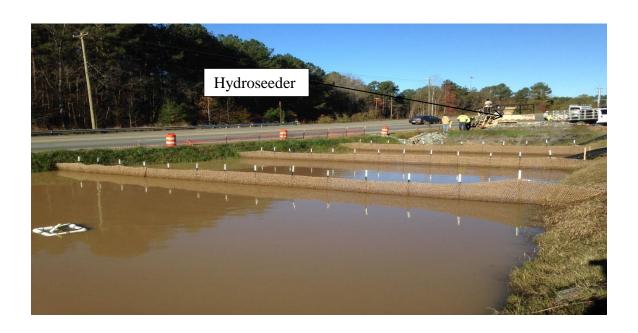
Dragados FLOC Demo 9.8 Pond November 20, 2015

Correct dosage of FLOC was done by calculating pond volume by 90 L x 45W x 3D x 7.3 to get total gallons which was 88,695. FLOC dosage was then calculated at 1 lb. per 1,000 gallons (this is a typical dosage amount for sediment basins), which was 89 lbs., 1-50 lb. bags were dosed into the basin totally 100 lbs. (a little overdosed, due to no measuring device in the field.

A 1200 gallon hydroseeder was used for the application and the dirty basin water was used to fill the hydroseeder where the FLOC product was dosed in manually and agitated inside the hydroseeder tank. The FLOC slurry was then sprayed topically into the basin using a 2" spray nozzle from the hydroseeder tower to provide for a forceful, lofty spray pattern. Application time was 9:00 a.m.



9.8 pond before treatment



9.8 pond 45 minutes after FLOC application



9.8 45 minutes after treatment



9.8 pond at 11:17 a.m. the following day 11/21/15



9.8 skimmer baffle area before FLOC treatment



9.8 skimmer baffle area 3 hours after FLOC application



9.8 skimmer baffle area at 11:17 a.m. the following day 11/21/15



9.8 basin 45 minutes after FLOC application



9.8 basin 11:17 a.m. following day 1/21/15 Clear all the way to the bottom



Clear water coming from skimmer discharge pipe at 12:07 p.m. (3 hours after FLOC application)



Conclusion

A simple application of a "pump and treat" approach with a hydroseeder was very successful, inexpensive and non-time consuming and produced drastic results resulting in true, quick flocculation.

Flocculation of the basin was produced within 45 minutes creating clear water in the top of the basin water.

Deeper flocculation was produced in 3 hours or less (site was not manned to se exact time) after treatment and full flocculation in less than 24 hours (not exact timing of full flocculation in the basin as it was not checked until the following morning, full flocculation may have been produced sooner than 24 hours).

Agitation and correct dosing of the FLOC material proved to be very successful and timely to dewater basins as needed.

FLOC should be applied in any inlet, outlet and any ditch lines coming into the basin to keep the basins clean with any incoming stormwater/groundwater. This can be achieved by using granular FLOC on wattles and matting or by attaching FLOC Socs to the wattles and FLOC Bags in any inlet/outlet pipe.



