



BOROUGH OF ECONOMY

2856 CONWAY WALLROSE ROAD

BADEN, PA 15005-2306

Building & Zoning Permit Application Department of Code Enforcement

Location of Proposed Work or Improvement

Site Address: _____ Tax Parcel: _____

City: _____ State: _____ Zip Code: _____

Zoning District: _____ Lot Size: _____

Property Owner(s): _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ Email Address: _____

Principal Contractor: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ Email Address: _____

Design Professional / Architect: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ Email Address: _____

Type of Work or Improvement

Zoning Permit Only (Fence, Shed, Demolition Permit, etc.)

New Building Addition Fire Protection Repair Energy Electrical

Mechanical Plumbing Change of Use Alteration Manufactured Housing

Swimming Pool Deck

Description of the Proposed Work: _____

Estimated Cost of Construction (Reasonable Fair Market Value)

Structural Cost	\$ _____
Installations Not Included in Above Cost	
Electrical	\$ _____
Plumbing	\$ _____
HVAC	\$ _____
Total Project Cost	\$ _____

Description of Building Use

Residential Uses	Non-Residential Uses
Single-Family Dwelling	Specific Use: _____
Two-Family Dwelling	Use Group: _____
Multi-Family Dwelling	Change in Use: Yes No
	If Yes, Indicate Former: _____
	Maximum Occupant Load: _____
	Maximum Live Load: _____

Building Dimensions

Existing Building Area: _____ sq. ft. Number of Stories: _____

Proposed Building Area: _____ sq. ft. High of Structure Above Grade: _____ ft.

Total Building Area: _____ sq. ft. Area of Largest Floor: _____ sq. ft.

Building / Site Characteristics

Number of Residential Dwelling Units: _____ Existing _____ Proposed

Mechanical System - Indicate Type (i.e. Electric, Gas, Oil, etc.): _____

Water Service: Public Private

Sanitary Service: Public Private On-Lot Sanitary Permit #: _____

Does or will your building contain any of the following:

Fireplace(s): Number _____ Type of Fuel _____ BTU's _____ Vent Type _____

Elevator / Escalator / Lift / Moving Walk

Sprinkler System

Pressure Vessel

Refrigeration System

Floodplain Development

Is the site located within an identified Special Flood Hazard Area? Yes No

Will any portion of the Special Flood Hazard Area be Developed? Yes No

Owner and/or agent shall verify that any proposed development activity complies with the requirements of the National Flood Insurance Program, the Pennsylvania Flood Plain Management Act (Act 166-1978), and any flood plain ordinance adopted by the municipality.

Before installing underground utilities, you must secure a road opening permit. All digging requires contacting PA One Call at 811.

If your property abuts a State Road, Please contact PennDOT at (724)774-6610, to obtain a Highway Occupancy Permit.

Applicant Certification

The applicant certifies that all information on this application is correct, and the work will be completed in accordance with the "approved" construction documents and PA Act 45 (Uniform Construction Code) and any additional approved building code requirements or zoning ordinance adopted by the Borough of Economy. The property owner and applicant assumes the responsibility of locating all property lines, setback lines, easements, rights-of way, flood areas, etc. Issuance of a permit and approval of construction documents shall not be construed as authority to violate, cancel or set aside any provisions of the codes or ordinances of the Borough of Economy or any other governing body. The applicant certifies he/she understands all the applicable codes, ordinances and regulations. Application for a permit shall be made by the owner or lessee of the building or structure, or agent of either, or by the registered design professional employed in connection with the proposed work.

I certify that the code enforcement officer or the code enforcement officer's authorized representative shall have the authority to enter areas covered by such permit at any reasonable hour to enforce the provisions of the code(s) applicable to such permit.

I certify that I am aware of the Borough of Economy's inspection requirements and have received a copy of the required inspections. Furthermore, I am aware that all inspections must be completed before a certificate of occupancy will be issued. I may not occupy the structure, for any purpose, prior to the issuance of a certificate. The installation of finishing materials or pouring of concrete slabs prior to the completion of required rough inspections will result in the need to remove any material to gain access to allow the inspection. Neither the jurisdiction nor the building official is liable for expenses entailed in the removal or replacement of any material required to allow inspection.

I certify that I am aware that a copy of the approved plans must remain at the construction site at all times until the project is complete and a certificate of occupancy has been issued. Additionally, I am aware that a copy of the building permit shall be kept on the site of the work until the completion of the project.

Signature of Owner or Authorized Agent

Print Name of Owner or Authorized Agent

Address

Date:

Required Project Documents:

- The following must be submitted to be considered a complete application with three (3) sets each:
- A plot plan must accompany the application indicating location of new construction and measurements to all lots lines.
- A Certificate of Insurance showing proof of General Liability Insurance for work performed by a contractor.
- An Affidavit of Exemption or Proof of Workers Compensation Insurance.
- Construction Documents: non-residential projects must have construction documents prepared, signed, and sealed by an Architect or Engineer. Construction documents shall be submitted electronically only, no paper copies.

FOR MUNICIPAL OFFICE USE ONLY

PERMIT NUMBER: _____ DATE: _____

TOTAL FEE: \$ _____ COLLECTED BY: _____

FEE BREAKDOWN:	PLAN REVIEW:	\$ _____	
	ACCESSIBILITY:	\$ _____	
	BUILDING:	\$ _____	
	PLUMBING:	\$ _____	
	MECHANICAL:	\$ _____	
	ELECTRICAL:	\$ _____	
	FIRE PROTECTION:	\$ _____	
	ENERGY:	\$ _____	
	DCED:	\$ _____	
	ZONING:	\$ _____	
	OTHER:	\$ _____	
	FEE TOTAL:	\$ _____	CHECK # _____

CONDITIONAL USE APPROVAL REQUIRED: () YES () NO

PLANNING COMMISSION MEETING DATE: _____

GOVERNING BODY MEETING DATE: _____

ZONING VARIANCE REQUIRED: () YES () NO

ZONING HEARING BOARD MEETING DATE: _____

CONTRACTOR'S GENERAL LIABILITY INSURANCE ON FILE: () YES () NO

CONTRACTOR'S WORKMAN'S COMPENSATION INSURANCE ON FILE: () YES () NO

IF NO, IS NOTARIZED CERTIFICATE OF EXEMPTION ON FILE: () YES () NO

IS PROPOSED PROJECT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA: () YES () NO

IF YES, WHICH ZONE: _____

PERMIT APPROVAL

APPROVED () DISAPPROVED () _____ DATE: _____
CODE ENFORCEMENT OFFICER

WORKER'S COMPENSATION INFORMATION FORM

THIS FORM REQUIRES A NOTARY SEAL

AFFIDAVIT OF EXEMPTION

The undersigned affirm that he/she is not required to provide worker's compensation insurance under the provisions of Pennsylvania's Worker's Compensation Law for one of the following reasons, as indicated:

_____ The Property owner is performing own work. If the property owner does hire a contractor to perform any work pursuant to the building permit, said contractor must provide proof of Worker's Compensation Insurance to the Borough of Economy. The homeowner assumes any/all liability for the contractor's compliance with these requirements.

_____ The Contractor has no employees. The contractor is prohibited by law from employing any individual to perform work pursuant to this building permit unless the contractor provides proof of insurance to the Borough of Economy.

_____ Religious exemption under the Worker's Compensation Law. All employees of the contractor are exempt from Worker's Compensation Insurance.

(Attach copies of a religious exemption letter for all employees.)

_____ Use this form when applicable to part "C" on the Worker's Compensation Form.

Applicants Signature

Commonwealth of Pennsylvania

County of _____

Municipality of _____

Subscribed sworn to and acknowledged before me by the above _____
this _____ day of _____, 20_____.

Notary

SEAL

Commission Expiration



BOROUGH OF ECONOMY

2856 CONWAY WALLROSE ROAD
BADEN, PA 15005-2306

OCCUPANCY PERMIT APPLICATION

NOTICE: Any permit issued pursuant to the approval of this application may be revoked if the issuance of the permit was based upon incomplete or inaccurate information, or it violates any Economy Borough Ordinance, Pennsylvania Statute, United States Law, or Court Precedent.

I. APPLICANT INFORMATION

Applicant Name: _____ Phone: _____

Applicant Address: _____

Applicant City: _____ State: _____ Zip Code: _____

II. PROPERTY INFORMATION

Property Address: _____ Lot Block: _____

Property City: _____ State: _____ Zip Code: _____ Suite: _____

Development: _____ Lot Number: _____

III. GENERAL INFORMATION

New Occupant: _____ Phone: _____

Is this application for a new structure: _____

Is this application for an existing structure: _____

Is this application for a change in use: _____

If this application is for a new structure or a change in use, is there a new monitored alarm system: _____

If this application is to occupy an existing structure, have there been any structural changes: _____

If this application is for a new structure has an automatic fire sprinkler system been installed: _____

Type of use proposed: _____

The applicant certifies that the above information is complete and true and correct to the best of the applicant's knowledge and belief.

The applicant agrees to comply with the provisions of Economy Borough Ordinances, Codes and Regulations, and all other applicable laws and regulations of Beaver County, Commonwealth of Pennsylvania and the United States, whether or not specified in this application.

THE APPLICANT AGREES THAT IF A PERMIT IS ISSUED, THE PERMIT MAY BE REVOKED BY ADMINISTRATIVE ACTION OF Economy Borough IF COMPLIANCE WITH THE FOREGOING PARAGRAPHS AND REFERENCES ARE NOT ABSOLUTE.

Signature of Applicant: _____ Date of Application: _____

Additional Comments: _____

ATTENTION

Please submit this completed application along with three (3) copies of the construction plans and a copy of the insurance certificate of any outside contractor. Remember to fill in your tax parcel number and your Pa One Call 811 reference #.

Incomplete applications will not be accepted!

If you have any questions, please call the Code Office at (724) 869-4779 ext. 5

SWIMMING POOL WATER DISCHARGE GUIDELINES

Water from swimming pools and hot tubs often contains high levels of chlorine. Discharging chlorinated pool or spa water into streams, (irrigation canals or ponds, etc.) is harmful to fish and other aquatic life. The discharge of any sewage or industrial waste, including swimming pool water, to any waters of the commonwealth without a permit is a violation of the Clean Streams Law, the Act of June 22, 1937, P.L. 1987, as amended.

The Department of Environmental Protection (DEP) does not require a permit for discharges from single residence pools, provided the guidelines outlined below are followed. Local municipalities should be contacted concerning potential local ordinances.

These guidelines cannot be construed to waive or impair any rights of DEP to prosecute a property (pool) owner and/or pool company for any stream damage that occurs as a result of a discharge. Penalties would be assessed under the provisions of the Clean Streams Law.

Pool Guidelines:

A. Disposal of Water to Sanitary Sewer

1. If the municipal authority grants permission, pool backwash water, pool cleaning wastewater and standing water may be discharged to the sanitary sewer system. Neutralize water before discharge by following these steps:
 - a) Prior to disposal of pool water to a sanitary sewer, shut off the chlorination system if there is one, or stop adding chlorine.
 - b) Hold the water in the pool or hot tub for at least two weeks to allow the chlorine to dissipate.
 - c) Measure the chlorine level in the pool or hot tub prior to discharging the water. The water should not show any detectable levels of chlorine. A longer holding period may be necessary if chlorine levels continue to remain at detectable levels at the end of two weeks. Chlorine measurements can be made with a chlorine test kit (colorimetric).
2. Plan discharge for low-use times of sewer flow such as afternoon or late night hours.
3. Use small volume pump and control discharge so it does not spill out. (< 800 gallons per minute)
4. Discharge with hose into access "cap" of the private property sewer cleanout. DO NOT use public manholes or cleanouts.
5. Care should be taken to make sure the discharge goes into a sanitary sewer and not a storm sewer, which would discharge to a stream. If sanitary sewers are not in the immediate area, the wastewater should be hauled off-site for disposal at an approved treatment facility.
6. Water from backwashing pool filters should not be discharged to a stream, ditch or storm sewer. Backwash from pool filters must be discharged to the sanitary sewer, on-site septic tank and drainfield system (if properly designed and adequately sized), or a seepage pit.

B. Discharge of Water

1. If the discharge to sanitary sewer is not feasible, then the following guidelines must be followed before discharging the water:
 - a) Prior to disposing or using the water for irrigation, shut off the chlorination system if there is one, or stop adding chlorine.
 - b) Hold the water in the pool or hot tub for two weeks to reduce the chlorine level.
 - c) Discharge or use the water for irrigation in an area where the water will not flow into a stream or storm sewer.
 - d) Discharge or use the water for irrigating the property and ensure that it does not flow off the property.

- e) Discharge or use the water for irrigation in a manner that will prevent nuisance conditions (such as creation of odors, and fly and mosquito breeding conditions). Nuisance conditions occur when water is held in the pool for a prolonged period.
2. The discharge should be at a rate which prevents erosion and optimizes filtration. In no event should pool water be directly discharged to waters of the commonwealth.
- C. Standing water or accumulated rain and/or pool water from the previous season should be pumped from the top so as not to disturb settled solids. Solids on the pool bottom should not be discharged. After the water has been pumped, solids should be cleaned out manually. The discharge should not raise stream temperatures by more than 2 degrees Fahrenheit in a one-hour period or a total of 5 degrees Fahrenheit. The pH should be between six and nine standard units and total chlorine residual should be 0.0 mg/l.
 - D. Cleaning wastewaters that contain muriatic acid or chlorine that is used in cleaning pool surfaces should be treated prior to discharge. Muriatic acid wastewater should be neutralized to a pH between six and nine standard units. Chlorine rinses should stand for a period of 10 days to allow chlorine degradation prior to discharge. Total chlorine residual of the wastewater discharge should be less than 0.5 mg/l. Temperature should be monitored as described above (standing water). Chlorine rinse water pH should be between six and nine standard units.

Questions concerning pool guidelines should be directed to DEP's regional offices:

Southeast Regional Office
2 East Main St.
Norristown, PA 19401-4915
 Main Telephone: 484-250-5900
 24-Hour Emergency: 484-250-5900

Counties: Bucks, Chester, Delaware, Montgomery and Philadelphia

Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18701-1915
 Main Telephone: 570-826-2511
 24-Hour Emergency: 570-826-2511

Counties: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne and Wyoming

South-central Regional Office
909 Elmerton Ave.
Harrisburg, PA 17110-8200
 Main Telephone: 717-705-4700
 24-Hour Emergency: 877-333-1904

Counties: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York

North-central Regional Office
208 W. Third St., Suite 101
Williamsport, PA 17701-6448
 Main Telephone: 570-327-3636
 24-Hour Emergency: 570-327-3636

Counties: Bradford, Cameron, Clearfield, Centre, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union

Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222-4745
 Main Telephone: 412-442-4000
 24-Hour Emergency: 412-442-4000

Counties: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland

Northwest Regional Office
230 Chestnut St.
Meadville, PA 16335-3481
 Main Telephone: 814-332-6945
 24-Hour Emergency: 800-373-3398

Counties: Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango and Warren

For more information, visit www.dep.state.pa.us, keyword: Wastewater.

Don't Let Storm Water Run Off With Your Time and Money!

What the Construction Industry Should Know About Storm Water In Our Community

The construction industry plays an important role in improving our community's quality of life by not only providing new development, but also protecting our streams and rivers through smart business practices that prevent pollution from leaving construction sites.

Storm water runoff leaving construction sites can carry pollutants such as dirt, construction debris, oil, and paint off-site and into storm drains. In our community, storm drains carry storm water runoff directly to local creeks, streams, and rivers with no treatment. Developers, contractors, and homebuilders can help to prevent storm water pollution by taking the following steps:

1. Comply with storm water permit requirements.
2. Practice erosion control and pollution prevention practices to keep construction sites "clean."
3. Conduct advanced planning and training to ensure proper implementation on-site.

The remainder of this fact sheet addresses these three steps.

Storm Water Permit Requirements for Construction Activity

Planning and permitting requirements exist for construction activities. These requirements are intended to minimize storm water pollutants leaving construction sites.

- Pennsylvania's Erosion and Sediment Pollution Control Program (25 Pa. Code, Chapter 102) requires Erosion and Sediment Control Plans for all earth disturbing activities.
- The National Pollutant Discharge Elimination System (NPDES) Permit Program (25 Pa. Code, Chapter 92) requires that construction activities disturbing greater than one acre submit a Notice of Intent for coverage under a general NPDES permit.

Knowing your requirements before starting a project and following them during construction can save you time and money, and demonstrate that you are a partner in improving our community's quality of life. For more information about these programs, contact your local county conservation district office or the Department of Environmental Protection.

What is Storm Water?

Storm water is water from precipitation that flows across the ground and pavement when it rains or when snow and ice melt. The water seeps into the ground or drains into what are commonly called storm sewers. These are the drains you see at street corners or at low points on the sides of streets. Collectively, the draining water is called **storm water runoff**.



Erosion Control Practices:

- Perimeter controls (e.g. silt fence)
- Sediment traps
- Immediate revegetation
- Phased, minimized grading
- Construction entrance
- Protection of streams and drainage ways
- Inlet protection



An Ounce of Prevention

Rain that falls onto construction sites is likely to carry away soil particles and other toxic chemicals present on construction sites (oil, grease, hazardous wastes, fuel). Storm water, if not properly managed, carries these pollutants to streams, rivers, and lakes. Erosion and sediment control practices can serve as a first line of defense,

Pollution Prevention Practices:

- Designated fueling and vehicle maintenance area away from streams.
- Remove trash and litter.
- Clean up leaks immediately.
- Never wash down dirty pavement.
- Place dumpsters under cover.
- Dispose of all wastes properly.

minimizing clean up and maintenance costs, and the impacts to water resources caused by soil erosion during active construction. Erosion controls can reduce the volume of soil going into a sediment control device, such as a sediment trap, therefore, “clean out” frequencies are lower and maintenance costs are less. When possible, divert water around the construction site using berms or drainage ditches.

In addition, use pollution prevention and “good housekeeping measures” to reduce the pollution leaving construction sites as well. This can be as simple as minimizing the pollution source’s contact with rainwater by covering it, maintaining a “clean site” by reducing trash and waste, and keeping vehicles well maintained.

The Best Laid Plans

Plans such as erosion and sediment control plans and storm water pollution prevention plans are important tools for outlining the erosion control and pollution prevention practices that you will use to manage storm water runoff prior to breaking ground. Developing good plans allows for proper budgeting and planning for the life of the project. Proper installation and maintenance of erosion and storm water controls is essential to a plan that works. Training for on-site staff helps to ensure the proper installation and maintenance of erosion controls and pollution prevention practices. Inspect controls and management techniques regularly to ensure they are working, especially after storm events. If polluted storm water is leaving the site, you may need to repair or add additional storm water controls.



The Bigger Storm Water Picture

Your community is preventing storm water pollution through a comprehensive storm water management program. This program addresses storm water pollution from construction, but it also deals with new development, illegal dumping to the storm sewer system, and municipal operations. It will also continue to educate the community and get everyone involved in making sure the only thing that storm water contributes to our streams is . . . water! Contact your community or the Pennsylvania Department of Environmental Protection for more information about storm water management.

For more information:

Pennsylvania Association of Conservation District’s:
<http://www.pacd.org/default.html>

Pennsylvania Handbook of Best Management Practices for Developing Areas:
http://www.pacd.org/products/bmp/bmp_handbook.html

Storm Water Manager’s Resource Center:
<http://www.stormwatercenter.net>

Pennsylvania Department of Environmental Protection:
<http://www.dep.state.pa.us>



Stormwater and the Construction Industry

Protect Natural Features



Bad



Good

- Minimize clearing.
- Minimize the amount of exposed soil.
- Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
- Protect streams, stream buffers, wild woodlands, wetlands, or other sensitive areas from any disturbance or construction activity by fencing or otherwise clearly marking these areas.

Construction Phasing



Bad



Good

- Sequence construction activities so that the soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Install key sediment control practices before site grading begins.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the land has been graded to its final contour.

Vegetative Buffers



Bad



Good

- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by mowing or replanting periodically to ensure their effectiveness.

Silt Fencing



Bad



Good

- Inspect and maintain silt fences after each rainstorm.
- Make sure the bottom of the silt fence is buried in the ground.
- Securely attach the material to the stakes.
- Don't place silt fences in the middle of a waterway or use them as a check dam.
- Make sure stormwater is not flowing around the silt fence.

Site Stabilization



Bad



Good

- Vegetate, mulch, or otherwise stabilize all exposed areas as soon as land alterations have been completed.

Maintain your BMPs!

www.epa.gov/npdes/menuofbmps

Construction Entrances



Bad



Good

- Remove mud and dirt from the tires of construction vehicles before they enter a paved roadway.
- Properly size entrance BMPs for all anticipated vehicles.
- Make sure that the construction entrance does not become buried in soil.

Slopes



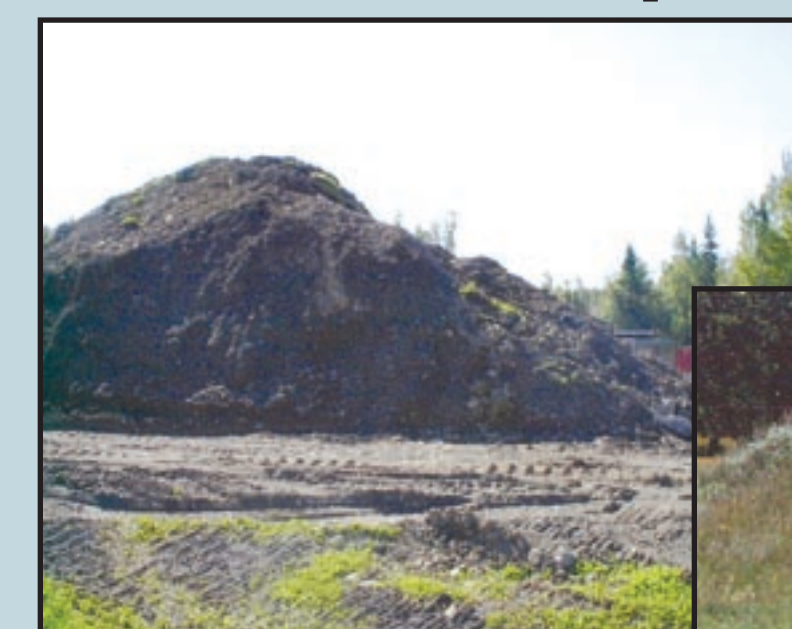
Bad



Good

- Rough grade or terrace slopes.
- Break up long slopes with sediment barriers, or under drain, or divert stormwater away from slopes.

Dirt Stockpiles



Bad



Good

- Cover or seed all dirt stockpiles.

Storm Drain Inlet Protection



Bad



Good

- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the rock size is appropriate (usually 1 to 2 inches in diameter).
- If you use inlet filters, maintain them regularly.

Stormwater and the Construction Industry

Planning and Implementing Erosion and Sediment Control Practices

The construction industry is a critical participant in the nation's efforts to protect streams, rivers, lakes, wetlands, and oceans. Through the use of best management practices (BMPs), construction site operators are the key defense against erosion and sedimentation.

As stormwater flows over a construction site, it picks up pollutants like sediment, debris, and chemicals. High volumes of stormwater can also cause stream bank erosion, and destroy downstream aquatic habitat. Preventing soil erosion and sedimentation is an important responsibility at all construction sites.

In addition to the environmental impact, uncontrolled erosion can have a significant financial impact on a construction project. It costs money and time to repair gullies, replace vegetation, clean sediment-clogged storm drains, replace poorly installed BMPs, and mitigate damage to other people's property or to natural resources.

Best Management Practice (BMP)

A BMP is a method used to prevent or control stormwater runoff and the discharge of pollutants, including sediment, into local waterbodies. Silt fences, inlet protection, and site-stabilization techniques are typical BMPs on a construction site.

Operator

An operator is someone who has control over and the ability to modify construction plans and specifications (e.g. owner, general contractor)

or

Someone who has control over the day-to-day operations at a site (e.g., owner, general contractor) that are necessary to ensure compliance with the permit requirements. It is the responsibility of a construction site owner or operator to contain stormwater runoff and prevent erosion during all stages of a project.

There may be more than one person at a site who meets these definitions and must apply for permit coverage. (States may have different definitions of the term "operator.")

So what's being done about polluted runoff?

The Clean Water Act includes the National Pollutant Discharge Elimination System (NPDES) permitting program. As of January 2003, 44 states and territories are authorized to issue NPDES stormwater permits. If your state isn't authorized to operate the NPDES stormwater permit program, EPA issues the permits. Permits vary from state to state, so contact your state or EPA for specific information. Your permitting authority has specific information on your state's NPDES stormwater permit program. In general, construction permits require construction operators to do all of the following:

- Develop and implement a stormwater pollution prevention plan
- Submit a permit application or notice of intent (NOI)
- Comply with the permit, including maintaining BMPs and inspecting the site

Under the NPDES program, construction activities that disturb 1 or more acres are required to obtain stormwater permit coverage. States have different names for the plans that construction operators must develop, such as

- Stormwater pollution prevention plan
- Erosion and sediment control plan
- Erosion control and stormwater management plan
- Stormwater management plan
- Water pollution control plan
- Pollution prevention plan

This document uses the term "*Plan*."

I think I need a permit... Where do I start?

All land-disturbing activities, including clearing, grading, and excavation, that disturb **1 or more acres** are required to be covered under a state or EPA-issued NPDES construction stormwater permit **prior to land disturbance**. Permit requirements vary by state. Begin by researching the specific requirements in your state. You might already be subject to local erosion and sediment control requirements, but that doesn't release you from the requirements of the NPDES program at the state or EPA level. Although you must comply with both sets of requirements, in most cases they have been designed to be complementary. Contact your permitting authority to find out exactly what you need to do. A good place to start your search is the Construction Industry Compliance Assistance web site at <http://www.envcap.org/cica>.

The NPDES permit requirements include small construction activities that are part of a larger common plan of development or sale, such as a single lot within a larger subdivision. For developments with multiple operators, all operators must have permit coverage for their individual parts of the larger development, no matter how large or small each operation happens to be. When there are multiple operators at one site, they're encouraged to develop and share one comprehensive Plan and obtain permit coverage as co-permittees.

The **owner or operator** of the construction site is responsible for complying with the requirements of the permit. Responsibilities include developing a Plan, obtaining permit coverage, implementing BMPs, and stabilizing the site at the end of the construction activity.

Determine your eligibility

All construction activity that disturbs 1 or more acres of land, as well as activity that disturbs less than 1 acre but is part of a larger common plan of development, must obtain permit coverage.

Read and understand your stormwater permit requirements

Get a copy of the permit for construction activities and a permit application (or notice of intent form) from your state or EPA permitting authority.

Develop a Plan

Most states do not require you to submit your Plan. However, you do need to keep the Plan on site. If that's impractical, you may post a notice that tells where the Plan is kept so it can be accessed by the permitting authority and other interested parties.

You'll need to post a copy of your completed application on site. Put it in a place where the public can see it so they'll know your site is covered by an NPDES permit!

Apply for permit coverage

Once you understand your permit requirements and have developed a Plan, you can submit a stormwater permit application (or notice of intent) to your permitting authority. This must be done before beginning any land disturbance on the site. Some states require a few days of lead time, so check with your permitting authority. Once you've submitted the application, you must satisfy the conditions of the permit.

Implement the Plan

Be prepared to implement the BMPs in your Plan before construction begins. Ensure that BMPs are properly maintained, and upgrade and repair them as necessary.

Developing and Implementing a Plan

You must have a Plan that includes erosion and sediment control and pollution prevention BMPs. These Plans require

- Advance planning and training to ensure proper implementation of the BMPs
- Erosion and sediment control BMPs in place until the area is permanently stabilized
- Pollution prevention BMPs to keep the construction site "clean"
- Regular inspection of the construction site to ensure proper installation and maintenance of BMPs

Fortunately, the practices and measures that must be included in your Plan are already part of the standard operating procedures at many construction sites.

Six steps are associated with developing and implementing a stormwater Plan. There's a wealth of information available on developing pollution prevention plans. Please contact your permitting authority for help in finding additional guidance materials, or visit www.epa.gov/npdes/stormwater. A sample construction plan is available at www.epa.gov/npdes/pubs/sample_swppp.pdf.

1. Site Evaluation and Design Development

- Collect site information
- Develop site plan design
- Prepare pollution prevention site map

The first step in preparing a Plan is to define the characteristics of the site and the type of construction that will occur. This involves collecting site information, identifying natural features that should be protected, developing a site plan design, describing the nature of the construction activity, and preparing a pollution prevention site map.

2. Assessment

- Measure the site area
- Determine the drainage areas
- Calculate the runoff coefficient

The next step is assessing the impact the project will have on stormwater runoff. Determine the drainage areas and estimate the runoff amounts and velocities. For more information on calculating the runoff coefficient, go to www.epa.gov/npdes/pubs/chap02_conguide.pdf, page 11.

3. Control Selection and Plan Design

- Review and incorporate state or local requirements
- Select erosion and sediment controls
- Select other controls
- Select stormwater management controls
- Indicate the location of controls on the site map
- Prepare an inspection and maintenance plan
- Coordinate controls with construction activity
- Prepare sequence of major activities

In the third step you'll actually document your procedures to prevent and control polluted stormwater runoff. You must delineate areas that will not be disturbed, including critical natural areas like streamside areas, floodplains, and trees. You must also identify the measures (or BMPs) you'll use to protect these areas.

Soil erosion control tips...

- Design the site to infiltrate stormwater into the ground and to keep it out of storm drains. Eliminate or minimize the use of stormwater collection and conveyance systems while maximizing the use of stormwater infiltration and bioretention techniques.
- Minimize the amount of exposed soil on site.
 - To the extent possible, plan the project in stages to minimize the amount of area that is bare and subject to erosion. The less soil exposed, the easier and cheaper it will be to control erosion.
 - Vegetate disturbed areas with permanent or temporary seeding immediately upon reaching final grade.
 - Vegetate or cover stockpiles that will not be used immediately.
- Reduce the velocity of stormwater both onto and away from the project area.
 - Interceptors, diversions, vegetated buffers, and check dams are a few of the BMPs that can be used to slow down stormwater as it travels across and away from the project site.
 - Diversion measures can also be used to direct flow away from exposed areas toward stable portions of the site.
 - Silt fences and other types of perimeter filters should never be used to reduce the velocity of runoff.
- Protect defined channels immediately with measures adequate to handle the storm flows expected.
 - Sod, geotextile, natural fiber, riprap, or other stabilization measures should be used to allow the channels to carry water without causing erosion. Use softer measures like geotextile or vegetation where possible to prevent downstream impacts.
- Keep sediment on site.
 - Place aggregate or stone at construction site vehicle exits to accommodate at least two tire revolutions of large construction vehicles. Much of the dirt on the tires will fall off before the vehicle gets to the street.
 - Regular street sweeping at the construction entrance will prevent dirt from entering storm drains. Do not hose paved areas.
 - Sediment traps and basins are temporary structures and should be used in conjunction with other measures to reduce the amount of erosion.
- Maintaining all BMPs is critical to ensure their effectiveness during the life of the project.
 - Regularly remove collected sediment from silt fences, berms, traps, and other BMPs.
 - Ensure that geotextiles and mulch remain in place until vegetation is well established.
 - Maintain fences that protect sensitive areas, silt fences, diversion structures, and other BMPs.

Other BMPs and Activities to Control Polluted Runoff

You'll need to select other controls to address potential pollutant sources on your site. Construction materials, debris, trash, fuel, paint, and stockpiles become pollution sources when it rains. Basic pollution prevention practices can significantly reduce the amount of pollution leaving construction sites. The following are some simple practices that should be included in the Plan and implemented on site:

- Keep potential sources of pollution out of the rain as practicable (e.g., inside a building, covered with plastic or tarps, or sealed tightly in a leak-proof container).
- Clearly identify a protected, lined area for concrete truck washouts. This area should be located away from streams, storm drain inlets, or ditches and should be cleaned out periodically.
- Park, refuel, and maintain vehicles and equipment in one area of the site to minimize the area exposed to possible spills and fuel storage. This area should be well away from streams, storm drain inlets, or ditches. Keep spill kits close by and clean up any spills or leaks immediately, including spills on pavement or earthen surfaces.
- Practice good housekeeping. Keep the construction site free of litter, construction debris, and leaking containers. Keep all waste in one area to minimize cleaning.
- Never hose down paved surfaces to clean dust, debris, or trash. This water could wash directly into storm drains or streams. Sweep up materials and dispose of them in the trash. Never bury trash or debris!
- Dispose of hazardous materials properly.

4. Certification and Notification

- Certify the Plan
- Submit permit application or notice of intent

Once the Plan has been developed, an authorized representative must sign it. Now is the time to submit the permit application or notice of intent. Your permit might require that the Plan be kept on site, so be sure to keep it available for the staff implementing the Plan.

Erosion and sedimentation control practices are only as good as their installation and maintenance.

5. Implementing and Maintaining a Plan

- Implement controls
- Inspect and maintain controls
- Update/change the Plan
- Report releases of hazardous materials

A Plan describes the practices and activities you'll use to prevent stormwater contamination and meet the NPDES permit requirements. Make sure that the Plan is implemented and that the Plan is updated as necessary to reflect changes on the site.

Erosion and sedimentation control practices are only as good as their installation and maintenance. Train the contractors that will install the BMPs and inspect immediately to ensure that the BMPs have been installed correctly.

Regularly inspect the BMPs (especially before and after rain events) and perform any necessary repairs or maintenance immediately. Many BMPs are designed to handle a limited amount of sediment. If not maintained, they'll become ineffective and a source of sediment pollution.

It's also important to keep records of BMP installation, implementation, and maintenance. Keep track of major grading activities that occur on the site, when construction activities cease (temporarily or permanently), and when a site is temporarily or permanently stabilized.

If construction plans change at any time, or if more appropriate BMPs are chosen for the site, update the Plan accordingly.

6. Completing the Project: Final Stabilization and Termination of the Permit

- Final stabilization
- Notice of Termination
- Record retention

Many states and EPA require a Notice of Termination (NOT) or other notification signifying that the construction activity is completed. An NOT is required when

- Final stabilization has been achieved on all portions of the site for which the permittee is responsible.

- Another operator has assumed control over all areas of the site that have not been finally stabilized. That operator would need to submit a new permit application to the permitting authority.

- For residential construction only, temporary stabilization of a lot has been completed prior to transference of ownership to the homeowner, with the homeowner being made aware of the need to perform final stabilization.

Permittees must keep a copy of their permit application and their Plan for at least 3 years following final stabilization. This period may be longer depending on state and local requirements.

Preconstruction Checklist

- A site description, including
 - Nature of the activity
 - Intended sequence of major construction activities
 - Total area of the site
 - Existing soil type and rainfall runoff data
- A site map with:
 - Drainage patterns
 - Approximate slopes after major grading
 - Area of soil disturbance
 - Outline of areas which will not be disturbed
 - Location of major structural and nonstructural soil erosion controls
 - Areas where stabilization practices are expected to occur
 - Surface waters
 - Stormwater discharge locations
- Name of the receiving water(s)
- A description of controls:
 - Erosion and sediment controls, including
 - Stabilization practices for all areas disturbed by construction
 - Structural practices for all drainage/discharge locations
 - Stormwater management controls, including
 - Measures used to control pollutants occurring in stormwater discharges after construction activities are complete
 - Velocity dissipation devices to provide nonerosive flow conditions from the discharge point along the length of any outfall channel
 - Other controls, including
 - Waste disposal practices that prevent discharge of solid materials
 - Measures to minimize offset tracking of sediments by construction vehicles
 - Measures to ensure compliance with state or local waste disposal, sanitary sewer, or septic system regulations
- Description of the timing during the construction when measures will be implemented
- State or local requirements incorporated into the Plan
- Inspection and maintenance procedures for control measures identified in the Plan
- Contractor certification and Plan certification

Implementation Checklist

- Maintain records of construction activities, including
 - Dates when major grading activities occur
 - Dates when construction activities temporarily cease on the site or a portion of the site
 - Dates when construction activities permanently cease on the site or a portion of the site
 - Dates when stabilization measures are completed on the site
- Prepare inspection reports summarizing
 - Name of person conducting BMP inspections
 - Qualifications of person conducting BMP inspections
 - BMPs/areas inspected
 - Observed conditions
 - Necessary changes to the Plan
- Report releases of reportable quantities of oil or hazardous materials
 - Notify the National Response Center at 800-424-8802 immediately
 - Report releases to your permitting authority immediately, or as specified in your permit. You must also provide a written report within 14 days.
- Modify the Plan to include
 - The date of release
 - Circumstances leading to the release
 - Steps taken to prevent reoccurrence of the release
- Modify Plan as necessary
 - Incorporate requests of the permitting authority to bring the Plan into compliance
 - Address changes in design, construction operation, or maintenance that affect the potential for discharge of pollutants

An ounce of prevention is worth a pound of cure! It's far more efficient and cost-effective to prevent pollution than it is to try to correct problems later. Installing and maintaining simple BMPs and pollution prevention techniques on site can greatly reduce the potential for stormwater pollution and can also save you money!

Visit www.epa.gov/npdes/stormwater for more information.