

# **WOOD COUNTY HEALTH DEPARTMENT'S ROLE IN RESPONDING TO AGRICULTURAL SPILL INCIDENTS**

*Updated March 31, 2003*

In the event of a manure or surface water release into the waters of the state, the Wood County Health Department will:

1. Respond to the scene with the Ohio EPA Division of Emergency Response, Ohio Department of Natural Resources Division of Wildlife and Wood County Emergency Management Agency.
2. Assist responding agencies with documentation of the incident including written correspondence, photographs, and water samples.
3. The Health Department will obtain surface water samples upstream and downstream of the point of release.
4. The Health Department will contact the City of Bowling Green Wastewater Treatment Lab to arrange to conduct an analysis of the fecal samples by WCHD staff as soon as possible within the specified holding hours. All other parameters will be analyzed by Jones and Henry Lab in Northwood, OH.
5. An incident report will be prepared, copies will be forwarded to all responding agencies.
6. Upon receipt of the results of the water samples, copies will be forwarded to the responding agencies.
7. Additional copies of any correspondence will be available upon request.

# SAMPLING PROTOCOL FOR SURFACE WATER SAMPLING IN WOOD COUNTY

The Wood County Health Department will collect the samples and they will be delivered to a certified lab for analysis. Fecal coliform samples will be analyzed by WCHD staff at the Bowling Green water treatment plant.

- The following protocol shall be used for surface water sampling in the event of an agricultural incident in Wood County.
- Fill out a purchase order requisition form for Lab if samples are to be delivered to Jones and Henry Lab.
- Obtain sample bottles from lab. With fecal samples, the normal TC bottles from the BG Water Lab will be adequate. Bottles should contain the appropriate preservative.
- Samples will be collected from designated locations in the vicinity of the suspected release. Upgradient samples from the spill location will be collected first followed by down gradient samples from the same location.
- During the sampling process, complete the Health Department surface water sampling survey sheet in particular, documenting depth of water and direction of flow at the time of sampling. In addition, complete the OEPA Public Health Nuisance Field Form (OAC Rule 3745-1-04 (F) & (G)).
- When sampling wear a pair of disposable latex gloves. Be cautious not to expose the lip, sides and cap of bottle to any potential sources of contamination. Properly dispose of gloves after use. An intermediate container for nutrients and biological oxygen demand parameters is acceptable to use in instances when waterway is too shallow. Water can be collected in a bucket for example and poured into containers. A 5 gallon plastic bucket is located next to the sample bottles in the Environmental Health Directors office.
- Fill the sampling bottle to the EPA 100 ML fill line. Tightly cap and seal the lid to the bottle. Complete the bottle label and place in cooler. Label sample bottles in the following upgradient - MDUP#1 downgradient - MDDG#1. Use 1 sample number for each set of samples at each location. For subsequent incidents follow numerical sequence #2, #3 . . . .
- Fecal water samples shall be kept cool with frozen ice packs and transported to the lab within **6 hours**. **24 hours** is the absolute deadline for submitting samples. The quicker delivered, the more accurate the results will be. Call the Bowling Green Wastewater Treatment Lab prior to collecting the samples and inform as to the number and time the samples we will be analyzing. The contact person for the BG Wastewater Treatment Plant is June Kaltenbach, Chemist; or Royce Beaverson, Superintendent. Call the Wastewater Treatment Lab phone number 419-354-6274. We can utilize this lab through the months of May 1 — October 31.
- In addition to collecting a fecal sample, the following parameters will be tested. Sample holding times are also indicated.

Fecal Coliform	6 hours
BOD	48 hours
Nitrate/Nitrite	48 hours
Suspended Solids	7 days
Ammonia	28 days
Phosphorus	28 days
Total Kjeldahl Nitrogen	28 days

- Following the same sampling protocol as above and if possible deliver to the lab with the fecal samples. Nutrient parameters must be preserved with sulfuric acid (2ml per qt of sample NO<sub>3</sub>/NO<sub>2</sub>, NH<sub>3</sub>, TKN, P.) Preserving the sample fixes the pollutant concentration and allows for the 28 hour holding time.
- Field measurements of temperature, dissolved oxygen and PH will also be obtained.
- Important! The shelf life for these sample bottle is 6 months! Replace as needed.
- Deliver samples to lab and complete a chain of custody form.

Surface water samples other than fecal samples will typically be delivered to:

Jones and Henry Lab, Inc.  
2567 Tracy Road  
Northwood, OH 43619  
Phone: 419-666-0411

Fecal water samples will be delivered to:

Bowling Green Wastewater Treatment Lab  
901 N. Dunbridge Road  
Bowling Green, OH 43402  
Phone: 419-354-6274

If additional information is needed, contact the following regulatory agencies:

- Ohio Department of Agriculture's Livestock Environmental Permitting Program  
8995 East Main Street, Reynoldsburg, OH 43068. Main telephone number: 614-387-0307;  
Fax number: 614-728-6335; E-mail: [leep@odant.agri.state.oh.us](mailto:leep@odant.agri.state.oh.us)
- ODNR's Division of Soil and Water Conservation, 4383 Fountain Sq. Dr., Building B-3,  
Columbus, OH 43224, Telephone: 614-265-6610; Fax number: 614-262-2064;  
E-mail: [dswc@dnr.state.oh.us](mailto:dswc@dnr.state.oh.us)
- A complete list of county soil and water conservation district offices with contact information can be found at [www.dnr.state.oh.us/odnr/soil+water.swcds.htm](http://www.dnr.state.oh.us/odnr/soil+water.swcds.htm)
- ODNR Division of Wildlife Headquarters, 1840 Belcher Dr., Columbus, OH 43224-1329,  
Main telephone number: 614-265-6300 or 1-800-WILDLIFE.

# WOOD COUNTY HEALTH DEPARTMENT SURFACE WATER

Is Location within 1 mile of Existing/Proposed Agricultural Operation?  Yes  No

Approximate Distance from Existing/Proposed Agricultural Operation? \_\_\_\_\_

Location of Sample point / ID# on Sample List \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Depth of Water at sampling \_\_\_\_\_

Direction of Flow if present \_\_\_\_\_

Additional Comments \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Fecal sample obtained?  Yes  No

Phosphorous sample obtained?  Yes  No

Nitrate/nitrite sample obtained?  Yes  No

BOD sample obtained?  Yes  No

Suspended solids sample obtained?  Yes  No

Ammonia sample obtained?  Yes  No

Total Kjeldahl Nitrogen sample obtained?  Yes  No

Date and time samples delivered to lab/location of lab \_\_\_\_\_

Chain of custody form completed?  Yes  No

Date results received \_\_\_\_\_

Fecal results \_\_\_\_\_ Phosphorus results \_\_\_\_\_ Nitrate/Nitrite results \_\_\_\_\_

pH results \_\_\_\_\_ Temperature \_\_\_\_\_ Dissolved Oxygen results \_\_\_\_\_

BOD results \_\_\_\_\_ Suspended Solids results \_\_\_\_\_ Ammonia results \_\_\_\_\_

Total Kjeldahl Nitrogen results \_\_\_\_\_

**\*Ohio EPA protocol suggests a minimum of 2 samples be collected at each location not exceeding 30 days. The samples may be collected the same day but must be at least 2 hours apart. Samples shall only be taken during base flow conditions only. Base flow is defined at the water sustaining flow during rainless periods.**

Name of sample \_\_\_\_\_

County \_\_\_\_\_ Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_  
Township \_\_\_\_\_ Agency \_\_\_\_\_

I certify that bacteria samples were collected at times when the surface water being tested met the odor, plus color and/or other visual manifestation or raw or poorly treated sewage requirements of OAC rule 1-40(F)&(G).

Printed Name of Sample Collector: \_\_\_\_\_

Title: \_\_\_\_\_

Signature of Sample Collector: \_\_\_\_\_

Date: \_\_\_\_\_

Bacteria Sample #1 \_\_\_\_\_

Bacteria Sample #2 \_\_\_\_\_

Location of Sample \_\_\_\_\_

Location of Sample \_\_\_\_\_

Date of Sample \_\_\_\_\_

Date of Sample \_\_\_\_\_

Time of Sample \_\_\_\_\_ AM \_\_\_\_\_ PM

Time of Sample \_\_\_\_\_ AM \_\_\_\_\_ PM

**Baseflow Documentation:**

Stage less than bank full \_\_\_\_\_ Yes \_\_\_\_\_ No

Muddy-brown turbidity absent \_\_\_\_\_ Yes \_\_\_\_\_ No

Pavement/snow melt/run off absent \_\_\_\_\_ Yes \_\_\_\_\_ No

**Baseflow Documentation:**

Stage less than bank full \_\_\_\_\_ Yes \_\_\_\_\_ No

Muddy-brown turbidity absent \_\_\_\_\_ Yes \_\_\_\_\_ No

Pavement/snow melt/run off absent \_\_\_\_\_ Yes \_\_\_\_\_ No

*(All three baseflow conditions must be met (yes) before a bacteria sample can be collected)*

**Odor Documentation:**

\_\_\_\_\_ No odor - level (0)

\_\_\_\_\_ Odor threshold (very slight), level (1)

\_\_\_\_\_ Slight odor, level (2)

\_\_\_\_\_ Moderate odor, level (3)

\_\_\_\_\_ Strong odor, level (4)

**Odor Documentation:**

\_\_\_\_\_ No odor - level (0)

\_\_\_\_\_ Odor threshold (very slight), level (1)

\_\_\_\_\_ Slight odor, level (2)

\_\_\_\_\_ Moderate odor, level (3)

\_\_\_\_\_ Strong odor, level (4)

*(An odor level of 2 or greater must be met before a bacteria sample can be collected)*

**Visual Documentation:** (check all that apply)

**Color Documentation:**

(Non-sewage colors) (Sewage colors)

\_\_\_\_\_ clear, no color \_\_\_\_\_ whitish

\_\_\_\_\_ brown/yellow/orange \_\_\_\_\_ grayish

\_\_\_\_\_ muddy brown \_\_\_\_\_ blackish

**Other Visual Manifestations:**

\_\_\_\_\_ oily sheen \_\_\_\_\_ aquatic plants

\_\_\_\_\_ floating scums \_\_\_\_\_ sewage fungus

\_\_\_\_\_ suspended sludge \_\_\_\_\_ algae

\_\_\_\_\_ sludge deposits \_\_\_\_\_ other

**Visual Documentation:** (check all that apply)

**Color Documentation:**

(Non-sewage colors) (Sewage colors)

\_\_\_\_\_ clear, no color \_\_\_\_\_ whitish

\_\_\_\_\_ brown/yellow/orange \_\_\_\_\_ grayish

\_\_\_\_\_ muddy brown \_\_\_\_\_ blackish

**Other Visual Manifestations:**

\_\_\_\_\_ oily sheen \_\_\_\_\_ aquatic plants

\_\_\_\_\_ floating scums \_\_\_\_\_ sewage fungus

\_\_\_\_\_ suspended sludge \_\_\_\_\_ algae

\_\_\_\_\_ sludge deposits \_\_\_\_\_ other

(At least one sewage color and/or visual manifestation of sewage must be met before a bacteria sample can be collected. Check all of the above that are present at the time of sampling.)

# Who To Contact In Cases Of Agricultural Incidents

## **OHIO EPA**

\*EMERGENCY RESPONSE NUMBER 1-800-282-9378

NW District Office 419-352-8461

Mike Gerber's Direct Line 419-373-3046

## **OHIO DEPARTMENT OF NATURAL RESOURCES**

Marty Baer, Wildlife Officer (Home) 419-686-0295

EMERGENCY RESPONSE NUMBER 614-265-6565

Number to call during normal office days/hours District #2 Office in Findlay 419-424-5000

Columbus Main Office 1-800-WILDLIFE (945-3543)

## **WOOD COUNTY EMERGENCY MANAGEMENT**

Eric Larson Office 419-354-9269

## **WOOD COUNTY HEALTH DEPARTMENT**

Larry Sorrells

Office 419-352-8402

Cell 419-308-4326

Brad Espen

Office 419-352-8402

Cell 419-308-4729

Jerry Bingham

Office 419-352-8402

Cell 419-308-4335

Jim Konopinski

Office 419-352-8402

Cell 419-308-4336

## **OHIO DEPARTMENT OF AGRICULTURE**

EMERGENCY RESPONSE HOTLINE 1-800-282-1955

614-728-6200

The Ohio EPA Emergency Response number should be the first contact in order to activate call down list, during non-business hours.

After normal business hours, the Health Department and Emergency Management Staff can be contacted by calling the Wood County Sheriff's Office at 419-354-9086.