Florida Department of Environmental Protection
Division of Water Resource Management

Biosolids Application Site Log

Site ID: _____ **Site Name:** _____

Application Zone ID: _____ **Site Manager:** _____

Zone Acreage: _____ **Soil pH:** ___ **Application Method:** _____ **Crop(s) / No. of Harvests:** _____

Biosolids Nutrient Tracking

Expected Limiting Nutrient[1]: ☐ **TN** ☐ **TP** **Enter applicable rate for: Allowed TN** _____ **and Allowed TP** _____

Date of Application	**Depth to Ground Water** (inches)	**Hauling Records - Shipment ID**	**Hauling Records - Facility ID**	**Quantity of Biosolids Applied**	**Quantity Units** (ie gallons, lbs, dry tons)	**Dry Pounds[2] of of Biosolids Applied** (lbs, dry weight basis)	**Qty of TN applied** (lbs)	**Running total of TN applied per acre** (lbs per acre)	**Qty of TP applied** (lbs)	**Running total of TP applied per acre** (lbs per acre)

Date of Application	**Depth to Ground Water** (inches)	**Hauling Records - Shipment ID**	**Hauling Records - Facility ID**	**Quantity of Biosolids Applied**	**Quantity Units** (ie gallons, lbs, dry tons)	**Dry Pounds[2] of Biosolids Applied** (lbs, dry weight basis)	**Qty of TN applied** (lbs)	**Running total of TN applied per acre** (lbs per acre)	**Qty of TP applied** (lbs)	**Running total of TP applied per acre** (lbs per acre)
Total:										

[1]Check the box to indicate the expected limiting nutrient. Enter the allowed application rates for both TN and TP. Both nutrients shall be tracked on the form (TP = P2O5 ÷ 2.3).

[2]Enter dry pounds (i.e. dry ton x 2000) to facilitate tracking the pounds of nutrients applied.

Are other sources of nutrients (i.e. fertilizer, manure, etc.) applied to this application zone? ☐ **Yes** ☐ **No**

If yes, ensure application documentation is kept with this log and in the NMP records.

INSTRUCTIONS FOR BIOSOLIDS APPLICATION SITE LOG FORM

This form shall be completed for each application zone at the permitted biosolids application site in accordance with Chapter 62-640, Florida Administrative Code, (F.A.C.). A minimum of six months of logs and records shall be maintained onsite and be available for inspection. Use additional sheets if necessary. All information shall be typed or printed in ink.

Site ID: Enter the identification number of the application site found on the site permit.
Site Name: Enter the site name as identified in the site permit.
Application Zone ID: Enter the application zone identification number as it appears on the site permit application form and in the Nutrient Management Plan.
Site Manger: Enter the name of the site manager.
Zone Acreage: Enter the acreage of the application zone as identified on the site permit application and in the NMP.
Soil pH: Enter the latest result of the annual soil pH testing.
Application Method: Enter the primary method of application (i.e. surface, incorporation, injection, etc.) used to apply the biosolids to the zone.
Crop(s)/No. of Harvests: Enter the crops being currently being grown on the application zone and the expected number of harvests identified in the NMP.
Biosolids Nutrient Tracking - Expected Limiting Nutrient: Indicate which nutrient is expected to limit the biosolids application rate.
Allowed TN/Allowed TP: Enter the allowed total nitrogen and total phosphorus loadings as appropriate from the NMP. Note: Divide the NMP P_2O_5 rate by 2.3 to find the TP rate.
Date of Application: Enter the date corresponding to each load of biosolids applied.
Depth to Ground Water: Enter the depth to the ground water table at the time of application, if required.
From Hauling Records – Shipment ID: Enter the shipment ID for the biosolids being applied as identified in the site hauling records.
From Hauling Records - Facility ID: Enter the facility identification number for the facility where the shipment of biosolids was treated.
Amount of Biosolids Applied – Quantity: Enter the amount of biosolids being applied using the units desired (i.e. typically the units being used to track the biosolids in the hauling records).
Amount of Biosolids Applied – Units: Enter the appropriate units corresponding to the value entered under "Quantity."
Amount of Biosolids Applied – Dry Pounds: Convert the quantity to dry pounds of biosolids (i.e. dry pounds = dry tons x 2000) to facilitate the tracking of individual applications of biosolids and nutrients to the application zone.
Qty of TN Applied: Enter the total quantity of Total Nitrogen (TN) applied in each load. Enter the quantity in pounds (lbs). Enter this quantity regardless of which nutrient was the basis for the NMP nutrient budget. TN lbs = Biosolids dry pounds x %TN (decimal).
Running Total of TN Applied Per Acre: Calculate the up-to-date amount of TN applied per acre to the zone following each individual application for the calendar year. Enter the amount in pounds per acre. Enter this quantity regardless of which nutrient was the basis for the NMP nutrient budget.
Qty of TP Applied: Enter the total quantity of Total Phosphorus (TP) applied in each load. Enter the quantity in pounds (lbs). Enter this quantity regardless of which nutrient was the basis for the NMP nutrient budget. TP lbs = Biosolids dry pounds x %TP (decimal).
Running Total of TP Applied Per Acre: Calculate the up-to-date amount of TP applied per acre to the zone following each individual application for the calendar year. Enter the amount in pounds per acre. Enter this quantity regardless of which nutrient was the basis for the NMP nutrient budget.
Total: When the sheet is completed, add up the totals of each column. Use these values as the starting point to continue applications on another sheet for same calendar year.
Are other sources of nutrients applied to this application zone: Check "Yes" or "No" as applicable. If "Yes", then ensure documentation of the quantities of nutrients (i.e. nitrogen and phosphorus from fertilizers, manures, etc.) are kept in the log and in the records for the NMP. The application of other sources of nutrients shall be identified in the NMP and the application shall be conducted in accordance with the NMP.

Basic Formulas for Calculating Dry Pounds

A. Dry pounds = Dry tons x 2000 lbs/ton

Example: 0.5 dry tons of biosolids

Dry pounds = 0.5 x 2000

Dry pounds = 1000

B. Dry pounds = Wet tons x Percent Solids (decimal) x 2000 lbs/ton

Example: 4 wet tons of biosolids at 15% total solids

Dry pounds = 4 x 0.15 x 2000 lbs/ton

Dry pounds = 1200

C. Dry pounds = Gallons of biosolids x 8.34 lb/gallon x Percent Solids (decimal)

Example: 6,000 gallons of biosolids at 4% total solids

Dry pounds = 6000 gal x 8.34 lb/gal x 0.04

Dry pounds = 2002

D. Dry pounds = Cubic yards (wet) of biosolids x Y lb/cubic yard x Percent Solids (Y = site-specific bulk density of biosolids)

Example: 20 cubic yards of biosolids at 15% total solids and 1800 lb/cubic yard

Dry pounds = 20 cu yds x 1800 lb/cu yds x 0.15

Dry pounds = 5400