17 center pivot systems. The collected solids will be used as bedding after composting, land applied, or taken off the farm while the settled solids will be spread on crops on the farm that are not reachable by the effluent irrigation system. The spreaders will apply the materials uniformly across the receiving field in accordance with the nutrient management plan provided. The farm will have adequate equipment and protected storage areas to ensure that no raw manure/bedding materials will be stored in uncovered staging areas. Composted bedding materials may be stored in uncovered areas. The farm will purchase a slurry spreader to transport and apply the solids accumulated in the solids settling tank.

The fresh bedding materials will be stored in a new storage barn near the power generation building. The cattle barns bedding will be spread by a spreader or blower wagon/truck. It is anticipated that the initial layer of bedding material will be spread just after cleanout and before the animals are brought back into the barn. Additional bedding will likely be blown in from the outside edge of the barn, but could also be spread from the feed lane on an as needed basis. Periodical grading of the stacked bed with a power rake may be needed to level the bed. The dairy barn bedding will be either sand or composted/dried solids from the screw presses.

Most of the animal feed will be grown on the farm in the form of forage crops, such as corn, sorghum, and ryegrass. These forages will be processed and stored in a large bunker silo or silage bags located near the barns (Figure 4), before being fed to the animals. Other feed products, such as grain mixes, will be purchased and stored in a covered commodity barn also located near the confinement barns (Figure 4).

Stormwater

The roof runoff from the cattle feed barns is directed to a large retention basins located on the south of the barns while the dairy freestall barns have retention ponds along the side of them as shown in Figure 4. All of the barns have been guttered with down spouts every thirty feet. For the five stacked-bed confinement barns the down spouts are connected to an 8" PVC pipe, which are connected to progressively larger corrugated stormwater pipes that ultimately enters the large original existing retention basin via a 30" pipe. All surface water drainage from the feed commodity facilities including the bunker silo is also directed to a large retention pond located south and west of the commodity barns. The system is designed so that no offsite discharge will occur from the commodity storage facilities for storms up to and including the 25-year, 24-hour storm event. This pond also handles excess road runoff and runoff from the bio-energy facility. Details of the cattle feeding facilities stormwater system are provided in the "*Stormwater Management Plan for Cattle Feeding Operation Facilities at Suwannee Farms*" dated June 10, 2008, which is on file with FDEP as part of the ERP permit requirements and in good standing.

The roof runoff from the dairy barns will be handled in retention ponds located along the sides of the barns as shown in Figure 4, thus not requiring any guttering on the barns. The ponds are sized based on retaining the 100-year storm event on site. The "*Stormwater Management Plan for Dairy Facilities at Suwannee Farms*" dated May 27, 2014. According to this plan the retention ponds will be constructed to meet the following minimum design requirement. The ponds shall be constructed to a depth of 2 feet with 3:1 side slopes for easy maintenance with a total surface area calculated as:

Pond Area (acres) = contributing roof area (acres) x .95 + access road area (acres) x 0.7