Biosolids Sampling Plan

Tennessee Rules and Regulations, 0400-40-15-.02 Table 1

Table 1

Frequency of Monitoring-Land Application

|  |  |
| --- | --- |
| Amount of Biosolids 1(metric tons per calendar year) | Frequency |
| Greater than 0 but less than 290 | Once per year |
| Equal to or greater than 290 but less than 1,500 | Once per quarter ( 4 times per year) |
| Equal to or greater than 1,500 but less than 15,000 | Once per 60 days (6 times per year) |
| Equal to or greater than 15,000 | Once per month ( 12 times per year) |

1 Either the amount of bulk biosolids applied to the land or the amount of biosolids prepared for sale or give-away in a bag or other container for application to the land (dry weight basis).

Note: 290 dry metric tons would be 7.67 MG of sludge at 1% total solids.

Containers: Preferred containers are Teflon, glass or stainless steel, plastic, steel or aluminum may be used, but galvanized coatings are to be avoided because they can release zinc into the sample. Containers are thoroughly cleaned using standard lab glassware cleaning processes.

 Nine Metals and Four Nitrogens

 Early in the Monitoring Period or prior to a hauling event, a sample will be collected from the digester with aeration operating fully in order to have a well-mixed digester. A clean dipper is used to collect multiple aliquots that are composited in the laboratory provided container. Aliquots are collected over at least 15 minutes while the digester is mixing.

Fecal Coliform Testing

 Early in the Monitoring Period or prior to a hauling event, seven samples are collected over a two week period of time. Each sample is collected in the laboratory provided container using sterile technique.

Fecal Coliform Testing, Follow-up

 Subsequent hauling events will include a single Fecal Coliform sample prior to hauling.

Specific Oxygen Uptake Rate (SOUR) Testing

 Prior to a hauling event duplicate SOUR tests will be conducted on the fully stabilized sludge. From a thoroughly mixing digester a sample of about 1 L is collected in a clean container and analyzed immediately. The duplicate test will be analyzed using a fresh sample.