

WASTE MANAGEMENT

Representative Project Experience

WASTE MANAGEMENT & DISPOSAL PROJECT EXPERIENCE

Client	Facility Type	Waste Types	Scope of Work & Description
City of Indianapolis, Department of Public Works	Municipality	Hazardous, Non-hazardous, Orphan drums, Empty drums	KERAMIDA developed handling and management procedures consistent with requirements of ISO 14001 EMS. The procedures developed for waste management were one element of the larger scope of work for EMS development. The procedures were implemented and followed.
Indiana Department of Administration	Governmental Agency	Hazardous, Non-hazardous, PCB, Universal, Pesticides, Unknown materials	KERAMIDA performed characterization, classification, packaging, and disposal. The agencies and offices include hospitals, printers, laboratories, photolabs, maintenance and support operations. KERAMIDA has an ongoing contract to assist all agencies with waste management and disposal needs.
Indianapolis Department of Transportation	Municipality	Hazardous	KERAMIDA provided turnkey services for development of closure plan, sampling, waste disposal and closure certification.
Indiana Department of Corrections	Governmental Agency	Hazardous	KERAMIDA provided hazardous waste management for the unit closure. Key negotiations were conducted to limit the contaminants of concern.
Confidential Client	Autoparts Manufacturer	Hazardous and Non-hazardous	KERAMIDA performed equipment cleaning and decommissioning, characterization, classification, and disposal. Over 1 million gallons of various waste waters, chemicals, and sludges were disposed.
EAR Specialty Composites	Plastics Manufacturing & Warehouse	Hazardous, Non-hazardous, Universal	KERAMIDA developed management plans, characterization, and completion of reports. There were special considerations for incineration of non-hazardous general waste. KERAMIDA has an ongoing contract for regulatory assistance and vendor auditing.
Automotive Castings Manufacturer	Foundry	Hazardous, Non-hazardous, Universal	KERAMIDA provided complete non-hazardous waste classification and agency approval, and assisted with agency inspections. Recommendations for waste segregation were implemented that resulted in streamlined waste management. The agency inspection was completed with no deficiencies cited.
Elan Pharmaceuticals	Pharmaceutical Manufacturing	Hazardous, Methylene Chloride Storage Tanks	KERAMIDA established compliance with 40 CFR Subpart AA, BB, CC. KERAMIDA completed integrity testing, leak testing, and the associated documentation.
Simon Management Group	Retail Facilities	PCB, Universal	KERAMIDA provides ongoing classification and disposal services for this client. PCB ballasts, capacitors, and fluorescent bulbs are managed. All tasks are completed on time.
Back 2 Basics	Reprocessor of Municipal Waste	Municipal Waste	KERAMIDA facilitated the acquisition of permits for several facilities, to allow application of processed municipal waste to agricultural land.
Wayne County Commissioners	Former Swayne Robinson and Company Foundry	Hazardous, Non-hazardous, Unknown materials, PCB	KERAMIDA provided characterization, Classification, packaging, and disposal. Large volumes of sand, slag, bricks, wood, metal, lead wastes and other wastes were managed and disposed.

Client	Facility Type	Waste Types	Scope of Work & Description
Indiana-American Water Services	Water Utility	Water treatment chemicals	KERAMIDA provided classification and completed waste disposal.
Rochester Metal Products	Foundry	Hazardous	KERAMIDA completed a hazardous Waste contingency plan and training. The plan was implemented.
City of Garrett	Vacated Manufacturing Plant	Hazardous, Non-hazardous, and Unknown materials	KERAMIDA was hired to provide waste sampling, classification, packaging, and disposal. Waste sampling of a large number of containerized and bulk unknown wastes was completed, and disposal requirements were established.

ADDITIONAL RELEVANT EXPERIENCE - SOLID WASTE MANAGEMENT

STATE HAZARDOUS WASTE SITING AUTHORITY PERMIT

KERAMIDA was retained by Authority to review major application for a hazardous waste landfill construction and educate Authority on the issues and their merits. Issues included adequacy of technical landfill design, hydrogeological considerations, air emission concerns, noise, traffic, and waste generation/need for the facility considerations. KERAMIDA conducted training sessions for the Authority, reviewed the eight-volume application and prepared a written report on its merits, participated in all public meetings held by the Authority and provided technical support to the Authority during its three-day deliberations for permit approval.

LANDFILL GROUNDWATER MONITORING

KERAMIDA performed comprehensive compliance groundwater monitoring and statistical evaluation of data for several municipal and industrial landfills. An example is the Madison County Landfill, where KERAMIDA conducts semi-annual groundwater sampling and statistical analysis which includes: the collection and analysis of groundwater samples from 14 monitoring wells that range from 2-inch to 4-inch in diameter; field measurements of specific conductance, pH and temperature, static water level and total well depth; and the statistical analysis of the groundwater quality data using EPA's GRITs statistical software package. As part of KERAMIDA's contract, quarterly methane monitoring was also conducted at this facility. The methane monitoring program included checking methane levels using a Digiflame methane monitor, total volatile organic levels using a photoionization detector and LEL levels using a Gastech monitor.

OLD SOLID WASTE LANDFILL CLOSURE CERTIFICATION, performed for Military Department of Indiana: KERAMIDA reviewed closure activities that had taken place at the site over several years. Due to the age of the landfill and the time that had elapsed since its closure, it was necessary to negotiate the closure specifications with the IDEM's Solid Waste Engineering Section. KERAMIDA performed geotechnical and topographical surveys to assess compliance with the closure requirements. Recommendations were provided regarding added cover material, site grading, security, and financial assurance. A Closure Certification document with a Professional Engineer's seal was completed after all closure requirements were met. (1997)

SANITARY LANDFILL CORRECTIVE ACTION

KERAMIDA has designed and negotiated with state agency and implement corrective action for sanitary landfill to address off-site contamination.

SOLID WASTE LANDFILLS - CLOSURE/POST CLOSURE PLANS

KERAMIDA has prepared numerous closure and post-closure plans for solid waste landfills and industrial special waste disposal sites for submittal to the state environmental agency in compliance with state rules.

INDUSTRIAL SOLID WASTE DISPOSAL

KERAMIDA provided strategy assistance and support in negotiations with regulatory agency in setting guidelines for disposal sites for cement kiln dust.

MONOFILL PERMIT APPLICATION

KERAMIDA prepared permit application for cement kiln dust monofill and assisted Client with its negotiations with IDEM. The permit application included elements of geological exploration due to Karst terrain.

AQUIFER OF SIGNIFICANCE EVALUATION FOR MUNICIPAL LANDFILL

KERAMIDA evaluated data of hydraulic conductivity, performed statistical evaluations, assessed significance of information generated through equations versus information obtained by slug tests and successfully presented to state agency conclusion that aquifer was not an aquifer of significance, for purposes of compliance with regulatory requirements.

SOLID WASTE DISPOSAL FEE EVALUATION

KERAMIDA evaluated fee structure and justification and reviewed technical documents provided in support of the fee by solid waste disposal vendor to solid waste commission.

AIR MODELING OF EMISSIONS FROM MUNICIPAL LANDFILL

KERAMIDA performed comprehensive ambient air modeling for projected emissions during the active life and post-closure life of a major new municipal landfill, in order to determine permit requirements.

SANITARY LANDFILL EXPANSION DESIGN AND PERMITTING, numerous Indiana sites

KERAMIDA prepared and submitted permit application to state agency; negotiated with state agency; performed landfill expansion investigations and design; monitored well installation. Successful issuance of landfill permit.

COAL ASH AND CONSTRUCTION-DEMOLITION WASTE LANDFILL for major university, Indiana

KERAMIDA prepared and submitted permit application; provided landfill design, geological exploration program; represented the University in negotiations with Indiana Department of Environmental Management. Successful issuance of landfill permit.

FOUNDRY SAND MANAGEMENT PLAN

KERAMIDA conducted a comprehensive evaluation of, and prepared report for, management alternatives for foundry sand for a foundry industry.

SLAG ASSESSMENT

KERAMIDA performed an assessment of conditions and feasibility for slag reuse in construction sites.

FOUNDRY SAND REUSE

KERAMIDA performed an assessment of options for foundry sand disposal and reuse.

SLAG AND FOUNDRY SAND

KERAMIDA assisted foundry in evaluation of restricted waste disposal options.

INDUSTRIAL WASTE MANAGEMENT PLAN

KERAMIDA conducted a comprehensive evaluation of, and prepared report for, management alternatives for by-products of cement production for major cement manufacturer, and evaluated feasibility of disposal sites.

INCINERATOR PERMIT for major university, Indiana

KERAMIDA prepared and submitted construction and operation permit applications for incinerator of animal carcasses. Successful issuance of permits.

WASTE-TO-ENERGY INCINERATOR ASH

KERAMIDA performed an evaluation of ash characteristics; regulatory negotiations and lobbying for waste classification; ash monofill disposal and environmental impact evaluation.

SOLID WASTE LANDFILL VALUATION

KERAMIDA evaluated costs and revenues of municipal landfill used for the facility's valuation in anticipation of litigation.

* **Note:** The names and locations of our clients have been withheld for reasons of confidentiality. References upon request.