



SEWAGE SLUDGE & BIOSOLIDS REPORTING FORM for EXCEPTIONAL QUALITY BIOSOLIDS

Please fill out the 13 page form completely and mail the completed 13 page form to:

Louisiana Department of Environmental Quality
Office of Environmental Services
Water Permits Division
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313

Name of Facility:		Contact Person:	
Agency Interest#:		Contact Telephone Number:	
Permit#:		E-mail Address:	
TEMPO Identification#:		Transporter/Hauler Registration#:	
Physical Address of Sewage Sludge Treatment Facility:			

(1) **DATE OF REPORT:** _____

(2) **REPORTING PERIOD:** From: _____ To: _____

(3) **ANNUAL AMOUNT GENERATED:** Indicate the annual amount generated/received (prior to the material being prepared) and the annual amount prepared at your facility for the Reporting Period indicated in Number (2) above:

Amount of Sewage Sludge Generated/Received: _____ Units: _ _

Amount of Sewage Sludge Prepared as an Exceptional Quality Biosolids: _ _ Units: _ _

(4) MATERIALS BLENDED, COMPOSTED, MIXED, PREPARED, OR UTILIZED AS PART OF THE TREATMENT OF SEWAGE SLUDGE:

List all of the materials, except agricultural grade lime, that is blended, composted, mixed, prepared, or utilized as part of the treatment of sewage sludge (use additional sheets if necessary):

(5) TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP):

Indicate the "Pass/Fail" TCLP Laboratory Results for each category:

a. Untreated/Raw Sewage Sludge ----- PASS FAIL

b. Materials, except agricultural grade lime, that are blended, composted, mixed, prepared or utilized as part of the treatment of sewage sludge (Indicate the Pass/Fail result for each material that is listed in Number (4) above. Use additional sheets if necessary.) -----
 PASS FAIL

c. Exceptional Quality Biosolids ----- PASS FAIL
(Sampling for the Exceptional Quality Biosolids must be at the completion of the "entire" treatment process.)

(NOTE: Records of the Results of Laboratory Analysis for TCLP shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility. The records shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.)

(6) POLYCHLORINATED BIPHENYLS (PCB):

a.) If stipulated as a requirement in the Permit, report in **Table 1a: POLYCHLORINATED BIPHENYLS UNTREATED/RAW SEWAGE SLUDGE** the **Total PCB** Laboratory Analysis Result for the Month(s) Sampled. The results must be in mg/kg of Total Solids (dry weight basis).

Table 1a: POLYCHLORINATED BIPHENYLS UNTREATED/RAW SEWAGE SLUDGE (mg/kg of Total Solids on a Dry Weight Basis)											
January	February	March	April	May	June	July	August	September	October	November	December

b.) If stipulated as a requirement in the Permit, list each individual material, except agricultural grade lime, that is blended, composted, mixed, prepared, or utilized as part of the treatment and report in **Table 1b: POLYCHLORINATED BIPHENYLS MATERIALS BLENDED, COMPOSTED, MIXED, PREPARED, OR UTILIZED AS PART OF THE TREATMENT OF SEWAGE SLUDGE** the **Total PCB** Laboratory Analysis Result for the Month(s) Sampled for the material listed (Use additional sheets if necessary). The results must be in mg/kg of Total Solids (dry weight basis).

Materials blended, composted, mixed, prepared or utilized as part of the treatment of sewage sludge:

Table 1b: POLYCHLORINATED BIPHENYLS MATERIALS BLENDED, COMPOSTED, MIXED, PREPARED, OR UTILIZED AS PART OF THE TREATMENT OF SEWAGE SLUDGE (mg/kg of Total Solids on a Dry Weight Basis)											
January	February	March	April	May	June	July	August	September	October	November	December

c.) If stipulated as a requirement in the Permit, report in **Table 1c: POLYCHLORINATED BIPHENYLS EXCEPTIONAL QUALITY BIOSOLIDS** the **Total PCB** Laboratory Analysis Result for the Month(s) Sampled. The results must be in mg/kg of Total Solids (dry weight basis).

Table 1c: POLYCHLORINATED BIPHENYLS EXCEPTIONAL QUALITY BIOSOLIDS (mg/kg of Total Solids on a Dry Weight Basis)											
January	February	March	April	May	June	July	August	September	October	November	December

(7) MONITORING FREQUENCY:

Indicate the Monitoring Frequency as stated in the Permit:

- Once/Year
 Once/Quarter
 Once/Sixty Days
 Once/Month

(8) POLLUTANTS:

a.) If stipulated as a requirement in the Permit, list each material (individually), except agricultural grade lime, that is blended, composted, mixed, prepared, or utilized as part of the treatment of sewage sludge and furnish the information in Table 2 below for the Month(s) Sampled for the material listed (Use additional sheets if necessary). The results must be in mg/kg of Total Solids (dry weight basis).

Materials blended, composted, mixed, prepared or utilized as part of the treatment of sewage sludge:

_____.

MONTHS	Table 2 POLLUTANTS Material Blended, Composted, Mixed, Prepared, or Utilized as Part of the Treatment of Sewage Sludge NOTE: Results must be in mg/kg on a dry weight basis								
	Arsenic	Cadmium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	January								
February									
March									
April									
May									
June									
July									
August									
September									
October									
November									
December									

b.) Furnish the information in Tables 3 below for the Month(s) Sampled for the Exceptional Quality Biosolids (treated sewage sludge). The sampling must be at the “end” of the preparation process and the results must be in mg/kg of Total Solids (dry weight basis).

MONTHS	Table 3 POLLUTANTS Exceptional Quality Biosolids NOTE: Results must be in mg/kg on a dry weight basis								
	Arsenic	Cadmium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
	January								
February									
March									
April									
May									
June									
July									
August									
September									
October									
November									
December									

(9) PATHOGENS:

(a) Indicate the Alternative utilized to meet the Exceptional Quality Biosolids Pathogen levels and maintain or submit the required information for the Alternative selected:

Alternative 1: Time & Temperature

1. Provide the Pathogen laboratory results required in **Table 4: PATHOGENS** below for each testing period required in the permit.

2. Records for the parameters listed below shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility:

- **Sludge Temperature** (Either continuous chart or two readings per day, at least one per shift.)
- **Time of Temperature Reading** (Date, Hour, Minute)

3. The records required in Number 2 above shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.

Alternative 2: Alkaline Treatment (pH, Temperature, Air Drying)

1. Provide the Pathogen laboratory results required in **Table 4: PATHOGENS** below for each testing period required in the permit.

2. Records for the parameters listed below shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility:

- **Sludge pH Reading** (The pH Reading shall be taken at the beginning of treatment process, at the mid-point of treatment process, and at the end of the treatment process.)
- **Time** (Hours pH was maintained above 12 or higher.)
- **Sludge Temperature** (The sludge temperature shall be taken at the beginning of treatment process and at the end of the treatment process. The sludge temperature shall also be taken on an hourly basis between the beginning and end of the treatment process for 12 hours to demonstrate that the sludge temperature was above 52° C or 126° F for the entire 12 hour period.)
- **Percent Solids of Biosolids** (After “Air Drying”)

3. The records required in Number 2 above shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.

Alternative 3: Pathogen Analysis & Operation

1. Provide the Pathogen laboratory results required in **Table 4: PATHOGENS** below for each testing period required in the permit.

2. Provide the requested laboratory analysis results in **Table 5: ENTERIC VIRUSES** below for each testing period required in the permit.

3. Provide the requested laboratory analysis results in **Table 6: Helminth Ova** below for each testing period required in the permit.

4. Records for the parameters listed below shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility:

- Values or ranges of values for the “**operating parameters**” to indicate consistent pathogen reduction treatment (NOTE: If Alternative 3 is selected for Class A pathogen achievement, the “**operating parameters**” will be indicated in the permit as monitoring requirements of the permit.)

5. The records required in Number 4 above shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.

Alternative 4: Analysis Only

1. Provide the Pathogen laboratory results required in **Table 4: PATHOGENS** below for each testing period required in the permit.

2. Provide the requested laboratory analysis results in **Table 5: ENTERIC VIRUSES** below for each testing period required in the permit.

3. Provide the requested laboratory analysis results in **Table 6: Helminth Ova** below for each testing period required in the permit.

Alternative 5: Pathogen Testing & Processes to Further Reduce Pathogens (PFRP)

1. Provide the Pathogen laboratory results required in **Table 4: PATHOGENS** below for each testing period required in the permit.

2. Indicate the PFRP utilized to attain the Exceptional Quality Pathogen levels by checking all the boxes that apply and maintain or submit the required information for the PFRP selected:

Composting

(a) Indicate the compost method by checking the appropriate box:

Within-vessel

Static aerated pile

Windrow

(b) Records for the parameters listed below shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility:

- **Sludge Temperature** (Either continuous chart or two readings per day, at least one per shift if compost method is either “within-vessel” or “static aerated pile”. If the compost method utilized is “windrow”, a minimum of two readings per day, at least one per shift.)
- **If the Compost Method is “Windrow” – Number of “turns” of compost pile** (Number of turns per day)

(c) The records required in (b) above shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.

Heat Drying

(a) Records for the parameters listed below shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility:

- **Temperature of Sewage Sludge During Treatment Process or “Wet Bulb” Temperature of “Exit Gas”** (Either Continuous Chart or two readings per day, at least one per shift.)
- **Total Solids Content of Biosolids** (Dry Weight Basis)
- **Moisture Content of Dried Biosolids** (percentage)

(b) The records required in (a) above shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.

Heat Treatment

(a) Records for the parameters listed below shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility:

- **Temperature of Sewage Sludge During Treatment Process** (Either Continuous Chart or three readings taken at 15 minutes intervals.)
- **Time when Temperature of Sewage Sludge was taken.**

(b) The records required in (a) above shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.

Thermophilic Aerobic Digestion

(a) Records for the parameters listed below shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility:

- **Dissolved Oxygen Concentration in Digester** (Record in mg/L)
- **Temperature of Sewage Sludge During Treatment Process** (Either Continuous Chart or two readings per day, at least one per shift.)
- **Date of Temperature Readings**
- **Number of Days the Sewage Sludge underwent the Thermophilic Aerobic Digestion Process**

(b) The records required in (a) above shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.

Beta Ray Irradiation

(a) Records for the parameters listed below shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility:

- **Beta Ray Dosage**
- **Ambient Room Temperature of Sewage Sludge During Treatment Process** (Either Continuous Chart or two readings per day, at least one per shift.)

(b) The records required in (a) above shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.

Gamma Ray Irradiation

(a) Provide the Gamma Ray “**Isotope**” used _____

(b) Records for the parameters listed below shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility:

- **Gamma Ray Dosage**
- **Ambient Room Temperature of Sewage Sludge During Treatment Process** (Either Continuous Chart or two readings per day, at least one per shift.)

(c) The records required in (c) above shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.

Pasteurization

(a) Records for the parameters listed below shall be kept on file at a protective and easily accessed location at the sewage sludge or sanitary wastewater treatment facility:

- **Temperature of Sewage Sludge During Treatment Process** (Either Continuous Chart or two readings per day, at least one per shift.)
- **Time of Temperature Readings**

(b) The records required in (a) above shall be furnished and/or made readily available to the Administrative Authority or DEQ personnel upon request.

Alternative 6: Sewage Sludge that is treated by a process that is equivalent to a PFRP (A process approved by the EPA Pathogen Equivalency Committee.).

1. Provide the Pathogen laboratory results required in **Table 4: PATHOGENS** below for each testing period required in the permit.

2. Additional Information: (NOTE: When this option is chosen for permitting purposes, any additional information necessary to demonstrate Class B Pathogen attainment will be indicated here by the Administrative Authority on a case by case basis based upon equivalency requirements and as required as a part of the permit.)

Table 4: PATHOGENS

(a) Indicate the pathogen selected for laboratory analysis as part of the required proof of Class A Pathogen attainment (Select all that applies.):

Fecal Coliform (Density per gram of total solids on a dry weight basis, reported in Most Probable Number)

Salmonella sp. Bacteria (Density per 4 grams of total solids on a dry weight basis, reported in Most Probable Number)

Enteric Virus (Density per 4 grams of total solids on a dry weight basis, reported in Plaque-forming Unit)

Helminth ova (Density per 4 grams of total solids on a dry weight basis, reported in Numbers)

(b) Provide the results of the laboratory analysis for the appropriate pathogen selected in (a) above for each testing period required in the permit:

MONTHS	Table 4: PATHOGENS (Density per 1 gram of Total Solids on a Dry Weight Basis)	
	Fecal Coliform (Most Probable Number)	<i>Salmonella sp.</i> (Most Probable Number)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

Table 5: ENTERIC VIRUSES

MONTHS	Table 5: ENTERIC VIRUSES (Plaque-forming Unit per 4 grams of total solids on a dry weight basis)	
	Untreated Sewage Sludge (Results prior to Treatment)	Biosolids (Results after Treatment)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

Table 6: Helminth Ova

MONTHS	Table 6: Helminth Ova (Density per 4 grams of total solids on a dry weight basis)	
	Untreated Sewage Sludge (Results prior to Treatment)	Biosolids (Results after Treatment)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

(10) VECTOR ATTRACTION REDUCTION:

Select all of the methods utilized at this facility to demonstrate Vector Attraction Reduction and provide the requested information:

(a) Volatile Solids Reduction

Select One → Aerobic Digestion Anaerobic Digestion

Was Volatile Solids reduced by at least 38%?

YES → If “YES”, provide the information requested in **Table 7: Volatile Solids Reduction** for the sampling periods required in the permit:

MONTHS	Table 7: Volatile Solids Reduction		
	Volatile Solids Reading prior to Treatment	Volatile Solids Reading after Treatment	Volatile Solids Reduction (%)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			

December			
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NO → If “NO”, provide the information requested in **Table 8: Volatile Solids Reduction – Sub-sample in Laboratory** for the sampling periods required in the permit:

MONTHS	Table 8: Volatile Solids Reduction – Sub-sample in Laboratory			
	Initial Volatile Solids Reading after Treatment	Number of Days Sampled in Laboratory	Volatile Solids Reading after further reduction of a sample in the Laboratory	Further Volatile Solids Reduction Reading (%)
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

(b) Specific Oxygen Uptake Rate (SOUR)

Provide the information requested in **Table 9: SOUR TEST** for the sampling periods required in the permit:

MONTHS	Table 9: SOUR TEST [milligrams O ² /hr/gram of total solids (dry weight basis)]	
	SOUR (Reading)	Temperature (°C)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

(c) Aerobic Treatment

Provide the information requested in **Table 10: AEROBIC TREATMENT** for the sampling periods required in the permit:

MONTHS	Table 10: AEROBIC TREATMENT			
	Number of Days of Aerobic Treatment	Minimum Temperature Reading (°C)	Maximum Temperature Reading (°C)	Average Temperature Reading (°C)
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

(d) Alkaline Treatment

Provide the information requested in **Table 11: ALKALINE TREATMENT** for the sampling periods required in the permit:

MONTHS	Table 11: ALKALINE TREATMENT				
	Enter the Time and Date at Initial Alkaline Treatment	Enter Time and Date of 1 st pH Reading (At 2 hours after initial treatment)	Enter 1 st pH Reading	Enter Time and Date of 2 nd pH Reading (22 hours after initial treatment)	Enter 2 nd pH Reading
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					

(e) Percent Solids

Is the sewage sludge subjected to any type of treatment after removal (wasted) from the sanitary wastewater treatment process? (Check either the Box labeled as “YES” or the Box labeled as “NO” and Provide the information requested.)

YES → Indicate the type of treatment process: _____

Provide the information requested in **Table 12: PERCENT SOLIDS – Stabilized Solids** for the sampling periods required in the permit.

MONTHS	Table 12: PERCENT SOLIDS – Stabilized Solids		
	Moisture Content	Total Solids	Percent Solids
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

NO

Provide the information requested in **Table 13: PERCENT SOLIDS – Unstabilized Solids** for the sampling periods required in the permit.

MONTHS	Table 13: PERCENT SOLIDS – Unstabilized Solids		
	Moisture Content	Total Solids	Percent Solids
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

(11) CERTIFICATION STATEMENT, SIGNATURE, AND DATE OF SIGNATURE:

(a) Insert/transfer the Certification Statements provided in Part II of the Permit here 

(b) Read the Certification Statements and sign and date below.

Signature: _____ Date signed: _ _____