



# ENVIRONMENTAL SERVICES CONTRACT – NATIONWIDE

Orlando, Florida

## PROJECT HIGHLIGHTS

*“I have rarely had the pleasure of working with such a talented and dedicated group of consultants. We value your organization like an extension of family. You have been very responsive to all of our needs and requests and have delivered quality products.”*

*– EHS Manager,  
Confidential Global  
Security Company*

### CONTRACT OVERVIEW

The firm has delivered more than \$25 million in environmental compliance, remediation, engineering, training, staff augmentation and design/build projects since 1998 for this confidential global security company. Services have been completed at more than 15 corporate facilities across the United States.

Specific work under this contract has included Hazardous and Solid Waste Amendment permitting and RCRA assessments; inspections of 90-day hazardous waste storage and satellite waste storage areas; successful completion of over 30 emergency response actions; decontamination of over 200 facilities; inspections and training for 10 petroleum tank systems; waste characterization and disposal annually for over 40 hazardous waste streams; Title V construction and operations air permitting; design and installation of air pollution control systems; visual emissions testing for permitted stationary air sources; wastewater evaluations and permitting; and pretreatment wastewater facility design, installation, and operation.

The contract has also involved National Pollution Discharge Elimination System (NPDES) sampling and permit development; SWPPP updates and electronic conversions; drinking water surveys and wellhead protection; environmental resource permit development and monitoring; wetland and T&E species surveys; mitigation bank permitting and credit marketing support; and petroleum and chlorinated solvent assessment and remediation. MSE has also received multiple recognitions for cost control and quality implementation on various projects.

### ACCOMPLISHMENTS

- Served as prime contractor for environmental services contract for more than 18 years, providing continuing professional services and engineering for client’s industrial facilities across the United States, and concurrently managing up to 75 projects with all labor categories as required by the contract.
- Developed programs and reporting for compliance under federal and state programs including CERCLA, TSCA, RCRA, EPCRA, CAA, and CWA.
- Provided compliance and design expertise in many PWS areas including HM/HQ, CAA, CWA, SDWA, Natural resources, remediation, and SAP.
- Developed site-specific data management systems to support stormwater and air quality programs
- Decontaminated and decommissioned more than 500 pieces of equipment in various facilities.

*“[MSE] completes tasks on time and meets deadlines. They are requested to perform complicated tasks on little or no notice and this company always comes through for us. If they do not have the expertise needed, they will go find it from another supplier, or they develop it for us themselves. They meet their report deadlines, and are expert at keeping us apprised of delivery schedules, giving enough advance and contingency if schedule changes are expected.”*

*– Sr. Environmental Manager  
Confidential Global Security Company*

## HAZARDOUS WASTE MANAGEMENT

- Conducted weekly inspections of six 90-day hazardous waste storage areas, two waste storage facilities, waste consolidation pads, and numerous satellite waste accumulation areas
- Provided corrective action recommendations for audit findings
- Completed weekly waste (hazardous, universal, and controlled) inventory tracking and reporting to client
- Completed HSWA permit and RCRA assessments for compliance with permit requirements and state/federal regulations
- Performed regulatory compliance applicability reviews for proposed regulations and operational processes, including research, regulatory coordination, site reconnaissance and summary letter submittal to multiple client stakeholders
- Assessed facility operations, site conditions, QC programs, regulatory status, and financial stability of TSDFs for inclusion into client-approved vendors list
- Executed over 30 emergency response actions including material isolation, containment, hazard assessment, cleanup, restoration activities, and closure report development of HM releases of petroleum hydrocarbons, solvents, and radioactive contaminants
- Decontaminated more than 200 facility structures and process equipment containing contaminants such as petroleum hydrocarbons, acids, caustics, thorium fluoride, hydraulic fluids, hexavalent chromium, beryllium, lead, asbestos, tungsten hexafluoride, and miscellaneous solvents
- Developed and implemented decontamination plans, industrial hygiene monitoring and safety plans, waste characterization, container management, restoration, and submittals
- Delivered annual universal and hazardous waste onsite training for over 200 staff and contractors

## HAZARDOUS MATERIAL MANAGEMENT

- Conducted monthly inspections for 10 petroleum tank systems
- Performed annual audits of the facility tank management program
- Completed annual review and revision of facility-wide SPCC and integrated contingency plan
- Provided onsite staff for over 10 years to perform hazardous materials tracking database input and updates
- Conducted annual inspections and updates to the facility Asbestos Management Plan
- Updated facility's Toxic Management Plan as processes and/or procedures were modified

## ENVIRONMENTAL SAMPLING AND ANALYSIS

- Performed annual waste characterization and sampling for disposal of 30 to 40 new and/or revised waste streams
- Completed numerous compliance multimedia sampling activities to support NPDES multisector general and construction permits, local municipality wastewater discharge permit, hazardous/industrial waste characterization, radioactive media contamination assessments, hazardous materials release assessments, groundwater and soil assessments, lead and chrome-based paint assessments, and PCB article/debris management and groundwater wells
- Prepared site-specific SAPs and SOPs for recurring sampling activities

## SUCCESSES

*MSE received a letter of commendation from this confidential client's Environmental Management Department for outstanding performance on a missile silo decommissioning project. MSE was also instrumental in the*

*Orlando facility's Environmental Health and Safety division's internal nationwide award in June 2011 for project success based on the use of sustainable processes and teamwork to result in exceptional problem solving.*

## AIR QUALITY

- Completed system engineering design, installation, and annual maintenance for two acid emission scrubbers (10,000 and 30,000 ft<sup>3</sup> per minute) associated with two plating facility emission points, including demolition and decontamination of existing systems and ductwork
- Conducted condition assessments on permitted pollution control devices to define functionality and effectiveness of maintenance activities; provided recommendations, findings, and cost estimates for corrective actions involving boilers, acid scrubbers, particle filtration systems, sludge dryer, Venturi scrubber, spray booths, lab hoods, and incinerator
- Performed EPA Method 9 visible emissions tests for permitted sources per state requirements
- Completed comprehensive preventive maintenance schedules and tasks for permitted pollution control devices
- Performed air inventory assessments to support State of Florida FESOP
- Provided onsite technical support with proprietary client databases to aid in development of annual air emission operating reports, FESOP data management requirements, and internal/external compliance assessments including data entry, data validation, system error correction, and reporting
- Assessed proposed federal and state regulation changes to support EHS resource planning
- Evaluated ventilation system duct velocities for compliance with permit and OSHA standards



*MSE has significant experience with turnkey design/build projects such as air scrubber systems, chemical storage systems, and multiple other infrastructure improvement projects.*

## DRINKING WATER

- Completed condition assessments of deionized (DI) water supply and treatment systems for manufacturing, plating, and support
- Completed site surveys to identify and develop site figures defining potable water, DI water, chilled water, steam supply, and distribution systems including review of facility drawings, completion of subsurface utility surveys, onsite reconnaissance, CAD file development (2D/3D) and documenting cross connections, critical valves, and backflow prevention systems
- Reviewed, designed, and constructed potable water utility relocation to support stormwater drainage modification project including identification of subsurface utilities, design of mechanical specifications and schedule, construction of new mechanical system, demolition of existing systems, and testing of potable water system
- Developed well head projection program

## ENVIRONMENTAL REMEDIATION PROGRAM

- Completed design/build for an expedited environmental remediation project under HSWA permit involving source, area, and waste minimization investigations that reduced final construction costs by \$1 million
- Negotiated wetland restoration activities in lieu of mitigation of environmentally sensitive areas that would require excavation, saving substantial project costs
- Led permitting and self-performed construction to save time and cost for design and implementation
- Completed closure of pesticide-impacted soils via risk-based human health assessments and statistical analysis, coupled with target source removal
- Completed closure of petroleum-impacted soils using site-specific anthropogenic data analysis and calculation of alternative cleanup goals in accordance with state and EPA protocols



*MSE's turnkey assessment and remediation capabilities have resulted in millions of dollars in project lifecycle cost savings.*

## WASTEWATER AND STORMWATER

- Assessed annual wastewater program and documented facility compliance with Orlando Utilities Commission (OUC) wastewater discharge permit, FDEP SOPs, and client's policies/procedures including recommendations for wastewater sampling protocols, analyses, equipment calibration methods, pretreatment operations, discharge monitoring reports, and corrective actions
- Submitted OUC wastewater discharge permit renewal applications including wastewater baseline certification statement and industrial pretreatment monitoring report
- Conducted sitewide wastewater discharge survey to define industrial discharge inventories, quantities, and quality including development and submittal of wastewater survey forms to tenants, site reconnaissance, inventory summary generation, revision of site AutoCAD figures, and presentation of findings and recommendations
- Completed wastewater system mapping project for the Micro-Electronics Center including facility drawings review, dye testing, test pit installation, personnel interviews, and SUE survey as well as development of summary report, AutoCAD figures, recommendations, and conceptual designs
- Conducted wastewater studies to identify discharge trends and unique analysis results, focusing on data validation, source identification, and corrective action recommendations
- Completed assessments and development of O&M plans for wastewater lift stations, boiler flash tank, wastewater pretreatment systems, and plating process rinse water systems.
- Conducted system engineering assessments, design, construction, and annual maintenance for the following systems:
  - 5,000-gallon plating wastewater/rinse water transfer station consisting of underground containment, tank installation, controls and electrical controls, containment piping, and structural systems
  - Wet emission scrubber wastewater treatment systems consisting of ionic/ultraviolet light wastewater treatment systems, process controls, and electrical and mechanical systems
  - Industrial wastewater pretreatment system consisting of 60,000-gallon storage tanks, 15,000-gallon batch treatment tanks, process controls, coated concrete containment systems, process water transfer stations, double-walled wastewater and reagent transfer piping, structural, mechanical, and electrical systems
- Completed NPDES multisector general permit monthly inspections, recordkeeping, SWPPP revisions, annual program evaluations, quarterly visual sampling of five outfalls, support of client's P2 team, release tracking, progress reports, input of work order requests, contractor and tenant communication for corrective action resolution, and site-specific AutoCAD figure revisions
- Supported NPDES construction general permits associated with client contractor construction projects including review/submittal of NPDES NOI, SWPPP review, inspection, progress reports, site personnel training, recordkeeping, confirmation of restoration actions, and submittal of NPDES NOT
- Completed biennial wastewater/stormwater point source assessment of the SLRC for compliance with NPDES multisector general permit, including review of exterior buildings and operations to define the status of known, observed piping and/or potential pollution sources
- Updated SWPPP to include new potential pollution sources
- Modeled and tracked impervious surface construction to support South Florida Water Management District (SFWMD) permits associated with stormwater storage and treatment capacities including design/build, certifications of stormwater conveyance systems associated with helicopter pad installation, construction of security access roads, and materials storage areas



*MSE teams have supported water/wastewater initiatives for more than 20 years.*

## NATURAL RESOURCES MANAGEMENT

- Delineated, reviewed, and assessed approximately 2,200 acres of onsite wetlands, which were reviewed by USACE and state regulators
- Conducted site surveys for occurrence of threatened, endangered, and special concern species including gopher tortoise, and bat surveys as well as preparation of a site wildlife utilization document that was accepted by agency personnel
- Prepared draft permit application package that is under review by the state water management district for approval; USACE has approved the prospectus; mitigation banking instrument phase is ongoing
- Developed long-term management goals and schedule (controlled burn, fuel reduction, maintenance intervals, feral hog eradication, etc.)
- Completed habitat analysis through Internet searches, GIS mapping, site reviews, historical aerial reviews and personnel interviews with agency staff, consultants, and other key individuals. Ecological resource information included size and types of resources present (streams, forested wetlands, herbaceous wetlands, species habitat, etc.) and current status of resources (degraded, pristine).
- Conducted site reviews and meetings with USACE and state water management district personnel for review of onsite resources for assessment of wetland quality using the Unified Mitigation Assessment Method (UMAM)
- Prepared and negotiated environmental resource permit required to support site development, dewatering, and temporary wetland destruction associated with environmental remediation
- Developed and implemented wetland mitigation plan including planting, maintenance, and monitoring vegetation associated with the permit

*“They are a supplier who works as hard as we do, and truly are part of our team!”*

*– Sr. Project Manager,  
Confidential Global Security Company*

## DATA MANAGEMENT

- Developed compliance program-specific electronic portable web-based data management systems that included customized features such as layered maps, status notifications, corrective action tracking, electronic forms, and tablet integration.
- Developed a custom intranet-based web application industrial hygiene system to monitor and track industrial hygiene for facilities in Florida and Texas
- Developed a comprehensive, custom, intranet web-based electronic database system to assist the Electronic Manufacturing Facility department with managing its SWPPP electronically

## HEALTH AND SAFETY

- **Safety Program Development.** Completed more than 50 multiple projects involving development and/or refinement of safety procedures, policies, and inspection forms related to isolation of hazardous energy, X-ray equipment use and control, confined space assessment/entry, laser use and registration, evaluation/selection of personal protective equipment, and job hazard analyses.
- **Compliance Assessment.** Completed over 400 environmental and safety compliance assessments/inspections associated with federal, state, and county regulations/laws including RCRA, HSWA, EPCRA, TSCA, OSHA, NFPA, CWA, and CAA.
- **Industrial Hygiene Monitoring.** Completed air monitoring within manufacturing operations for hexavalent chromium, beryllium, general metals/aerosols, dust and vapors. Services included development and implementation of industrial hygiene plans for associated problematic areas within the facilities.
- **EHS Training Programs.** Completed EHS training programs for manufacturing operations including hazardous waste, universal waste and hazardous material transportation management, confined space entry, respiratory protection, powered industrial equipment, HAZWOPER, LO/TO, first aid and CPR, and blood-borne pathogens.
- **Emergency Response Activities.** Completed multiple emergency response projects associated with the discovery of hazardous materials including petroleum hydrocarbons, solvents, explosives, and radioactive contaminants. Included material isolation, containment, hazard assessment, cleanup, and restoration activities.