (crushed concrete makes excellent aggregate for roadbeds and other building applications).
- If stored liquids have not evaporated, and the washout is nearing capacity, vacuum and dispose of them in an approved manner.
- If rainstorms are predicted, remove or cover the washout to prevent overflow.
- Once materials are removed from the washout build a new structure, if needed.
 - If the previous structure is still intact, inspect for signs of weakening or damage and make any necessary repairs.
 - **Line the structure with new plastic after each cleaning as the existing liner has most likely suffered damage from pumps and concrete removal.**

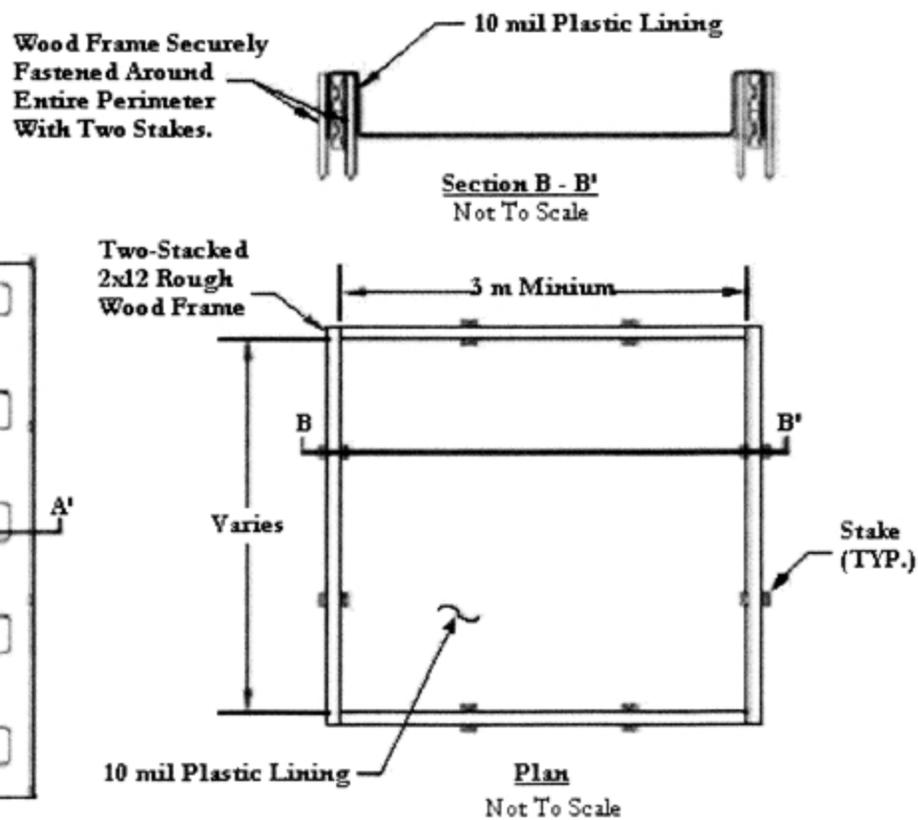
TIP *Concrete contractors should be encouraged, where possible, to use washout facilities at their own plants or dispatch facilities.*



TYPE "ABOVE GRADE" WITH STRAW BALES



TYPE "BELOW GRADE"



TYPE "ABOVE GRADE" WITH WOOD PLANKS

NOTES

1. Actual Layout Determined in the Field.



Solid Waste Management

CONDITIONS WHERE PRACTICE APPLIES

On all land development projects consisting of one (1) acre or more of land disturbance where any of the following wastes are generated and/ or stored:

- Solid wastes generated from land clearing, including removal of vegetation and demolition of existing structures.
- Building construction wastes, including packaging materials, surplus or residue building or landscaping materials and other scrap residues generated by the construction trades and their activities. This may also include dry wall, concrete, roofing materials, plastic, metal, glass, windows and doors.
- Domestic wastes including beverage containers, paper, plastic wrappers, cigarettes and related wastes.

PLANNING CONSIDERATIONS

- Designated trash and bulk waste collection areas should be at convenient and easily identified areas to promote their proper utilization for general construction and domestic waste disposal. They should be located away from storm drains, water courses and other stormwater conveyances. Waste collection areas are best located near construction site entrances to minimize traffic on disturbed soils.
- When practical, accommodations should be made to recycle (paper, wood, plastic and concrete).
- Segregate solid waste collection areas from hazardous material collection/ storage areas, and make sure toxic liquid wastes (oil, solvents, paints) and chemicals are not disposed of in dumpsters designated for construction debris.
- Provide an adequate number of containers and schedule regular pick ups before containers overflow.

PURPOSE

To reduce the potential of pollutant discharges to stormwater from solid wastes generated on the construction site by providing designated waste collection areas, appropriate containers, regular pick up for disposal and adequate training of employees and contractors.



Proper Solid Waste Disposal and Collection

- Consider secondary containment around the disposal area and utilize containers with lids or covers to reduce the impacts of rain or windy conditions. These conditions increase the potential for stormwater runoff to pick up construction site wastes and discharge them in surface waters.

- Clean up litter and debris from the construction site daily. Implement a regular site inspection schedule which includes an inspection of erosion and sediment control devices where litter tends to collect.

- Do not permit solid waste containers to be cleaned or washed out on the construction site.

- Be prepared to undertake immediate clean up measures if a waste container spills.

- Establish an inspection and maintenance schedule by designated personnel in order to keep a clean, well organized and equipped solid waste storage area.



Hazardous Waste Management

CONDITIONS WHERE PRACTICE APPLIES

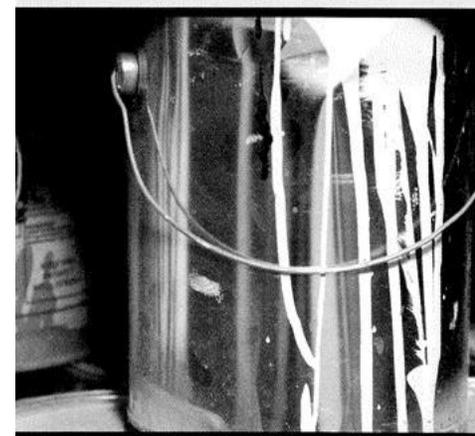
On all land development projects consisting of one (1) acre or more of land disturbance where any hazardous waste products are generated or stored during the construction process. This includes paints, solvents, petroleum products, wood preservatives, pesticides, roofing tar, acids and other materials.

PLANNING CONSIDERATIONS

- Minimize production or generation of hazardous wastes on the project site.
- Designate a hazardous waste collection area on-site located away from storm drains, non-hazardous construction wastes, water courses and moving vehicles and equipment.
- Arrange for regular waste collection before containers overflow. Pick-up should be made by a licensed waste transporter in accordance with applicable state and local regulations.
- Implement employee and contractor education on hazardous waste handling, storage, disposal and clean up.
- Establish an inspection schedule to ensure that all containers are labeled properly and non leaks are present.
- Do not mix wastes, unless specifically recommended by the manufacturer.
- Never remove the original product label from the container because it contains important safety information. Follow the manufacturer's recommended method of disposal, which should be printed on the label.
- Do not handle materials more than necessary.

PURPOSE

To prevent or reduce the discharge of pollutants to stormwater from hazardous and toxic wastes. Implement comprehensive waste management practices for construction projects that generate hazardous wastes.



Label and Contain all Hazardous Wastes for Safety and Pollution Prevention



Sanitary & Septic Waste Management

CONDITIONS WHERE PRACTICE APPLIES

On all land development projects consisting of one (1) acre or more of land disturbance where any vehicle and equipment cleaning takes place.

PLANNING CONSIDERATIONS

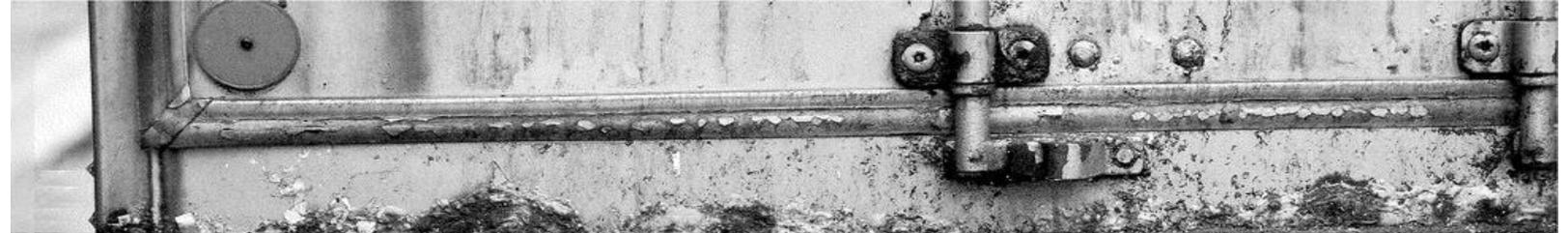
- On-site temporary sanitary facilities should be located away from storm drains, water courses and other stormwater conveyances. Facilities should also be kept clear of traffic circulation patterns.
- Temporary sanitation facilities should be conveniently located and of sufficient number to meet the requirements of the project, which may be subject to specific state and local regulations. They should be clean and maintained in good working condition by a licensed service. This service company should also provide timely waste collection to ensure facilities do not overflow.
- Secondary containment pans under portable sanitation facilities should be considered where possible or necessary.
- Temporary sanitary facilities should be properly anchored or tied down in areas subject to high winds.
- Waste water shall not be discharged or buried within the project site.
- Designated personnel should conduct regular inspections for leaks. Repairs and replacements should be made immediately by the licensed service.
- Employees, contractors, and suppliers should be educated about the on-site location of facilities and about the dangers, to humans and the environment, from sanitary and septic waste.
- If either an on-site disposal system (such as a septic system) or direct discharges are made into the public sanitary sewer system, then state and local treatment and disposal regulations must be satisfied.

PURPOSE

To prevent the discharge of pollutants to stormwater from sanitary and septic waste by providing conveniently located, securely installed and well maintained toilet facilities which are provided with regular inspections, service and disposal.



Properly Located Restroom Facilities on a Solid Surface



Vehicle & Equipment Cleaning

CONDITIONS WHERE PRACTICE APPLIES

On all land development projects consisting of one (1) acre or more of land disturbance where any vehicle and equipment cleaning takes place.

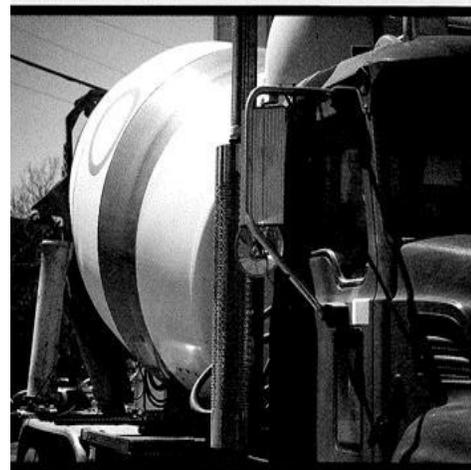
PLANNING CONSIDERATIONS

- To extent possible, utilize off-site vehicle and equipment cleaning facilities. All vehicles and equipment that regularly enter and leave the site must be cleaned off-site.
- When vehicle and equipment cleaning must take place onsite, clearly identify a designated washing area and inform employees that washing must occur in this area.
- Washing and cleaning activities which must occur on-site should be located away from drainage facilities and water courses.
- Consider a contained vehicle washing area to properly collect and dispose of wash water.
- Use blowers or vacuums instead of water to remove dry materials if possible.
- Because water alone can remove most dirt adequately, use high-pressure water spray without detergents at washing areas. If you must use detergents, avoid phosphate or organic-based cleansers to reduce nutrient enrichment and biological oxygen demand in wastewater.
- Use only biodegradable products that are free of halogenated solvents.
- Do not perform other activities, such as vehicle repairs, in the wash area.

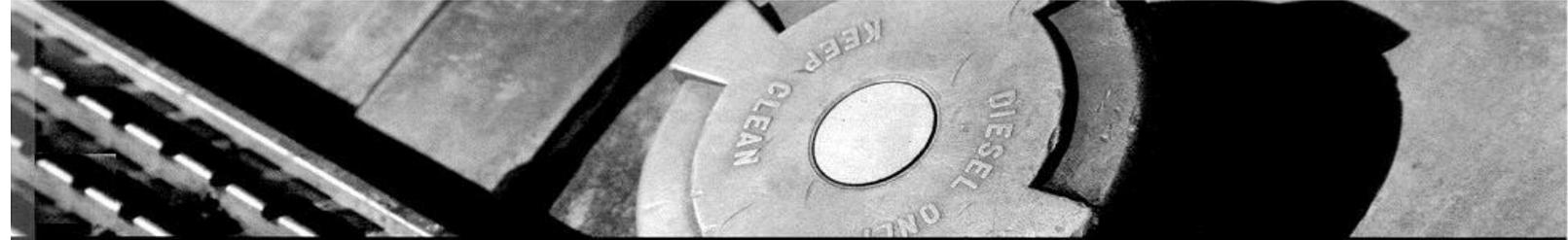
TIP Educate employees and contractors on pollution prevention measures

PURPOSE

To implement vehicle cleaning measures to reduce or eliminate discharge of pollutants to stormwater.



Vehicle Washing Runoff May Contaminate Nearby Water Resources



Vehicle & Equipment Fueling

CONDITIONS WHERE PRACTICE APPLIES

On all land development projects consisting of one (1) acre or more of land disturbance where any vehicle and/ or equipment takes place.

PLANNING CONSIDERATIONS

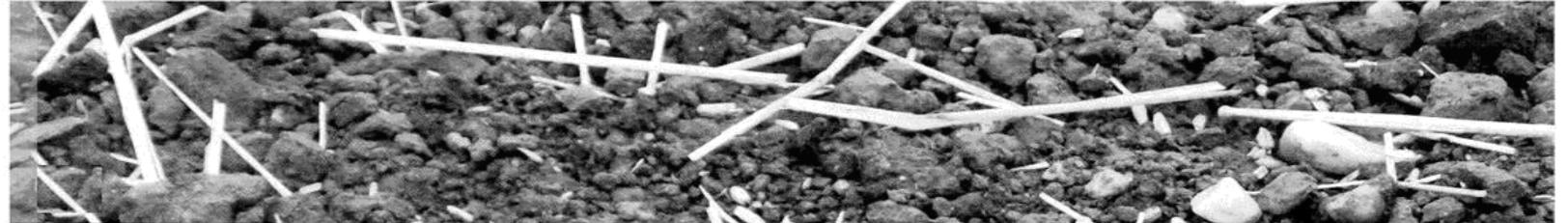
- To extent possible, utilize off-site fueling stations
- When vehicle fueling must take place on-site, designate an area away from storm drains, water courses and other stormwater conveyances.
- When possible, utilize dedicated fueling areas with protective berms and dikes to contain potential spills.
- If possible, avoid mobile fueling of equipment around the site. Transport equipment to designated areas.
- Use drip pans or absorbent pads for small spills. Do not bury a spill, but remove and dispose of properly.
- Make spill kits available.
- Keep spill kits in easily accessible locations and fully stocked.
- Train employees and contractors in proper fueling procedures and use of spill kits.
- Consider utilizing fueling nozzles equipped with automatic shutoff and vapor recovery to control fuel drips.
- Implement a daily inspection program with an identified individual to check on site vehicles and equipment to respond to leaks and equipment damage.
- Discourage ‘topping off’ fuel tanks.

PURPOSE

To implement measures regarding location, inspection and maintenance of vehicle and equipment fueling to reduce or eliminate discharge of pollutants to stormwater.



To Ensure the Protection of Natural Areas a Combination of Techniques and Education is Needed



Routine SPPP Inspection & Maintenance

PLANNING CONSIDERATIONS

It is the responsibility of the construction site operator to ensure that regular inspections take place. Inspectors must be familiar with the location, design specifications, maintenance procedures, and performance expectations of each BMP.

Three types of BMP inspections are performed:

1. Routine inspections
2. Inspections performed before rain event
3. Inspections performed after rain event

ROUTINE INSPECTIONS

Routine inspections and maintenance minimizes the work required to prepare a site before a rain event and it helps protect a site from future rains. Inspect at a minimum of once a week if there is no rain. More frequent inspections may be needed during times of heavy construction activity.

- Identify the individual(s) responsible for conducting inspections and describe their qualifications. Reference or attach the inspection for that will be utilized.
- Describe the frequency that inspections will occur at your site including any correlations to storm frequency and intensity.
- Describe general procedures for correcting problems when they are identified. Include responsible staff and time frames for making corrections.
- Describe actions taken, date completed, and note the person who completed the work.
- Note any changes made as a result of specific conditions.

TIP *It is more cost effective to inspect and repair BMPs as routine maintenance than to deal with the expense of remediation for any environmental damage.*

DEFINITION

To document the condition and repairs needed as noted by the builder's on-site representative.

PURPOSE

Stormwater control best management practices (BMPs) need regular inspections to ensure their effectiveness, and many permitting authorities require self-inspection for construction projects. The inspections should identify areas contributing to the stormwater discharge authorized by the Permit and evaluate whether the SPPP is being properly implemented and maintained, or whether additional measures are needed to implement the plan.*



Weekly Inspections by the Builder's On-site Representative are Needed to Manage and Control Stormwater Pollution

INSPECTIONS BEFORE RAIN EVENTS

It is important that construction site operators pay attention to weather forecasts. To prepare for impending rains:

- Operators should walk the construction site and ensure that BMPs are cleaned out and operating properly.
- They should verify that dumpsters are covered, paint and other chemicals are covered, and no oil spills are present.
- Operators should also visually inspect all BMPs when the site will be inactive for several days, such as weekends or holidays. This will help to prepare for rains that might occur when workers are off-site.

INSPECTIONS AFTER RAIN EVENTS

- Eight (8) hours after rain, inspect, clean, and repair the site's BMPs. This will keep the site clean and minimize complaints from nearby residents.
- Remove mud in traffic areas and remove mosquito-breeding standing water.
- Clean mud and debris from silt fences and other BMPs. Clogged BMPs will not prevent pollutant releases during subsequent rain events, so clean, repair, or replace them as quickly as possible.
- Prepare the site for the next rain event.

MAINTENANCE & REPAIR

Construction site operators should allow enough time and resources for BMP maintenance and repair. As site conditions change, BMP designs may prove to be inadequate in controlling erosion and sedimentation. A knowledgeable inspector will be able to identify these deficiencies and ensure that necessary improvements are made.

EFFECTIVENESS

Inspections and maintenance ensure that BMPs function properly and help prevent pollution discharges. Education of on-site personnel is another important factor in an effective program. To recognize and preempt problems, those responsible for maintaining BMPs must be familiar with their design and installation. However, making everyone at the site aware of general erosion and sedimentation control principles can expedite identification of maintenance problems and repairs.

**Please refer to E.1 on page 5 of the Permit's Narrative Requirement found under the regulations tab.*

Common Compliance Problems During Inspections

The following are problems commonly found at construction sites. As you conduct your inspections, look for these problems on your site.

Problem #1 – Not using phased grading or providing temporary or permanent cover

In general, construction sites should phase their grading activities so that only a portion of the site is exposed at any one time. Also, disturbed areas that are not being actively worked should have temporary cover. Areas that are at final grade should receive permanent cover as soon as possible.

Problem #2 – No sediment controls on-site

Sediment controls such as silt fences, sediment barriers, sediment traps and basins must be in place before soil-disturbance activities begin. Don't proceed with grading work out-of-phase.

Problem #3 – No sediment control for temporary stockpiles

Temporary stockpiles must be seeded, covered, or surrounded by properly installed silt fence. Stockpiles should never be placed on paved surfaces.

Problem #4 – No inlet protection

All storm drain inlets that could receive a discharge from the construction site must be protected before construction begins and must be maintained until the site is finally stabilized.

Problem #5 – No BMPs to minimize vehicle tracking onto the road

Vehicle exits must use BMPs such as stone pads, concrete or steel wash racks, or equivalent systems to prevent vehicle tracking of sediment.

Problem #6 – Improper solid waste or hazardous waste management

Solid waste (including trash and debris) must be disposed of properly, and hazardous materials (including oil, gasoline, and paint) must be properly stored (which includes secondary containment). Properly manage portable sanitary facilities.

Problem #7 – Dewatering and other pollutant discharges at the construction site

Construction site dewatering from building footings or other sources should not be discharged without treatment. Turbid water should be filtered or allowed to settle.

Problem #8 – Poorly managed washouts (concrete, paint, stucco)

Water from washouts must not enter the storm drain system or a nearby receiving water. Make sure washouts are clearly marked, sized adequately, and frequently maintained.

Problem #9 – Inadequate BMP maintenance

BMPs must be frequently inspected and maintained if necessary. Maintenance should occur for BMPs that have reduced capacity to treat stormwater, or BMPs that have been damaged and need to be repaired or replaced (such as storm drain inlet protection that has been damaged by trucks).

Problem #10 – Inadequate documentation or training

Failing to develop a SPPP, keep it up-to-date, or keep it on-site, are permit violations. You should also ensure the SPPP documentation such as copies of weekly inspections and annual reports and also kept on-site. Likewise, personnel working on-site must be trained on the basics of stormwater pollution prevention and BMP installation/maintenance.

Sample Inspection Report

Instructions

This sample inspection report has been developed as a helpful tool to aid you in completing your site inspections. This sample inspection report was adapted for use in New Jersey and is consistent with EPA's Developing Your Stormwater Pollution Prevention Plan.

This inspection report is provided in Microsoft Word format to allow you to easily customize it for your use and the conditions at your site. You should also customize this form to help you meet the requirements in your construction general permit related to inspections.

Using the Inspection Report

This inspection report is designed to be customized according to the BMPs and conditions at your site. For ease of use, you should take a copy of your certified soil erosion and sediment control (251) plan and number all of the stormwater BMPs and areas of your site that will be inspected. A brief description of the BMP or area should then be listed in the site-specific section of the inspection report. For example, specific structural BMPs such as construction site entrances, sediment ponds, or specific areas with silt fence (e.g., silt fence along Main Street; silt fence along slope in NW corner, etc.) should be numbered and listed. You should also number specific non-structural BMPs or areas that will be inspected (such as trash areas, material storage areas, temporary sanitary waste areas, etc).

You can complete the items in the "General Information" section that will remain constant, such as the project name, NPDES tracking number, and inspector (if you only use one inspector). Print out multiple copies of this customized inspection report to use during your inspections.

When conducting the inspection, walk the site by following your site map and numbered BMPs/areas for inspection. Also note whether the overall site issues have been addressed (customize this list according to the conditions at your site). Note any required corrective actions and the date and responsible person for the correction in the Corrective Action Log.

Stormwater Construction Site Inspection Report

General Information			
Project Name			
NPDES Tracking No.		Location	
Date of Inspection		Start/End Time	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Describe present phase of construction			
Type of Inspection:			
<input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event <input type="checkbox"/> Annual (attach report)			
Weather Information			
Has there been a storm event since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide: Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):			
Weather at time of this inspection? <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds <input type="checkbox"/> Other: Temperature:			
Have any discharges occurred since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:			
Are there any discharges at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:			

Site-specific BMPs

- *List the structural and non-structural BMPs identified in your SPPP on your Soil Erosion and Sediment Control (251) Plan map below (add as many BMPs as necessary). Carry a copy of the numbered list with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
16		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
18		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
19		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
20		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Inspections should be conducted once every seven (7) days and within twenty-four (24) hours of 0.5" or greater rainfall.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	Temporary Stabilization			
1	Have all dormant, disturbed areas been temporarily stabilized completely?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Have all stockpiles that will sit for over thirty (30) days been stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Has seed and mulch been applied at the proper rate? (see SESC plan for details)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Are any erosion (gullies, sediment plumes) problems that have formed sitewide been repaired and/or stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Construction Entrance			
1	Is sediment being tracked from the entrance onto paved surfaces?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Is the stone 1 1/2" to 2" in diameter?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Is the stone at a depth of 6", with a width and length as per the SESC plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
4	Are there areas where stone is ground in and no longer functioning for wheel cleaning? (i.e. stone should be loose to allow for scraping of tires before exiting site)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Sediment Barriers			
1	Is the silt fence dug in at least six inches (6") into the ground?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Is the trench backfilled to prevent runoff from cutting underneath the fence?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Is the fence placed as noted on the certified SESC plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Have all gaps and tears in the fence been eliminated?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Inlet Protection			
1	Has the inlet protection been replaced when it deteriorates?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Curb inlet protection – does it filter runoff but allow for overflow into the inlet?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Yard inlet protection – does the barrier encircle the entire grate?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Is the protection properly entrenched or anchored so that water passes through it and under it?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Is sediment that accumulates around the inlet/ curblin removed on a basis?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Permanent Stabilization			
1	Are areas at final grade and stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Has the soil been properly prepared to accept permanent seeding?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Has seed and mulch been applied at appropriate rate? (see SESC plan for details)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
4	If rainfalls been inadequate, are seeded areas being watered?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Are permanent controls (grassed waterways, conduit outlet protection, channel, etc.) constructed in time with the sequence on construction?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Sediment Basins (where present)			
1	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Is the connection between the riser pipe and the permanent outlet water tight?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Is the sediment pond being cleaned out to restore its original capacity?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Construction Site Waste Control			
1	Has a designated area been established and properly constructed for concrete wash out?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Is waste and packing material disposed of in onsite covered dumpsters?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Are all pesticides, fertilizers, fuels, lubricants, petroleum products, anti-freeze, paints and paint thinners, cleaning solvents and acids, detergents, chemical additives, and concrete curing compounds stored in containers in a dry covered	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Is a spill prevention plan in place and materials on hand in easily accessible locations?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Are onsite sanitary facilities in place and properly maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Has a vehicle fueling area been designated?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
7	Has a vehicle wash area been designated?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	Are streets swept as often as necessary to keep them free of tracked sediment?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	Are stockpiles of soil or other materials stored away from water courses, ditches, and storm drains?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	If an area of the site is being dewatered, is it being pumped and filtered in a way not to cause erosion?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Administrative Requirements			
1	Have regular inspections been performed, at a minimum of once per week?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Have site inspections been performed both before and after any rain event?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Has a log of the regular inspections been established?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Is the SPPP and a copy of your authorization to discharge onsite and available?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Has the SPPP been maintained to reflect any changes to onsite conditions?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Has a facility contact been established who is familiar with the SPPP and permit requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Non-Compliance

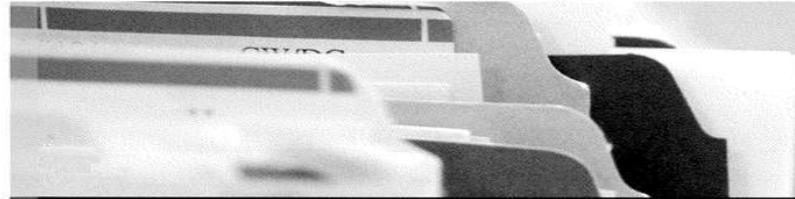
Describe any incidents of non-compliance not described above:

CERTIFICATION STATEMENT

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Print name and title: _____

Signature: _____ **Date:** _____



Record Keeping

WHAT TO KEEP

You must keep copies of the SPPP, inspection records, copies of all reports required by the Permit, and records of all data used to complete the Request for Authorization (RFA) to be covered by the Permit for a period of at least three (3) years from the date the Permit coverage expires or is terminated.

RECORDS SHOULD INCLUDE

- A copy of the SPPP (certified soil erosion and sediment control plan).
- A copy of the RFA and Authorization to Discharge (ATD) and any stormwater related correspondence with federal, state, and local regulatory authorities.
- Inspection forms, including the date, place, and time of inspections.
- Names of inspector(s).
- The date, time, exact location, and a characterization of significant observations, including spills and leaks.
- Records of any non-stormwater discharges.
- BMP maintenance and corrective actions taken at the site.
- Any documentation and correspondence related to endangered species and historic preservation requirements.
- Weather conditions (e.g., temperature, precipitation).
- Date(s) when major land disturbing (e.g., clearing, grading, and excavating) activities occur in an area.
- Date(s) when construction activities are either temporarily or permanently ceased in an area.
- Date(s) when an area is either temporarily or permanently stabilized.

DEFINITION

All construction site operators are required to complete inspections and annual certifications.

Maintaining complete records during the construction period is essential.

PURPOSE

Regardless of who performs the inspections, it is critical to maintain proper documentation. Use the inspection form for each inspection. Log books are often used, but they need to include more information than merely the date of the inspections. Permitting authorities require self-inspections, and if they audit the site, they will want to see proof of inspections to document compliance. Permitting authorities may also wish to see inspection and maintenance documentation for each specific BMP.



Maintaining Accurate Records is Essential

ANNUAL REPORTS AND CERTIFICATIONS

The permittee must prepare an annual report summarizing each routine inspection that was performed on the facility. (please refer to 3.a on page 5 of the Narrative Requirements of the Permit). The report must include:

- **Annual Certification:** That the facility is in compliance with the SPPP and the Permit, except that if there were any incidents of noncompliance. Those incidents shall be identified in the certification.

- If there are any incidents of noncompliance, the certification should identify the steps being taken to remedy the noncompliance and to prevent a reoccurrence of the noncompliant incident.

- **Annual Report:** Summary of all routine inspections performed.
- The Certification and Annual Report shall be signed and dated by the permittee (in accordance with N.J.A.C. 7:14A-4.9) and shall be maintained for at least five (5) years. This period may be extended by written request from NJDEP at anytime.