

## INSTRUCTIONS FOR COMPLETING DISCHARGE MONITORING REPORTS

In the packet of materials included with these instructions are a set of preprinted Discharge Monitoring Report (DMR) forms to be used for the annual sludge reports required by 40 CFR 503.18. These reports are due on February 19, 2013 to US EPA Region 5, currently the sludge permitting authority for the states of Illinois, Indiana, and Minnesota.

The forms being provided are based upon last years' reports. For example, if you only land applied sludge last year, you will receive only the land application form and the sludge production form. These are identified by the discharge number SLDL and SLDP, respectively.

If you changed disposal methods during the year, you will need to request additional forms. For example, if you switched to surface disposal from land application, you can request additional forms by contacting John Colletti at (312) 886-6106.

The completed and signed forms must be mailed to U.S. EPA Region 5 at the following address:

US EPA - Region 5  
Water Enforcement and Compliance Assurance Branch (WC-15J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

You may wish to make a copy and keep it for your own records.

### **Frequency of Analysis/Monitoring Period**

Facilities must indicate the actual frequency that sewage sludge quality is monitored in the "Frequency of Analysis" column. The minimum required frequency, indicated in Table 1 of 503.16 is dependent on the amount of sludge which is annually land applied.

A separate form shall be completed for each monitoring period, and the appropriate monitoring period dates must be indicated at the top of the form. For example, if a facility is required to monitor once per quarter, four DMR forms must be completed for each full reporting year. You are only provided with one set of these forms, so please make as many copies of this form as you need.

The enclosed forms are for the 2012 reporting year which begins January 1, 2012. For data entry purposes, facilities must indicate the first monitoring period as beginning on January 1, 2012. For example, a facility which monitors once per quarter must indicate the first reporting period as "From 12/01/01 to 12/03/31" and the second reporting period as "from 12/04/01 to 12/06/30", and so forth.

### **Additional Reporting Requirements**

In addition to the enclosed form, facilities which land apply sewage sludge are responsible for submitting the additional information required in Parts 503.18; i.e., appropriate certification statements, descriptions of how the pathogen reduction requirements in Part 503.32 (a) or (b) are being met, and descriptions of how the vector attraction reduction requirements in Part 503.33 are being met. These descriptions should include the narrative and back-up data to conclusively show that the applicable requirements have been met. Narrative should also be included to describe your facility's practices regarding sludge use and disposal, such as on-site storage and how you take samples for analysis. Identify problems you may be having and how you plan on addressing them. All data for metals analyses that are performed during a monitoring period, in addition to the required monitoring, must be included. The actual dates of land application should also be provided. This information must be attached to the DMR forms when submitted to the EPA.

Facilities which dispose of sewage sludge by incineration are required to provide the information required in Part 503.48 in addition to the production and use form.

### **Completion of Forms**

The following instructions are for use in completing the individual sections of each type of sludge DMR form:

#### **PRODUCTION AND USE**

The 2012 reporting year begins on January 1, 2012 and ends on December 31, 2012. Accordingly, the reported production and use data period must be indicated "From 12/01/01 to 12/12/31". Please provide annual totals on this form. Only one form is needed for all your sludge production data. This form is to be completed by all major and/or designated Class I facilities which generate sewage sludge. The annual production and use information must be reported in metric tons per year (MT/YR); other information shall be in the units indicated. If a particular sludge use does not apply to the facility's practice, then this must be indicated with a "NA".

**Annual Sludge Production** - Facilities must indicate the amount of sewage sludge produced after final sludge treatment for the reporting period (12/01/01 to 12/12/31).

**Annual Sludge Land Applied** - Facilities must indicate the amount of sewage sludge prepared and beneficially reused by land application. Facilities which provide sewage sludge to another facility which further prepares the sludge prior to land application need not report that amount of sludge which it has not prepared.

**Annual Sludge Surface Disposed** - Facilities must indicate the amount of sewage sludge prepared and disposed in a surface disposal unit.

**Annual Sludge Landfilled** - Facilities must indicate the amount of sewage sludge prepared and co-disposed in a municipal solid waste landfill.

**Annual Sludge Incinerated** - Facilities must indicate the amount of sewage sludge prepared and disposed of by incineration in a sewage sludge incinerator.

**Annual Sludge Disposed by Other Methods** - Facilities must indicate the amount of sewage sludge prepared and used or disposed of by a method other than land application, surface disposal, incineration or co-disposal in a municipal solid waste landfill. Facilities which provide sewage sludge to another facility which further prepares the sludge, or changes the quality of the sludge, prior to land application, must report the amount provided to the other facility, as well as the name of the facility. The method of disposal or use must be further described in the "comments" section of the form.

**Annual Sludge Transported Interstate** - Facilities must indicate the amount of sewage sludge which it has prepared and which is transported to another state other than the one in which it was prepared for eventual use or disposal.

#### **LAND APPLICATION**

This form is to be completed by those facilities which prepare bulk sewage sludge for land application for beneficial reuse or which prepare sewage sludge to be sold or given away in a bag or other container. This form does not apply to those facilities which provide all of their sewage sludge to another facility which changes the quality of the sludge prior to land application.

**Pollutant Table from 503.13** - The facility must indicate the pollutant table from Part 503.13 which is used to determine compliance with pollutant quality as follows:

**Table 2** - Used if bulk sewage sludge exceeds the Pollutant Concentrations of Table 3;

**Table 3** - Used if bulk sewage sludge that is land applied, sold or given away in a bag or other container of one metric ton or less meets (does not exceed) the Pollutant Concentrations of Table 3; and,

**Table 4** - Used if sewage sludge is sold or given away in a bag or other container of one metric ton or less, does not meet the Pollutant Concentrations of Table 3, and contains a label or information sheet indicating an annual whole sludge application rate which does not cause any of the Annual Pollutant Loading Rates in Table 4 to be exceeded.

**Metals** - The information to be included in this portion of the form consists of three types:

1. The cumulative loadings of the metals for a particular site (in Kg/Ha);
2. The monthly average concentration of metals (in mg/Kg); and,
3. The maximum concentrations of the metals (in mg/Kg).

All facilities which land apply bulk sewage sludge or sell or give away sewage sludge in a bag or other container (distribution) for land application must indicate the maximum concentration for all metals during the monitoring period in the "Maximum Concentration" column. These concentrations are limited by the values of Table 1 of Part 503.13. If no application or distribution occurred during the monitoring period, this must be indicated by filling out the no discharge box in the upper right hand corner of the DMR form. Please provide the dates of land application that occurred during the monitoring period as an attachment.

The "Average Concentration" information must be completed by those facilities whose sludge meets the Table 3 Pollutant Concentrations. This information must reflect the monthly average concentration during the monitoring period. This data is the average of the measurements taken during the month, not the average of the measurements taken during the monitoring period.

**Level of Pathogen Reduction Achieved** - Facilities must indicate the level of pathogen reduction achieved, if any. If the sludge meets the Class A requirements, it must be indicated on the form with a "1". If the sludge meets the Class B requirements, it must be indicated on the form with a "2". If the facility's sludge does not meet either the Class A or Class B levels, the facility must report "0" (None).

**Pathogen Alternative Used** - Facilities must indicate which alternative is used to achieve the pathogen level indicated above. The alternative numbers are given in Part 503.32 (a) (3) - (8) for Class A(#1-6) and Part 503.32 (B) (2)-(4) for Class B (# 1-3). If the facility's sludge does not meet either of the pathogen reduction levels, it must report "0". Please remember to include a narrative description (with back-up data) to fully describe how pathogen reduction is achieved.

**Vector Attraction Reduction Alternative Used** - Facilities must indicate which alternative was used to achieve the vector attraction reduction requirement. The alternatives which apply to land application (#1-10) are given in Part 503.33(b) (1)-(10). If a facility is unable to meet any of the vector attraction reduction alternatives, it must report "0". Please remember to include a narrative description (with back-up data) to fully describe how vector attraction reduction is achieved.

### **List of Common Deficiencies**

A list of common deficiencies found in the annual reports from previous years is also included for your reference. The list is meant as a reminder and is not a reflection of the quality of your previous annual reports.

UNIT DEFINITIONS AND CONVERSION FACTORS  
ENGLISH SYSTEM UNITS TO METRIC SYSTEM UNITS

INTERNATIONAL SYSTEM OF UNITS (SI)				
NAME	ABBREVIATION	MULTIPLIER	SYMBOL	NAME
<b>MASS</b>				
TON	T	0.907	mt	METRIC TON
<b>DENSITY</b>				
POUNDS PER ACRE	LBS/ACRE	1.1206	kg/ha	KILOGRAMS PER HECTARE
TONS PER ACRE	T/ACRE	2.2421	mt/ha	METRIC TONS PER HECTARE

**COMMON ANNUAL SLUDGE REPORT DEFICIENCIES**

- Lab and back-up data is missing for pathogen reduction and vector attraction reduction.
- No description of the pathogen reduction and/or vector attraction reduction method used.
- Certification statement for pathogen reduction and vector attraction reduction is missing.
- Certification statement for site restrictions and management practices is missing. This should be included even if a contract land applier is the one who land applies the sludge.
- There is no information on site restrictions, management practices, or general requirements.
- Monitoring is not being performed at the correct frequency.
- Lab data (including preparation (i.e., digestion) and analytical methods used) is missing for metals analyses.
- Data is missing for either Table 2 and/or Table 3 for land application. Those facilities that cannot meet Table 3 limits and whose sludge must therefore meet Table 2 limits for land application (cumulative loading rates), must notify the USEPA (in writing) prior to land applying this sludge (see 40 CFR 503.12 (j)).
- Unapproved analytical methods are used for metals analyses. Analyses of metals in sludge must be done by using "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846.
- Not performing the fecal coliform test (geometric mean of 7 composite samples) over a 2-week period. Each of the composite samples must be representative of the sludge that will be disposed. Grab samples are not acceptable.
- Not including the actual dates of land application or surface disposal.
- Not performing the temperature correction when measuring pH at other than 25 degrees C. This **must** be done in order to obtain the correct value of pH.