



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH  
**FORM S – SECTION 2 – LABORATORY RESULTS – FORM SA**

**SLUDGE MONITORING RESULTS FOR METALS, NUTRIENTS, PATHOGENS AND VETORS**

PERMIT NO: MO -	REPORT PERIOD: (CALENDAR YEAR)
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FACILITY NAME

Use this form to report sludge monitoring required under Standard Conditions for NPDES Permits, Part III, dated Aug. 15, 1994. For a copy, contact the department at (573) 751-6825.

If the facility has a design population equivalent (P.E.) of 150 or less, treat the sludge generated as septage and consequently, no testing is required. See WQ 422 guide, *Land Application of Septage*, for further guidance.

Report all results on **dry weight** basis.

**Attach copies of all laboratory results for the items below.**

**A. MINIMUM MONITORING LIST FOR ALL PERMITTEES**

PARAMETER	UNITS	AVERAGE	MINIMUM	MAXIMUM	NUMBER OF SAMPLES
TOTAL SOLIDS	%				
TOTAL ARSENIC	mg/kg				
TOTAL CADMIUM	mg/kg				
TOTAL CHROMIUM	mg/kg				
TOTAL COPPER	mg/kg				
TOTAL LEAD	mg/kg				
TOTAL MERCURY	mg/kg				
TOTAL MOLYBDENUM	mg/kg				
TOTAL NICKEL	mg/kg				
TOTAL SELENIUM	mg/kg				
TOTAL ZINC	mg/kg				

**B. ADDITIONAL MONITORING FOR LAND APPLICATION**

PARAMETER	UNITS	AVERAGE	MINIMUM	MAXIMUM	NUMBER OF SAMPLES
TOTAL KJELDAHL NITROGEN	mg/kg				
TOTAL PHOSPHORUS AS P	mg/kg				
TOTAL POTASSIUM AS K	mg/kg				

If more than two dry tons of sludge per acre/year is applied complete the following:

ORGANIC NITROGEN AS N	mg/kg				
AMMONIA NITROGEN AS N	mg/kg				
NITRATE NITROGEN AS N	mg/kg				

<b>C. POLLUTANT LIMITS</b>			
POLLUTANT	AVERAGE SAMPLE CONCENTRATION mg/kg DRY WEIGHT	LOW METAL CONCENTRATION mg/kg DRY WEIGHT	CEILING CONCENTRATION mg/kg DRY WEIGHT
ARSENIC		41	75
CADMIUM		39	85
CHROMIUM		1,200	3,000
COPPER		1,500	4,300
LEAD		300	840
MERCURY		17	57
MOLYBDENUM		18	75
NICKEL		420	420
SELENIUM		36	100
ZINC		2,800	7,500

**D. PATHOGENS**

Pathogen testing is required for all sludges to show operational compliance, including sludges treated by a PSRP approved method.

The geometric mean of the density of fecal coliform is less than 2,000,000 Most Probable Number (MPN) or Colony Forming Units (CFU) per gram of total solids (dry weight basis) for each group of seven samples:

Yes       No      Sampling frequency \_\_\_\_\_

Geometric mean per gram of total solids for each group of seven samples was:

MPN/CFU	SAMPLE DATE
MPN/CFU	SAMPLE DATE
MPN/CFU	SAMPLE DATE

**E. VECTOR REDUCTION PROCESSES**

- 38 percent volatile solids reduction (attach calculations).
- SOUR test, mg O/hr/g (attach graph and calculations).
- Other. Attach explanation.

