

 Trinity Consultants is a leading global environmental consulting firm that brings 50 years of experience providing services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Trinity has the technical expertise, industry depth, and specialized capabilities to help clients achieve their goals across the natural and built environments.

Summary of Expertise

Trinity has executed hundreds of complex technical and regulatory projects addressing industrial wastewater systems and PFAS, including: influent and effluent studies, site investigations, source reduction, waste minimization, reporting, wastewater treatment, sampling programs and others. Trinity has extensive experience supporting numerous facilities within the various manufacturing industries throughout the United States, providing comprehensive environmental services that span compliance reporting, multimedia auditing, NPDES permitting, and greenfield facility permitting. Trinity's consultants have in depth knowledge of state regulations and maintain a strong working relationship with the local permitting authorities. In addition, Trinity's consultants bring years of on-site experience, including, but not limited to, managing and troubleshooting waste and process water systems directly at industrial facilities. A summary of our key areas of experience and expertise is provided in the following sections.

PFAS Site Investigations

Conducted technical investigations of PFAS sources and contamination for industrial sites to identify PFAS in process equipment as well as releases to soil and groundwater. Site investigations are required to comply with state regulatory orders for PFAS and related regulatory requirements. Scope of work includes PFAS source identification, sampling protocols, onsite sampling and fieldwork, regulatory negotiations, laboratory data assessments and technical reporting.

PFAS Industrial Studies

Evaluated all potential PFAS release pathways in a composite material production process utilizing equipment similar to a paper machine. Fluoropolymer fibers in an aqueous solution are distributed through a headbox onto a moving wire mesh and then form a solid composite sheet through drying, pressing, and heating sections. White water is recirculated through the machine and then ultimately treated in a filtration system. Trinity recommended best management practices for limiting PFAS exposure to workers and for limiting environmental releases. Potential release streams included treated



wastewater, filtered media, aerosols and volatiles emitted above the wire and drying sections, dust from raw materials handling and cutting/sizing of finished solid product.

PFAS Management and Reporting

Developed PFAS management plan for semiconductor facility to demonstrate to company ownership and stockholders that PFAS-containing materials are handled to minimize environmental releases. Included creating a working definition of PFAS, addressing goals for zero liquid discharge, evaluating point-of-use thermal destruction technologies for air emissions, and describing procedures to comply with Toxic Release Inventory (TRI) reporting and Toxic Substances Control Act (TSCA) Section 8(a)(7) reporting. Led facilities in many industries through TRI reporting determinations following the designation of PFAS as Chemicals of Special Concern, which removes the de minimis exemption for low concentrations. Evaluated waste stream testing data for representativeness of facility operations relevant to TRI reporting.

Wastewater System Assessments

Conducted technical and regulatory reviews of wastewater treatment systems to comply with applicable local, state and federal requirements, including POTW permits, pretreatment standards, federal Effluent Guidelines and others. In addition, scope of work includes auditing and preparing technical plans for wastewater treatment operations, including, Slug Control Plans, Waste Analysis Plans, Toxic Organics Management Plans, Preventative Maintenance Plans, Closure Plans and Tank System Assessments.

Industrial and Sanitary Wastewater Treatment

Performed sanitary and industrial wastewater treatment system engineering design, design review and analysis, system optimization and improvement planning including engineering design, hydraulic

analysis and modeling, treatment system computer modeling, equipment sizing and selection, permitting, construction support, procurement support, system commissioning, start-up and operator training. Scope has also included feasibility and alternatives evaluations, cost estimating, and system hazard and operability risk assessments.

PFAS Drinking Water Treatment

Conducted sampling to assess PFAS contaminant levels in drinking water sources. Evaluated PFAS treatment options acceptable for meeting drinking water standards including estimates of probable construction and operational costs. Planned, implemented and on-going sampling of an on-site pilot-scale column study for optimizing full-scale PFAS treatment system design parameters in compliance with state regulatory requirements. Project has included frequent regulatory agency engagement and informal review.

Waste Source Reduction Programs

Conducted process investigations and prepared Source Reduction Programs to reduce hazardous waste generation and comply with applicable regulatory requirements for various industrial plants and wastewater operations, including, aerospace, metal finishing, aluminum extrusion, coating manufacturing, chemical plants and others. Scope of work includes preparing waste inventories, reviewing wastewater influent and effluent, investigating sources of waste generation, developing source reduction measures, compiling laboratory data and drafting regulatory plans.

Trinity Can Help

Trinity has a broad range of experience both with PFAS and pulp, paper, and tissue throughout the United States. Trinity is a valued partner that strives to provide high quality, detailed deliverables to facilities in order to enhance their EHS&S compliance.

ISO 9001:2015 certified at our corporate office in Dallas, Texas

CONTACT OUR TEAM!

For more information about how we can help your organization, please contact us.

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