

LANGAN CHEMICAL INDUSTRY QUALIFICATIONS



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NEW JERSEY NEW YORK CONNECTICUT MASSACHUSETTS PENNSYLVANIA OHIO VIRGINIA FLORIDA TEXAS ARIZONA COLORADO
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POWER PLANT WASTEWATER TREATMENT SYSTEM DESIGN

Location: PA
Client: Confidential Power Plant Facility
Services:

OVERVIEW

Langan was retained to address concerns associated with the levels of oils/grease from frequent spills to the Delaware River by a large power plant facility. Another concern at the facility was the variation in pH and severe wear and tear in the existing hypalon liner at the Industrial Wastewater Treatment Basin (IWTB). A detailed review of existing site conditions, previous studies and data was conducted by Langan to develop the most efficient design for treating the oil/grease and pH and meet effluent discharge requirements. A characterization of the influent flows was also performed based on a study completed in 1993. After the initial review, Langan developed and designed a Dissolved Air Flotation (DAF) unit with input from vendors. Our teams then prepared the final design package, including a design report detailing the process flow diagram and process and instrumentation diagrams, manufacturer's equipment specifications, and construction drawings. Implementation of the oil/grease removal pH neutralization systems aided the facility in reaching compliance with the effluent requirements.

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AUGUSTA AEROSPACE - ENVIRONMENTAL COMPLIANCE AUDIT

Location: Philadelphia, PA
Client: Augusta Aerospace
Services: Environmental Compliance

OVERVIEW

Langan was retained to conduct an Environmental Compliance Audit at this helicopter repair and maintenance facility. A comprehensive site inspection was conducted by our engineers to review all processes involved at the facility and determine applicable environmental regulations. The scope of the audit covered federal and state regulations in the areas of hazardous waste, residual waste, wastewater discharges, air emissions, chemical management, stormwater discharges, and Right-to-Know training. Langan issued a formal report with recommendations for added or revised compliance procedures, record-keeping and implementation of Best Management Practices. Multiple air emissions issues for the facility were also addressed through the audit. Langan prepared a Permit Application and secured approval for a Minor Emission Facility from Philadelphia Air Management Services (AMS) to address facility wide fugitive VOC emissions

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AIR EMISSIONS - PERMIT RENEWAL AND COMPLIANCE

Location: Philadelphia, PA
Client: Confidential Fleet Operations
Services: Environmental Compliance

OVERVIEW

When their existing operating permit was scheduled for expiration, Langan was retained by the owners of a fleet operations facility in Philadelphia, PA to review air regulations applicable to the facility and re-evaluate permitting requirements. Sources at the site included a gasoline storage and dispensing system and paint spray booth with associated volatile material usage. Langan conducted a site inspection to gather air emission source data and general work practices at the facility. Based on the inspection information, Langan determined that the facility needed to obtain a Synthetic Minor Operating Permit, issued by Philadelphia Air Management Services (AMS). Langan completed the permit application package, which included an Air Pollution Control Act compliance review, reviewed draft permit conditions with the facility, and submitted comments to AMS on behalf of the facility. Upon issuance of the final permit, Langan prepared a summary in checklist form of requirements the facility was subject to, in order to assist in ongoing permit compliance. This checklist is used annually as compliance documentation for the annual compliance certification.

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AIR EMISSIONS - MINOR SOURCE PERMITTING

Location: Collegeville, PA

Client: Transicoil LLC

Services:

OVERVIEW

Langan was retained by Transicoil LLC to obtain a facility- wide State-Only Operating permit for their air emission sources. The primary activity performed at the facility includes fabrication of motion control and rotating electromechanical components, along with liquid crystal displays and modules for aerospace, defense, medical, and commercial applications. As part of these functions, Transicoil operates over 50 individual sources within ten different emission source categories including degreasers, paint booths, ovens, chrome and acid baths, blasting stations, and general solvent uses. The primary pollutants of concern at this facility were VOCs and particulate matter. Langan reviewed all previous submittals to the Pennsylvania Department of Environmental Protection (PADEP), prepared an updated inventory of emission sources, and evaluated pre-existing emissions calculations with regard to accuracy and revisions. Langan then prepared and submitted a State-Only Operating Permit package, provided follow-up correspondence, and coordinated with the Bureau of Air Quality of the Southeast regional office of the PADEP on behalf of Transicoil during the technical review process.

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COMPRESSOR STATION AIR PERMITTING

Location: Washington County & Greene County, PA

Client: Rice Poseidon Midstream

Services:

OVERVIEW

Langan prepared two air-quality permit applications for the construction of the Kryptonite and Pettit Compressor Stations. The applications were submitted to the Pennsylvania Department of Environmental Protection (PADEP) as part of its general plan-approval or general operating-permit application. A Request for Determination was completed for the pigging operations that clean out the pipelines and emergency generators at both locations. Our engineers completed a single-source determination to assess Rice Poseidon Midstream properties within a five-mile radius by mapping nearby facilities to determine whether the project qualified for a GP-5 PADEP air-pollution-control permit. The project met the single-source review criteria, and Langan prepared the permit application, General Information Form, and supporting documents. This work included obtaining equipment information and calculating emission rates based on equipment specifications and EPA AP-42, Compilation of Air Pollutant Emissions Factors, GRI-GLYCalc emissions testing software, and the EPA TANKS 4.0.9d software program. As part of the operating permit application, Langan conducted a full regulatory review, a Best Available Technology review, prepared a Compliance Review Form, Municipal and County Notification letters, and a Pennsylvania Natural Diversity Inventory (PNDI) review according to PADEP requirements.

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COIL COATER WASTEWATER TREATMENT SYSTEM DESIGN

Location: NJ
Client: Confidential - Coil Coating Facility
Services:

OVERVIEW

Langan was retained to address concerns associated with the levels of suspended solids contained in this coil coating facility's discharge of process wastewater to the municipal sewer system. The possibility of inadvertent leaking or accidental discharge to groundwater through the existing system was also of significant concern to the facility and inspecting agency. A detailed review of existing site conditions was conducted by Langan to obtain and develop facility as-built drawings. In addition, Langan obtained field measurements to determine compatibility with process equipment. A wastewater characterization effort was also completed to define average and peak flow rates and effluent quality. Available utilities, location of existing process equipment and the possibility of adverse weather conditions were all recorded to take into consideration during the design process. After the initial review, Langan developed and designed a filtering method to cost effectively reduce solid levels in the facility discharge. Implementation of the solids removal system will aid the facility in reaching compliance with the effluent requirements and save significant fines and further agency violations.

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REAGENT CHEMICAL

Location: Middlesex, NJ
Client: Reagent Chemical and Research, Inc.
Services:

OVERVIEW

This site previously served as a research facility where dried wastewater sludge was used as fill material during site development in the 1960s. The sludge contained hazardous levels of arsenic and other contaminant constituents at levels above the New Jersey Department of Environmental Protection's Soil Remediation Standards. Langan provided site remediation services that addressed two Areas of Concern (AOCs) which included soil contamination associated with site-wide historic fill material and petroleum related soil impacts. Soil contamination was identified adjacent to a former 10,000-gallon diesel UST/20,000-gallon fuel oil UST area and the adjacent Chipper Process Area. An Open Public Records Act (OPRA) was requested to obtain files on previous investigations and remediation completed at the property. Langan engineers also collected soil samples to determine the extent of fill material.

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INNOVATIVE TECHNOLOGIES - PHYTOREMEDIATION

Location: Salem, NJ

Services:

OVERVIEW

Langan evaluated phytoremediation at an active manufacturing facility in southern New Jersey to address contaminated soil, sludge, and lagoon sediment, and to provide a site-wide remedy that includes a landfill 'phyto-capping' system. This approach, that received preliminary regulatory support under the NJDEP Site Remediation Program (SRP), combines major elements of a conventional landfill cap into a single unit, while simultaneously providing an on-site treatment remedy for impacted media resulting from former wastewater treatment lagoons. The phyto-capping system was designed as a combined landfill cover and vegetative layer to control runoff and inhibit infiltration.

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