

GET THE DIRT OUT – CHESAPEAKE FIELD GUIDE FOR PENNSYLVANIA

This Field Guide is designed to help you develop a record of a stormwater problem at a construction site that you can report to the County Conservation District with jurisdiction over the site. Your report is going to consist of the Site Report Card plus any photos or videos you take. Following the Instructions in this Guide will help you generate the best possible report.

GATHERING INFORMATION

In order to make a report, you are first going to have to gather information about the site. There is one important rule you must always follow:

DO NOT TRESPASS ON THE CONSTRUCTION SITE ITSELF

You should gather your information from public property (like streets and sidewalks). If you cannot see something asked about on the Site Report Card from the sidewalk or street, leave that portion of the card blank. The Conservation District will be able to go onto the site and investigate, so we will leave that job to the District.

How Do I Know A Site May Have a Stormwater Problem?

The stormwater regulations are designed to prevent sediment and other pollutants from leaving a construction site. So the tip-off to a stormwater problem is when you see brown, muddy water on the street or in a ditch, stream, or lake that is not on a construction site (or you see evidence—like dried dirt in the street—that such a problem has occurred). So what you want to do is LOOK FOR MUDDY WATER AND TRACE IT BACK TO A CONSTRUCTION SITE.

Once I Find A Site, What Should I Do To Gather Information?

Our goal is to create a report that will cause the Conservation District to investigate and use its enforcement powers to stop the stormwater problem. The Site Report Card asks a series of questions about the site to generate information we think the Conservation District will find helpful. These include:

1. *Site Identifying Information.* At the top of the Report Card, this information helps to tell the Conservation District where the problem is. Be as complete as possible.
NOTE: The Report Card asks about the weather. You are more likely to observe stormwater problems during or right after a rain event.
2. *Description of Stormwater Appearance.* This section helps you indicate the offsite problems and locations of the stormwater. This will help the Conservation District understand the nature and extent of the problem.
3. *Description of Various BMPs.* This section helps you pinpoint problem BMPs that you observe. Note that the questions require only a simple Yes or No response—our goal is

simply to alert the Conservation District to a BMP problem that they can investigate more fully. The Report Card has been set up so that “Yes” answers mean something is wrong or needs attention.

To help you in assessing the BMPs, we have included photos of “Good” and “Bad” examples of six of the BMPs covered by the Report Card. These pictures are merely a guide, and do not show all the different ways that a BMP can be “bad.”

At the end of each section, the Report Card asks you to express your opinion about the BMP at the site by assigning a “grade” to it. You are asked whether you think that the particular type of BMP at the site is “Good” or “Poor.”

4. *Stream Buffers.* Stormwater problems can be worsened when the vegetative buffer around a stream or lake are damaged by construction activity. Number 8 on the Report Card asks you to assess this situation IF YOU CAN. The focus should be on impacts to the buffers being caused by this construction project itself.
5. *Additional Notes.* There are some blank lines for additional notes that you may want to make about your observations. DO NOT FEEL CONFINED BY THE LIMITED SPACE. If you want to make additional observations, simply attach an additional sheet and indicate that in the space on the Report Card.

A NOTE ON PHOTOS AND VIDEOS

They say that a picture is worth a thousand words, and that is certainly true when it comes to stormwater problems. We encourage you to take pictures and videos of what you observe and to include those with the Site Report Card when reporting to the Conservation District. A simple Photo Log is attached to the Site Report Card on which you can provide information about your photos. It is VERY IMPORTANT that you provide information about where you took a particular photo or video from, so that someone can later go to the same spot. Therefore, keep track of where you take each photo and try to record it on the Photo Log.

MAKING YOUR REPORT

There are three entities that you should report to:

1. The County Conservation District. See the Contact List in this Field Guide. Note: The Contact List also includes phone numbers. If you observe a bad problem, consider calling the District right away even while you are observing and preparing your Report Card.
2. The DEP.
3. The Lower Susquehanna Riverkeeper.

Send a copy of your Site Report Card, with any photos and videos, to each of them and KEEP A COPY FOR YOURSELF.

SILT FENCES

A silt fence is a temporary sediment barrier consisting of filter fabric buried at the bottom, stretched, and supported by posts, or straw bales staked into the ground. It is designed to contain sediment within the construction site. The bottom four inches of fabric must be buried beneath the soil surface to prevent sediment from going under the fence. Because silt fences can cause temporary ponding, sufficient storage area and overflow outlets should be provided.

GOOD



- Fence is stretched taut and not sagging.
- It appears to be properly installed with stakes. Wall supports can also be used together with stakes (hay bales etc).
- Stakes are not more than 6 feet apart.
- Sediment is contained within the construction site.

POOR



- Fence is sagging and NOT taut.
- Water is passing through the barrier.
- Sediment is passing through the barrier with the water.
- Some stakes are missing.

CONSTRUCTION ENTRANCES AND EXITS

Whenever traffic will be leaving a construction site and moving directly onto a public road or other paved area, there must be a stone construction entrance lined with filter fabric to reduce the amount of mud being transported off-site. NPDES permits require that appropriate measures be put into place at the entrance and exit of a construction site to prevent sediments, such as mud and dirt, from overflowing onto public roads by construction vehicles. Entrances and exits should be constructed on level ground only.

GOOD



- Excellent stone coverage
- No mud tracking onto the roadway
- Entrance dimensions should be in accordance with the regulations for type of site
- Should be flared at the road to provide a turning radius
- Stone pad underlain with filter cloth (may not be required for residential lot)
- Stones should be at least the size of a person's fist

POOR



- Very poor stone coverage
- Significant mud tracking onto the roadway (see red arrow)

STORM DRAIN PROTECTION/CURB INLET FILTER

A curb inlet filter is for temporarily enclosing the curb inlet of a storm drainage system. Its purpose is to prevent sediment, debris, and other pollutants from construction sites from entering a storm water system. Its filtering action lets water freely flow through the fibrous material while stopping sediment and debris.

GOOD



GOOD



- Good placement of inlet and rock
- Inlet is properly maintained
- Excellent use of spacers

POOR



POOR



- Poor inlet protection
- Inlet is clogged with sediment and dirt
- Sediment can freely flow into the stormwater inlet

SOIL STABILIZATION AND COVER

This BMP involves the application of plant material such as hay and straw to the soil surface. This reduces erosion by shielding the soil from the force of raindrop impact and reducing the velocity of runoff flowing over the soil. Mulch can also aid in seed growth by conserving moisture and shielding the young plants from extremes of heat, cold, or dry conditions.

GOOD



GOOD



- Good straw and straw mulch coverage
 - Minimal exposed soil

POOR



POOR



- Completely inadequate coverage
 - Exposed soil

CHECK DAMS

A rock check dam is a small barrier constructed of rock, gravel bags, sandbags, fiber rolls, or reusable products, placed across a constructed swale or drainage ditch. Check dams reduce the effective slope of the channel, thereby reducing the velocity of flowing water, allowing sediment to settle and reducing erosion.

GOOD



- Excellent spacing and placement
- Large rocks break up long slopes to divert stormwater

POOR



- Poor application of stone
- Water easily migrates under the stone and carries sediment into the stream

▪ SEDIMENT TRAPS

Sediment traps are basins that allow for collection of stormwater runoff so sediment can “settle out.” High amounts of standing water are permissible because a properly implemented sediment trap will keep the standing water isolated. Nonconforming sediment traps may be located near flat roadways or vast stretches of land that can promote the collection of extremely large amounts of water. Sediment traps that are too shallow, or are not accompanied by additional drainage measures like rock or granite beds, can fail easily.

GOOD



- Standing water collected and isolated
- Sediment trap accompanied by additional drainage measures (rock bed and nearby vegetation)
- No flat earth; sediment trap located at the bottom of a hill

POOR



- Flat construction area easily allows spread of standing water
- Inadequate size
- Little to no nearby vegetation or rock beds
- Stormwater is leaving the trap
- Uncompacted earth surrounding the sediment trap