innovative turf solutions
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Floc™ Socs

Flocculation using our Floc™ Flocculating Agent results in:

- Reduced Quantity of Chemicals
- Increased Settling Rates
- Increased Hydraulic Capacity
- Increased Flocculent (Floc) Size
- Improved Flocculent (Floc) Shear and Mixing
- Heavy Metals Removal and Recovery
- Sludge Leachability Tests with reduced Environmental Liability
- Enhanced BOD/TSS Removal
- Reduced Impact on TDS/EC
- Meets US EPA TCLP (Toxic Characteristic Leaching Procedure) testing
- Works Over Broader pH Ranges (4 to 12)
- Reduced Costs

Flocculation or **floculation**, is the process of adding a flocculant, coagulant or other catalyst to dirty water or wastewater. The flocculant then binds with the contaminants to form flocculent or floc. This process is a critical part of virtually all discharge sites or wastewater treatment. Separating solids from liquid is the primary basis of the treatment.

Flocculation is a clumping together of substances or **encapsulation of substances** that form **flocculent**.

Innovative Turf Solutions' flocculants are based on natural products to bind to contaminates in your discharge site or wastewater. This causes the contaminants to not only floc up but also become encapsulated in the flocculant.

Floc™ is designed to break emulsified oils as well as encapsulate the heavy metals or entrained oil in a strong floc.

The Floc™ products are formulated from chemicals that are either NSF 60 approved for drinking water application, FDA approved for direct human contact, or meeting the GRAS status as defined by the FDA.

Additional benefits to you are that the Floc™ products operate over a wide pH range, generate a high shear strength floc, require no additional chemistry to dewater, **simplify the operations by using just 1 product**, and **reduce operating costs.**

Floc™ products coagulate, break emulsified oils in water, change the pH, encapsulate the metals, and flocculate to separate the solids from the discharge site or waste stream resulting in the ultimate flocculation**.**

Placement
Each Floc™ Soc is designed for placement within a ditch averaging 8 – 12 ft wide and 4 – 6 ft deep, 4 socs may be required depending on turbidity (sediment content) and water flow. Placement should occur closest to the flow of water. All factors are variable (slope, water content and velocity of water) due to these variables, placement and number of socs will vary. As an example in a 8' wide x 4' deep ditch with highly turbid water and relatively fast moving water may require 4 Floc Socs at 100 yards distance downstream. Floc™ Socs may also be zip tied to wattles, silt fence or hay bales and may also be used in conjunction with rock check dams and inserted into pipe drainages at the inlet or outlet.

Note: Actual GPM or dosage will vary based on site criteria and soil/water testing.

Directions for Use
Remove plastic covering and slip socs into water to begin sediment control process. Placement is made per ditch size and volume of water. (for your convenience each soc has two loop hangers incorporated into it).

Patents Pending