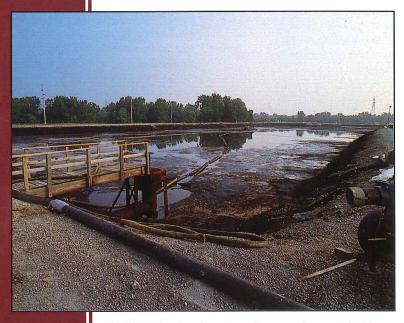


## Experienced Environmental Solutions for Crude Oil Refineries





in the <u>Fortune</u> 500 are OHM clients.



OHM sludge treatment services can be provided for the management of both continuously generated wastes such as sewage sludges and intermittent waste from process unit and storage tank maintenance.

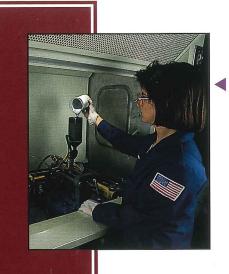
OHM Corporation's services for refineries are directed toward the implementation of cost-effective waste management programs. The goal is to deliver a solution which reduces the total volume of hydrocarbon-contaminated waste and eliminates or minimizes future liabilities—while still protecting the health and safety of plant personnel, community neighbors and OHM workers.

Specializing in the on-site treatment of wastes, OHM has developed a new alternative for refineries faced with regulatory pressures that are increasing the categories and volumes of hazardous wastes. By combining sludge dewatering equipment with low temperature thermal drying technology, OHM can produce a cost-effective system for the management of RCRA-regulated wastes which include:

- API Separator Sludges
- Pond Sediments
- Slop Oil Emulsion Solids
- Nonleaded Tank Bottoms
- DAF Float
- · Other Separator Sludges







## Cost-effective solutions for the management of hydrocarbon-contaminated wastes consists of:

- Sampling and Analysis: Moisture, solids, organic concentrations and BTU values are determined. Treatability testing is done to develop the most appropriate process design.
- 2. Dewatering: Sludges are chemically treated to increase solids separation. Using recess chamber filter press equipment, the sludge is processed to achieve volume reduction of 40% to 75% in the resulting filter cake. The system can also include on-site treatment of water to meet NPDES criteria and POTW requirements.



OHM utilizes its own OSHA-certified

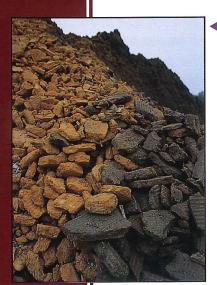
equipment. OHM serves as the single

personnel and mobile treatment

source for the management and

implementation of the project.

- 3. Drying: In the OHM designed and fabricated dryer, preheated air is fed into a rotary drum to drive off moisture and volatiles. The volatiles are drafted through a venturi scrubber and condenser prior to discharge. A vapor phase carbon cell can be added if needed. Drying further reduces the waste volume by removing greater than 90% of the water from the filter cake. OHM coordinates and helps secure the necessary permits to meet state and local air quality standards.
  - OHM can provide a comprehensive cost analysis, comparing various sludge management alternatives. The combination of dewatering and drying can provide an environmental solution that is often only half the cost of other alternatives.



4. Disposal: If the energy value of the dried cake meets minimum standards, the waste can be used as supplemental fuel for cement kilns or in a solid fuels recycling program at a fraction of the cost incurred for off-site incineration. Likewise, if incineration is the preferred method, significant cost savings can be achieved through the volume reduction of the filter cake produced by the dryer.

To secure more information about this waste management service and to arrange for a cost comparison of the alternatives, contact:

OHM Corporate Headquarters 800-537-9540

**Baton Rouge, Louisiana**Dewatering/Treatability Laboratory
504-389-9596

## Regional Offices:

Findlay, Ohio 419-423-3526 Houston, Texas 713-875-0000 Norcross, Georgia 404-729-3900 Princeton, New Jersey 609-987-0010 Walnut Creek, California 510-256-6100



