

**RAIDER ENVIRONMENTAL SERVICES, INC.
OPA LOCKA, FLORIDA**

ATTACHMENT 4

**SLUDGE, RESIDUE, AND BYPRODUCT
MANAGEMENT**

October, 2013

SLUDGE, RESIDUE, AND BYPRODUCT MANAGEMENT DESCRIPTION

Sludge, residue and by-products from filters, tank bottoms and or storage tank, etc., are removed as needed, on a frequency which depends on volumes (layer) less specific on frequency of oil and oily waste received and processed at the facility.

The sludge and sump solids come from filter baskets and pump sumps. These materials are commingled . This washing procedure minimizes the quantity of waste that must be shipped off-site for disposal and placed in containers. Representative samples will be obtained after start-up and characterized Sludge residues, filter basket solids, and other residues are shipped in bulk to a State permitted landfill or thermal treatment (waste to energy) facility. Any wastes that contain free liquids will be tested for flashpoint, prior to shipment. If found not to be characteristic for flashpoint, these materials may be sent to a State permitted facility for solidification and/or ultimate disposal at a Treatment, Storage. and Disposal Facility (TSDF).

Solid material or residue that accumulates over time in the bottom of separation vessels, pump trucks, or tankers is removed and analyzed for Petroleum Product Contaminants of Concern, as defined in 62-770 Table A, F.A.C. Solids that are not hazardous as defined in 40 CFR Part 261 limits are stabilized with an inert organic material (such as saw dust. granular/clay absorbent, etc.) and are sent for disposal as a non-hazardous waste at a secured landfill or sent for thermal treatment. Solids that exceed the 40 CFR 261 criteria for classification as a characteristic hazardous waste are containerized and disposed at an off-site licensed TSDF. Any material sent to a TSDF is accompanied by a hazardous waste manifest.

Whenever a tank is cleaned, a sample of the sludge will be collected for analysis. The analytical testing will include, at minimum, TCLP 8 RCRA Metals, TCLP Volatiles, TRPH, PCB's, Total Halogens, and Percent Solids. Any solids determined to exceed the 40 CFR 261 criteria for classification as a characteristic hazardous waste are disposed at an off-site permitted Treatments, Storage, and Disposal Facility (TSDF). Each material sent to the TSDF is accompanied by a hazardous waste manifest.