

Chapter 8 Equipment Fluids and Solid Waste

Helpful Hints:

For more information, refer to the product's Safety Data Sheets, or SDS.

Contact the NCDENR / DWR Regional Office for spill reporting rules information.

**NCDENR / DWR
Regional Offices:**
Asheville
828-296-4500

Fayetteville
910-433-3300

Mooresville
704-663-1699

Raleigh
919-791-4200

Washington
252-946-6481

Wilmington
910-796-7215

Winston-Salem
336-771-5000

**N.C. Division of
Emergency
Management:**
24-hour HotLine to
report environmental
emergencies
1-800-858-0368

**National
Response Center**
1-800-424-8802

Careful management of fluids and solid waste during forestry operations can protect water quality. Some ways to achieve water quality protection include:

- Maintain equipment to prevent or control fluid leaks.
- Store fluids in a way that contains any leakage or spill.
- Collect used fluid and waste to dispose of them properly according to applicable rules or laws.

Water Quality Link

Solid waste, oils, and other fluids can be potential pollution risks to water quality if not managed and controlled. This includes surface water and groundwater. The main points to remember are:

1. Control fluids to prevent them from entering the ground and water.

This includes maintaining equipment, preparing for spills, and properly disposing used materials

2. Collect and dispose of trash and other wastes.

This keeps waste from being washed into the water if left on the job site

A Note on Oils, Fuels, and Fluids:

This chapter focuses on BMPs and those rules only related to water quality. There are other rules about oils, fuels and fluids that you should be aware of. Those rules address product labeling, storage capacity and safe handling.

Rules for Notification of a Petroleum Spill*

Regardless of the amount of a spill, take immediate action to control and contain the spilled fluid.

Notify NCDENR / DWR within 24 hours of discharge or spill if:

- Amount is 25 gallons or more, *or*
- Spill causes a sheen on nearby surface water, *or*
- Spill occurs within 100 feet of any surface water.

No notification is needed, but cleanup must still occur if:

- Amount is less than 25 gallons, *and*
- No sheen is produced on nearby surface water, *and*
- The spill is located more than 100 feet from surface water.

Notify NCDENR / DWR immediately if:

- Amount is less than 25 gallons, *and*
- You cannot effectively clean it up within 24-hours of spill, *or*
- Spill causes a sheen on surface water.

**Petroleum spill notification rules are taken from N.C.G.S. Ch. 143-215.85(b)*

Watch Out!

Keep the fluid from flowing into lakes, streams, or other waterbodies.

Helpful Hints:

To avoid the potential for large spills or leaks, only bring as much fuel, oil, and other fluids that you need for that day's work onto the job site.

Working over a tarp on the ground while servicing equipment may help keep fluid from soaking into the soil.



Refer to FPG .0205

BMPs for a Fluid Spill

Protect yourself and others.

- Wear protective clothing and equipment.
- Avoid contact with any vapors or fumes.

Control the spill - - stop the leak.

- Keep fluid from spreading.

Contain the fluid.

- Create a temporary berm or dike around the spill.
- Use material such as bark, chips, sawdust, soil, limbs, or logs to soak up and/or contain the fluid.

Contact the nearest N.C. Department of Environment and Natural Resources' Regional Office for guidance on clean up and disposal per state regulations, or if you have doubt about how to handle the spill.

Quick action to contain the spill, stop its source, clean up the site, and report the incident will help to keep a spill from becoming a larger problem.

Managing Fluids

Prevention of a spill or leak by maintenance is typically less expensive than cleaning up a spill and site mitigation.

Ignoring a leak, spill or accepting fluid loss as a normal occurrence is not an acceptable practice. Be prepared for accidents and spills!

BMPs for Managing Fluids

- Frequently inspect equipment for leaks and repair them promptly or otherwise prevent the fluid from entering the ground and water.
 - This is especially important on sites in which the groundwater level is close to the ground surface, such as in swampy locations.
- If equipment is washed while inspecting for leaks, only use plain water. Do not use degreasers or detergents.
- Designate specific areas for equipment maintenance and fueling. Level ground away from waterbodies provides the best location to avoid spills.
- Park and service equipment at least 100 feet from all streams, wetlands, ditches, and ephemeral streams if site conditions allow.
- Service equipment in a manner that minimizes the risk of fluids from entering nearby waterbodies or the groundwater.

Helpful Hints:

A selection of locking pliers may also be handy to have for closing off broken hoses.

Consider using biodegradable lubricants.

- Maintain tools and materials to contain and clean up spills and leaks. At a minimum, it is suggested to have on-hand and available:
 - A variety of plugs and clamps to control a hose leak.
 - Containers to catch and contain leaking fluid.
 - Shovels and absorbent material or pads (booms) to stop fluid, soak it up and keep it from running across the ground.
 - Plastic sheeting or tarp to create a barrier on top of the soil.
- Keep used oil and other fluids in separate, labeled containers to prevent mishandling and allow for easier fluid disposal or recycling.
- Use suitable containers to store oils, fuels and other fluids that control or minimize leakage and spillage. Keep this material away from streams and waterbodies.

Caption:

An equipment trailer can be used to securely store fluid containers out of the way from vehicle movement where they may get crushed and leak fluids.

Even if a trailer is not used, you should keep fluid containers in a central and secure location away from streams.

Figure 8A: A trailer used for holding fluid containers on a logging job



Solid Waste Management

Manage waste products to keep them from getting out of control. Dispose of the waste properly.

Waste includes containers, equipment parts, hoses, tires, batteries, trash, and other leftover man-made debris. Leftover waste or debris can pose a risk to water quality if left uncontrolled. In addition, a cleaned-up job site provides a much more favorable visual impression.

BMPs for Solid Waste Management

- Keep garbage in a container to collect all trash for proper disposal. If left uncontrolled, garbage and waste may pose a risk to water quality.
- Empty waste containers once they get full.
 - Doing this will keep waste in check and help prevent leakage, which protects water quality from pollution.

Did You Know?

Most North Carolina towns and counties have waste & recycle drop-off stations, usually called Convenience Centers.

Helpful Hints:

In particular, remove and properly dispose all containers and parts that may have fluid on them.

Also Refer To...

Recycling Vendors:
www.p2pays.org
N.C. Division of Pollution
Prevention and
Environmental Assistance
1-877-623-6748.

See Appendix 10 for an
example.

- Secure the waste bin after work hours to prevent accidentally tipping it over or vandalism.
- Do not bury or burn the waste and trash on the job site. The remnants may wash into nearby waterbodies and create pollution problems.

Chapter 8 Summary

Proper handling of fluids and wastes will protect water quality.

Remember the five C's related to fluid and waste management:

Check equipment and the job site frequently for fluids and waste.

Contain any stored fluid and waste on-site with suitable containers.

Control leaks and waste material before it gets out of hand.

Clean-up and dispose of spills and waste promptly.

Contact the appropriate state agency for petroleum spills when required.