

WATER MANAGEMENT

Representative Project Experience

NPDES PERMITTING AND LIMITS DEVELOPMENT

KERAMIDA has provided assistance to many municipal and industrial clients in the preparation of NPDES permit applications and the development of appropriate permit limits and biomonitoring conditions, and has negotiated successfully on their behalf with state environmental agencies and the U.S. EPA offices in Regions One and Five.

STORMWATER

KERAMIDA has provided assistance to hundreds of industrial and municipal clients in the preparation and negotiation of NPDES permit applications, stormwater management strategies, and the preparation of SPCC and SWPP plans.

STORMWATER ENFORCEMENT

KERAMIDA provided extensive evaluation of stormwater management and discharges, facility expansions, and past practices, and provided litigation support in a multi-million dollar U.S. EPA enforcement case.

RECHARGE POND

KERAMIDA conducted an extensive recharge pond study for evaluation of environmental impacts of adjacent land practices by an energy generation facility on the pond's water and sediment and the vicinity's groundwater.

FISH KILLS

KERAMIDA conducted extensive investigations of fish kills, on behalf of potential dischargers, including:

- Circumstances of fish kill
- River studies
- Fish sampling and cause of death determination
- Chemical breakdown in surface waters
- Modeling of dispersion

The work included extensive evaluation of POTW operations, and presence of toxic compounds in sewers.

MULTIPLE NPDES DISCHARGES

KERAMIDA performed a river data evaluation to determine the need for controlling ammonia discharges to the river and to determine appropriate permit conditions for a multiple of municipal and industrial point discharges.

WETLANDS DELINEATION AND MITIGATION

KERAMIDA conducted identification, delineation and mitigation of wetlands as part of many site assessments, major development projects, and landfill siting and design projects.

STORMWATER RUNOFF

KERAMIDA prepared comments to proposed federal storm water regulations on behalf of a major municipality, and designed a management plan for the municipality's compliance with forthcoming storm water regulations to be used as a planning guide. The management plan included:

- Storm water discharge and stream monitoring plans
- Critical information gathering and review schemes
- Estimation of associated costs
- Coordination with local industry/business community
- Development of local authority requirements

HAZARDOUS SUBSTANCES IN STREAM

KERAMIDA performed an investigation of the presence of hazardous organic and inorganic substances in Eagle Creek and Eagle Creek reservoir, an evaluation of possible pollutant contributing areas, and an assessment of pollutants' effects to human health and environment.

DIOXINS IN STREAM

KERAMIDA investigated the presence of dioxins in sediments of White River, Indiana, their possible sources and the environmental impact.

WATER QUALITY ASSESSMENT OF WHITE RIVER, INDIANA

KERAMIDA directed a half-a-million dollar, multi-year monitoring and assessment study of White River, Indiana, to evaluate the impact of discharges from two POTWs and metropolitan non-point sources on the river's quality. The study included collection of water and sediment samples in multiple locations as well as collection of invertebrate organisms for in-stream biomonitoring.

STORMWATER IMPACT ASSESSMENT ON STREAM, INDIANA

KERAMIDA directed a stormwater monitoring and assessment study of Fall Creek, Indiana, to evaluate the impact of metropolitan runoff on the stream's water quality over numerous storm events. The study included collection of stream water samples before, during, and after a storm, for multiple storm events.

NORTHSIDE/ENVIROCHEM SUPERFUND SITES - DETERMINATION OF MIGRATION OF CONTAMINANTS, INDIANA

KERAMIDA reviewed EPA's RI/FS and other available data, on behalf of PRPs. KERAMIDA concluded that the organic contaminants found regularly in the adjacent stream could not have been coming from the superfund site, as determined by EPA in the RI/FS, and that the proposed remedy would not correct the stream problem. KERAMIDA persuaded EPA to conduct additional monitoring and the source of the stream contamination was eventually found to emanate from an unrelated site.

STEEL MILL SITING

KERAMIDA represented the steel mill in a public hearing. KERAMIDA made a presentation and successfully resolved water issues that had stonewalled the project prior to KERAMIDA's involvement, thus enabling the mill to obtain approval from the zoning board.

NPDES/STORMWATER PERMITS

KERAMIDA provided technical support to the City of Indianapolis for the preparation of its applications for the NPDES permit renewals for its two POTWs and the stormwater NPDES. The work included:

- Technical evaluation of plant performance and river water quality data collected over a period of 10 years
- Interpretation of applicable present and forthcoming regulations
- Evaluation of their impact on the permits and development of strategies for compliance
- Negotiations with regulatory agencies

WATER QUALITY STANDARDS

KERAMIDA evaluated the impact of new Indiana water quality standards on a major municipality's NPDES permits and on industrial indirect dischargers. KERAMIDA also prepared comments to the proposed water quality regulation on behalf of the municipality.

GREAT LAKES INITIATIVE (GLI)

KERAMIDA has participated in the state's efforts to develop the Indiana GLI regulations and has advised municipal and industrial clients on the impact of these regulations.

STORMWATER PERMITTING ACTIVITIES

KERAMIDA prepared a Group Permit Application on behalf of clients in the same specialty industry group. Our staff have received intensive training on storm water sampling methodology and have conducted the sampling and prepared the necessary applications on behalf of numerous industrial clients, as well as trained industrial representatives for sample collection.

NPDES LIMITS DEVELOPMENT

KERAMIDA was retained by a major municipality to assist in the development of its NPDES permit limits, in the preparation of comments to the proposed permit and in negotiations with regulatory agency. This included evaluation of the impact of the Great Lakes Initiative, as well as evaluation of multiple river water, sediment and invertebrate studies, effluent toxicity assessments, and industrial discharges.

WET WEATHER LIMITS DEVELOPMENT

KERAMIDA was retained by a major municipality to assist in the development of technical and policy positions for wet weather management issues, and to assist in negotiations with regulatory agency, including preparation of comments for impaired waters.

NPDES PERMIT ASSISTANCE for east coast industrial facility

KERAMIDA drafted comments to the proposed permit and established technical justification which convinced EPA Region I to issue the final permit without the objectionable limits included in the proposed permit.

INDUSTRIAL STORMWATER PERMITS

KERAMIDA assisted numerous industries to comply with general stormwater NPDES permit requirements, including preparation of documents, sampling requirements, and pollution prevention plans.

CHLORIDE IN GREAT LAKES STUDY

KERAMIDA performed a study to evaluate the presence and cause of chloride in the waters of Lake Michigan under a grant from U.S. EPA Region 5.

TOXIC POLLUTANT LOADING STUDY to determine causes of violations of effluent limitations in NPDES permit

KERAMIDA was retained by a municipality in Indiana to determine the causes of violations of effluent limitations in its NPDES Permit. KERAMIDA's work included:

- Determination of appropriate sampling locations, methods, and frequencies
- Collection of wastewater and drinking water samples for cyanide and metals analyses
- Interpretation of data and preparation of reports containing findings and recommendations for compliance
- Toxicity evaluation of industrial discharges and toxicity elimination evaluation
- Representation of municipality before state agency and the U.S. EPA to negotiate appropriate permit conditions and limitations.

DRAINAGE STUDY AND IMPLEMENTATION

KERAMIDA's work included:

- Evaluating drainage alternatives for large commercial trucking facility
- Calculating drainage basin flow and performing hydrologic model to obtain construction permit
- Oversight of design
- Preparation of applications to city and state agencies
- Successfully negotiating with both agencies to reverse their original refusal and issue the permits. Permits were granted by both agencies.

CONSTRUCTION IN A FLOODWAY PERMIT

KERAMIDA has prepared numerous permit applications and performed floodway modeling using HEC-2 and HEC-RAS software; prepared IDNR permit applications, including soil erosion plans; negotiated with IDNR and obtained permits.