



Gratiot County
Department of Community Development
Soil Erosion & Sedimentation Control Division
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Office Use Only
Date Received



Soil Erosion and Sedimentation Control (SESC) Application Guide

The goal of the Soil Erosion and Sedimentation Control Program is to serve the public by protecting the waters of the State of Michigan and to ensure clean water for drinking, swimming, fish, and wildlife habitat.

Gratiot County Inspectors:

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SESC Requirements:

- ✓ **Must have SESC Permit prior to earth moving activity. Post permit clearly visible from the road.**
- ✓ **SESC Measures must be designated on site plans and/or (as required) installed prior to any earth moving activity.**
- ✓ **Detention/Retention/Sedimentation ponds must be constructed and stabilized prior to Earth Moving activity. Outlets must be designed to reduce the water flow to non-erosive velocity.**
- ✓ **All earth moving activity must be designed, constructed, and completed in such a manner as to limit the exposed area of disturbed ground for the shortest period of time. Site must be stabilized within 5 days after final grading is completed.**
- ✓ **Stone access drives must be installed prior to construction.**
- ✓ **Soil, sediment, and miscellaneous debris must be kept off streets and out of drainage ditches/catch basins.**
- ✓ **Stockpiling must be kept clear of sensitive areas with adequate controls.**
- ✓ **Erosion control blankets are required on slopes of 4:1 or steeper.**
- ✓ **All permanent erosion control measures shall be permanently maintained by the owner or homeowner association.**

Benefits of SESC:

- **Economic – excess sediment increases cost of treating drinking water & negatively affects water treatment equipment.**
- **Health & Safety – Eroded soils entering water bodies/channels raise water levels and block culvers which leads to flooding. Sediment deposited on roadways from construction vehicles or storm water runoff leads to dangerous roadways. Soil particles carry pollutants such as pesticides, oil, and herbicides that contaminate the water bodies the soils enter.**
- **Environment – Sediment in water bodies can cover fish eggs and other organisms to prevent hatching. Sediment reduces light penetration which can lead to loss of aquatic plants. Soil absorbs heat and can raise water temperature and thus reduce fish populations.**
- **Aesthetic & Recreational – Clear water is more desirable for swimming, boating, canoeing, and fishing. Excess sediment leads to high water level but shallower water depth which affects canoeing, boating, and fishing capabilities.**

SESC Permit Application

Completed application forms, schedule, and two site plans must be submitted at least 14 days prior to Construction Start Date to the Gratiot County Department of Community Development SESC Division.

1. Project Information																								
Address: _____																								
City/Village: _____		Zip Code: _____																						
Parcel ID#: _____		Township: _____																						
Start Date: _____		Completion Date: _____																						
<input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> LAND BALANCING/MINING <i style="text-align: center;">*Check all that apply below*</i>																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: left; padding: 5px;">Project Type</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;"><input type="checkbox"/> Single Family Residence (New)</td> <td style="padding: 5px;"><input type="checkbox"/> Single Family Residence (Addition)</td> <td style="padding: 5px;"><input type="checkbox"/> Garage (Attached)</td> </tr> <tr> <td style="padding: 5px;"><input type="checkbox"/> Garage (Detached)</td> <td style="padding: 5px;"><input type="checkbox"/> Pole Barn</td> <td style="padding: 5px;"><input type="checkbox"/> Pool (In-Ground)</td> </tr> <tr> <td style="padding: 5px;"><input type="checkbox"/> Pond</td> <td style="padding: 5px;"><input type="checkbox"/> Commercial/Industrial (New)</td> <td style="padding: 5px;"><input type="checkbox"/> Commercial/Industrial (Addition)</td> </tr> <tr> <td style="padding: 5px;"><input type="checkbox"/> Residential Development</td> <td style="padding: 5px;"><input type="checkbox"/> Recreation Development</td> <td style="padding: 5px;"><input type="checkbox"/> Golf Course</td> </tr> <tr> <td style="padding: 5px;"><input type="checkbox"/> Road</td> <td style="padding: 5px;"><input type="checkbox"/> Pipeline</td> <td style="padding: 5px;"><input type="checkbox"/> Utility</td> </tr> <tr> <td style="padding: 5px;"><input type="checkbox"/> School/Church</td> <td style="padding: 5px;"><input type="checkbox"/> Hospital</td> <td style="padding: 5px;"><input type="checkbox"/> Other</td> </tr> </tbody> </table>				Project Type			<input type="checkbox"/> Single Family Residence (New)	<input type="checkbox"/> Single Family Residence (Addition)	<input type="checkbox"/> Garage (Attached)	<input type="checkbox"/> Garage (Detached)	<input type="checkbox"/> Pole Barn	<input type="checkbox"/> Pool (In-Ground)	<input type="checkbox"/> Pond	<input type="checkbox"/> Commercial/Industrial (New)	<input type="checkbox"/> Commercial/Industrial (Addition)	<input type="checkbox"/> Residential Development	<input type="checkbox"/> Recreation Development	<input type="checkbox"/> Golf Course	<input type="checkbox"/> Road	<input type="checkbox"/> Pipeline	<input type="checkbox"/> Utility	<input type="checkbox"/> School/Church	<input type="checkbox"/> Hospital	<input type="checkbox"/> Other
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Work Description: _____ _____ _____																								
Earth Change Description: _____ _____ _____																								
Size of Earth Change: _____ Acres Name & Distance to Nearest Lake/Pond/Drain: _____ Feet																								
2. SESC Control Plan (See Attached Guidelines Rule 1703)																								
Designers Name: _____		Phone #: _____																						
E-mail Address: _____		Site Plan Attached: <input type="checkbox"/> YES <input type="checkbox"/> NO																						
3. Property Owner Information																								
Name: _____		Mailing Address: _____																						
City: _____		State: _____	Zip Code: _____																					
E-mail Address: _____		Phone #: _____																						
4. Parties Responsible for Earth Change ("On-Site")																								
Name: _____		Company Name: _____																						
Mailing Address: _____		City: _____	State: _____																					
Zip Code: _____		Phone #: _____																						
5. Performance Deposit (If Required)																								
Amount Required: \$ _____		Name of Surety Company: _____																						
Mailing Address: _____		City: _____	State: _____																					
Zip Code: _____	Phone #: _____	E-mail Address: _____																						

6. Applicant Information

APPLICANT IS RESPONSIBLE FOR THE PAYMENT OF ALL FEES AND FINAL GROUND COVER.
If the property is sold, the legal responsibility remains with applicant unless the buyer signs a written agreement to take over all responsibility for installing the required final cover. A copy must be submitted to the SESC Officer.

Name:	Mailing Address:	
City:	State:	Zip Code:
E-mail Address:	Phone #:	
Driver's License #:	Birth Date:	

I (WE) HEREBY CERTIFY THAT THE PROPOSED WORK IS AUTHORIZED BY THE OWNER OF RECORD AND THAT I (WE) HAVE BEEN AUTHORIZED BY THE OWNER TO MAKE THIS APPLICATION AS HIS/HER AUTHORIZED AGENT, AND WE AGREE TO CONDUCT THE ABOVE-DESCRIBED EARTH CHANGE IN ACCORDANCE TO PART 91, SOIL EROSION AND SEDIMENTATION CONTROL, OF THE NATURAL RESOURCES AND ENVIRONMENTAL CONTROL ACT, 1994 PA 451 AS AMENDED, LOCAL ORDINANCES, AND THE DOCUMENTS ACCOMPANYING THIS APPLICATION. ALL INFORMATION SUBMITTED ON THIS APPLICATION IS ACCURATE TO THE BEST OF MY KNOWLEDGE.

Designated Agent

I authorize _____ to act as my representative regarding the Soil Erosion
(Applicant/Contractor Name)
and Sedimentation Controls for the project located at _____.
(Project Location)

In doing so, I agree to the specified requirements on the SESC Permit.

Landowner Name (Print)

Date

X

Landowner Signature

Date

Designated Agent Name (Print)

Date

X

Designated Agent Signature

Date

DEPARTMENT USE ONLY

APPLICATION – APPROVED DENIED

APPLICATION FEE: \$ _____

X

SESC Official Signature

Date

PROJECT RISK: Low Low/Medium Medium Medium/High High

Low:

- Earth disturbances under 1/2 Acre
- No highly erodible soils/slopes
- No Direct Connection to Surface Water
- No Direct Connection to Adjacent Property
- Areas w/ Dense Vegetation (100 ft.+) b/w Earth Disturbance and Property Boundary

Medium:

- Earth disturbances under 1/2 Acre
- No Direct Connection to Surface Water
- No Direct Connection to Adjacent Property
- Project Involves Trucks/Heavy Machinery Entering/Exiting Public Roadway

High:

- Earth disturbances Over 5 Acres
- Adjacent to Surface Water
- Directly Connected to Surface Water
- Directly Connected to Adjacent Property
- Project Involves Trucks/Heavy Machinery Entering and Exiting Public Roadway

Site Plan Checklist

Rule 1703 Requirement	Included in Plan?	Comments
Map w/ Scale (1" = 200' or less)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Nearest Road Intersection Labeled	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Legal Description of Property	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Location & Size of Proposed Earth Change	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Proximity of Proposed Earth Change to Lakes/Streams/Ponds/Drains	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Location & Size of Temporary Soil Stockpiles	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Predominant Geographic and Vegetation Features	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Location & Size of All Tree Lines/Forested Area	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Location & Size of All Existing Buildings/Structures	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Slope Description/Contour Intervals	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Soil Survey/Written Description of Soil Type	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Description & Location of the Physical Limits of Each Proposed Earth Change	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Description & Location of All Existing & Proposed On-Site Drainage & Dewatering Facilities	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Description & Location for Installing and Removing All TEMPORARY SESC Measurements	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Description & Location for All PERMANENT SESC Measurements	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Maintenance Program for all Permanent SESC Measures (Including Designated Responsible Person)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Timing & Sequence of Construction/Proposed Earth Changes	<input type="checkbox"/> Yes <input type="checkbox"/> No	

*** If No is checked above, the plan must be revised to include the missing element prior to submittal/approval.

Additional Earth Change Information

- | | | |
|--------------------------------------------------|----------------------------------------------------------|----------------------------------------|
| Has earth-moving activity started? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Is the earth-moving activity over 1-acre? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Is the earth-moving activity over 5-acres? | <input type="checkbox"/> Yes <input type="checkbox"/> No | – If Yes, Licensed SWO must be on-site |
| Will the work be occurring in a wetland? | <input type="checkbox"/> Yes <input type="checkbox"/> No | – If Yes, contact MDEQ |
| Will de-watering occur? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Will work be occurring in a waterway/floodplain? | <input type="checkbox"/> Yes <input type="checkbox"/> No | – If Yes, contact MDEQ |
| Will a designated county drain be affected? | <input type="checkbox"/> Yes <input type="checkbox"/> No | – If Yes, contact Drain Office |
| Will fill be brought on-site? | <input type="checkbox"/> Yes <input type="checkbox"/> No | – Amount in Cubic Yards _____ |
| Will material be removed from site? | <input type="checkbox"/> Yes <input type="checkbox"/> No | – Amount in Cubic Yards _____ |

Example Site Plan:

Soil Erosion Control Plan

Legend

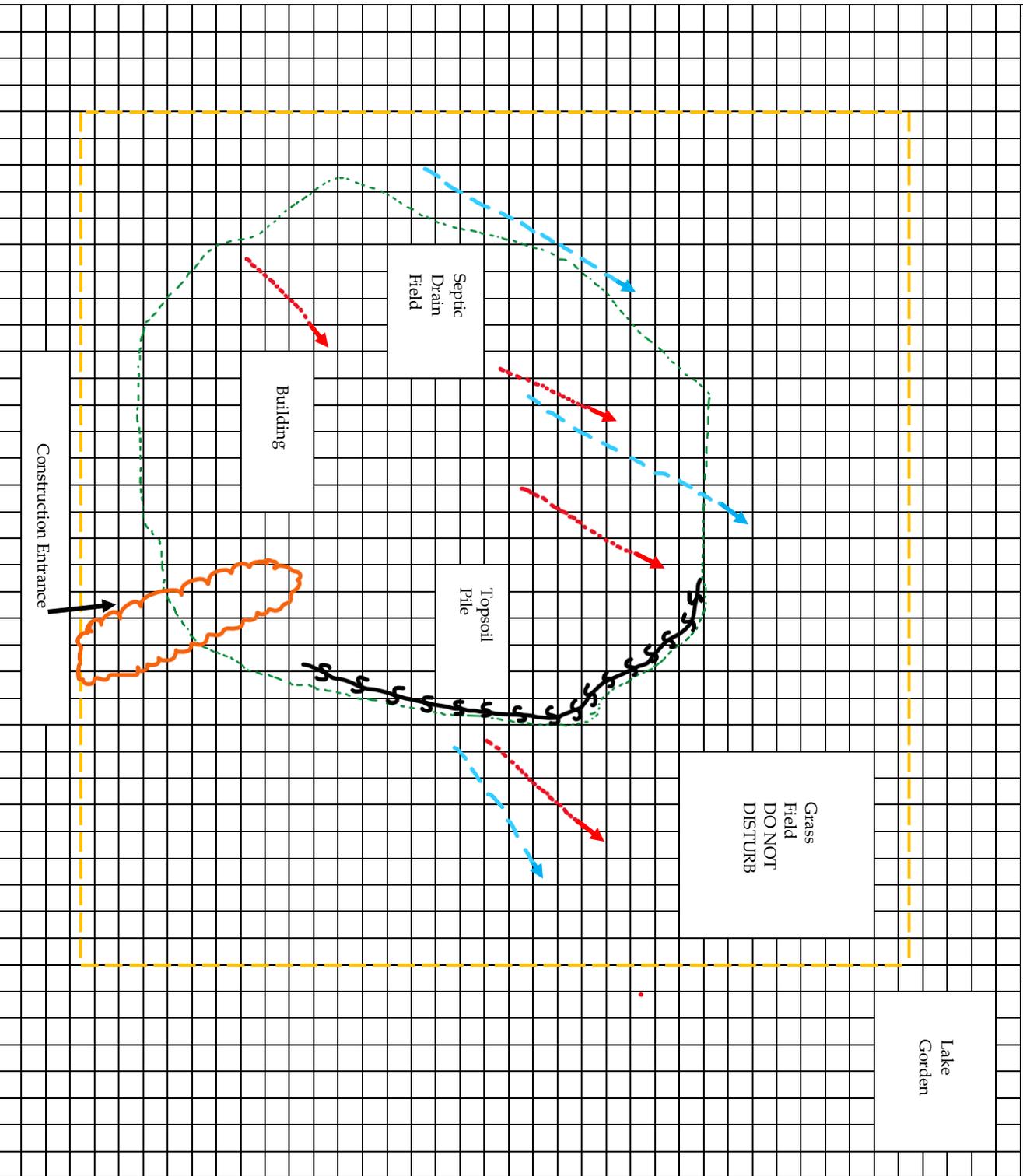
(Use key below to place needed objects on the plan, use a scale or ruler to draw home location and locate any other trees or buildings on the property. Label Roads. Show only the area that will be disturbed and the access drive.)

- Property Line ————
- Existing Drainage ————
- Temp. Diversion ————TD———
- Finished Drainage ————
- Limits of Grading ————
- Silt Fence — S — S — S

Show stone access drive, tree preservation and temporary soil stockpile.

Owner: John Smith
Telephone #: (989) 875-5201

Scale: 1 inch = _____ Feet



Legal Description:

Approximate Project Timing/Construction Schedule	
Minor Project	Date (Month/Year)
Temporary Erosion Control Measures Installed	
Gravel Drive/ Entrance Installed	
Land Cleared or Excavation Started	
Final Grade/Seeding	
Permanent Erosion Measures in Place	
Temporary Erosion Measures Removed	
Major Project	
Temporary Erosion Control Measures Installed	
Gravel Drive/ Entrance Installed	
Land Cleared or Excavation Started	
Detention/Retention/Sediment Ponds Installed	
Road Construction	
Utilities Installed	
Final Grade/Seeding	
Catch Basins/Ponds Cleaned	
Permanent Erosion Measures in Place	
Temporary Erosion Measures Removed	

Permit Fee Schedule

	Fee	Add Cost
Plan Review Fee		
<1 acre	\$25.00	
1 to 5 Acres	\$50.00	
>6 Acres/Commercial	\$75.00	
Permits Fee		
Residential – Single or Duplex		
New Home	\$80.00	
Building Addition/Improvement	\$40.00	
Pole Building	\$40.00	
Garage	\$40.00	
Sanitary Waste System	\$40.00	
Driveway	\$40.00	
Industrial/Commercial		
Up to 1 Acre	\$200.00	
Each Additional Acre (or Fraction Thereof)	\$50.00	
Site Development		
Up to 1Acre	\$100.00	
Each Additional Acre (or Fraction Thereof)	\$25.00	
Utilities (Including but not limited to cables/conduits/pipelines)		
Up to 1 Mile	\$100.00	
Each Additional Mile	\$35.00	
Gravel/Sand Mining (Annual Permit)		
1-2 Acres	\$250.00	
3-5 Acres	\$500.00	
6+ Acres	\$750.00	
Inspection Fee (4 Minimum Required for Entire Project Timeline)		
Monthly (Based on Project Risk)		
Residential	\$30.00	
Non-Residential	\$75.00	
Non-Residential (Multiple Parcel Projects)	\$75.00/Parcel	
Site Evaluation/Consultation		
Single-Family Residential Home/Accessory	\$35.00	
All Other Projects	\$75.00	

*****Commercial Projects that involve multiple parcels will be issued one (1) permit per Parcel involved, but will be charged a Total Permit Fee based upon the total amount of Earth Disturbance across all parcels involved. The Total Permit Fee will be invoiced to each permit issued based upon (TPF) ÷ (# of Permits Issued).**

Frequently Asked Questions

PART 91, SOIL EROSION AND SEDIMENTATION CONTROL (SESC)

of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as Amended

1. Why is erosion and sediment control important?

Sediment is the greatest pollutant by volume impacting our lakes, streams, and wetlands. Sediment is the product of uncontrolled erosion. Everyone in Michigan is affected by erosion and off-site sedimentation. Erosion and sedimentation result in: loss of fertile topsoil, filling of lakes and streams, increased flooding, damage to plant and animal life, and structural damage to buildings and roads.

Construction is one of the major causes of erosion in Michigan. Without proper planning and management, over 100 tons of sediment per acre per year can be generated on some construction sites.

2. Why was Part 91 passed?

The primary intent of Part 91 is to protect the waters of the state and adjacent properties by minimizing erosion and controlling off-site sedimentation.

3. Where do I obtain a Part 91 permit?

In Gratiot County, excluding the City of St. Louis, Gratiot County has primary responsibility for issuing permits. An SESC Permit can be obtained at the Department of Community Development Office at 118 S. Main St. Ithaca, MI.

4. What principles should be considered when developing a SESC plan?

1. Integrate the overall construction design and activities to fit the physical features of the site.
2. Stage construction and stabilization activities to minimize the area and duration of disturbance.
3. Identify control measures that will minimize erosion.
4. Identify controls that will prevent off-site sedimentation. Sediment control should not be used as used as a substitution for erosion control, but rather in conjunction with erosion control.
5. Establish an inspection and maintenance schedule.

5. How can I maintain compliance with Part 91?

1. Obtain a permit from the appropriate county or municipal enforcing agency.
 2. Install all temporary and permanent SESC measures in accordance with the approved SESC plan and special permit conditions. Temporary SESC measures should be installed prior to or upon commencement of the earth change.
 3. Inspect all projects at least weekly and after every rainfall event to evaluate the effectiveness of the SESC measures.
 4. Maintain and/or replace all SESC measures per plan requirements or as needed based on the site inspections.
 5. Notify the permitting agency when the project begins and for a final inspection when the site is stabilized.
- Note: If the permit will expire before the site is stabilized, a request for a permit extension must be made before the permit expires.

6. Are there penalties for not complying with permit conditions or Part 91?

Yes, there are several:

1. A person may be subject to a civil fine of up to \$25,000 for each day of violation.
2. A cease and desist order or injunction may be issued until compliance is obtained.
3. The permitting agency may install or maintain control measures, to bring the site into compliance with Part 91, and bill the landowner for the costs incurred.
4. A person may be ordered to restore all areas affected by the violation.

7. If I have a Part 91 permit, do I need to apply for storm water coverage under Part 31 of the NREPA?

Yes, if your earth change meets the requirement for storm water coverage. Storm water coverage is required for any earth change that disturbs one or more acres of land and has a point source discharge to the waters of the state. A point source discharge is defined as any discharge by a specific confined conveyance such as, but not limited to, a pipe, ditch, channel, swale, or concentrated flow area.

8. If I obtain a permit from the DEQ's Water Resources Division for various land/water interface activities, do I need a Part 91 permit?

Yes, if the project involves earth work that is within 500 feet landward of a lake or stream or disturbs one or more acres.

Acceptable Control Measures

- Catch Basin Filter – Geotextile filter fabric placed inside a catch basin (storm drain) to filter suspended sediment from water. Must have regular maintenance after storm or snow melt events.
- Check Dam (Temporary) – A line of 4-8" stone piled a maximum of 2ft. high that slows the flow of water in ditches, swales, or natural drainage areas. Should be built so the center of the wall is lower than outside edges and spaced so the downslope is level with the bottom of the upslope.
- Detention/Retention Basin – Drainage basins or ponds designed to hold and filter water draining from developed site to prevent flooding and filter suspended sediment. (Required for most major projects.)
- Erosion Control Blanket – A blanket composed of biodegradable mesh material, interlaced with straw mulch, and sometimes containing grass seed that is staked in and trenched in at the top and flat against the ground. Used to control erosion on steep downslopes.
- Rip-Rap – Rocky type material (6-8" stone) placed on the edges of culverts or drainage outlets in a half-circle around the outlet to slow water.
- Silt Fencing – (Temporary) Wooden fence posts, support system, and a geotextile filter fabric used to keep suspended soil particles from leaving the site. Must be trenched to a depth of 6".
- Vegetative Buffer – A strip or area of vegetation used to filter sediment and pollutants from runoff with a minimum width of 25'.

Acceptable Stabilization Methods

Temporary:

- Mulch – Typically in the form of straw, spread heavily over a disturbed area to protect exposed soil from weather elements. Soil must not be visible through the mulch.
 - Used – In flat areas with a low amount of water runoff and/or with adequate protection from high winds.
- Erosion Blankets – Consist of straw, coconut fiber or excelsior fiber packed in web netting (sometimes with seed for more permanent stabilization). Laid at right angles, staked in place, and toed in at the top of the slope with a 6" overlap of all edges.
 - Used – In moderate/steep slopes on sites with soil that is susceptible to erosion.
- Hydro-Seed – Grass seed to stabilize the soil. (Use with mulch for a better barrier between the weather elements and the soil.)
 - Used – on flat areas with low volume of runoff.
- Tarps – Plastic sheets
 - Used – to cover stockpiles or small disturbances. (Not for large disturbances.)

Permanent:

- Established Vegetative Cover – Any form of vegetation that provides a root base in the soil and a barrier between the soil and the weather. (I.e. Sod, grass, native trees, shrubs, and ground cover)
- Woodchips – A thick layer of wood chips or other "permanent" mulch (only in non-sloped areas)
- Stone – A thick layer of stone (i.e. gravel drives, stone gardens, and pavers – use geotextile fabric underneath stone in swales and drives) (not for steep slopes)
- Pavement – Roads or driveways.