

ENVIRONMENTAL SOLUTIONS FOR POWER & ENERGY INDUSTRIES





Custom Systems for Air Pollution Control and Water & Wastewater Treatment

Monroe Environmental® provides custom engineered environmental solutions for a variety of power and energy production processes. We offer cost-effective solutions to meet demanding regulatory requirements, reduce maintenance costs, improve worker safety, streamline production, and minimize downtime.

Monroe's Engineered Systems

Air Pollution Control

- Packed Tower Scrubbers
- Venturi Scrubbers
- Ouench Towers
- Dust Collectors
- Oil Mist Collectors
- Wet ESPs
- Fiber Bed Filters

Water & Wastewater Treatment

- Circular Clarifiers & Thickeners
- Lamella Plate Vertical Clarifiers
- Horizontal Plate Clarifiers
- API Oil/Water Separators
- Oil Skimmers/Oil Recovery Units
- X-Flo Mobile Clarifier[™] and Rental Clarifiers
- Air Strippers

Application & Process Expertise

Air Pollution Control

- NH₃, H₂S, SO₂, HCl, HF, HCN, and acid gasses
- Particulate matter PM₁₀ and PM_{2.5}
- Condensables, aerosols, and opacity
- VOCs and odor
- Mist and dust collection

Water & Wastewater Treatment

- Suspended (TSS) and dissolved (TDS) solids
- Stormwater and coal pile runoff
- Oil separation and recovery
- Plant wash down
- Mobile water treatment and rentals

Recent Monroe Projects



Monroe X-Flo Mobile Clarifiers™ treating fly ash from wash down water at a coal-fired power plant during a planned outage. Clarifiers treated up to 2,000 GPM and included sludge underflow pumps.



200 ACFM Packed Bed Scrubber for removal of HCl fumes from acid storage tank at biodiesel plant. Unit was insulated and heated for freeze protection.



Clarifier drive rebuild for FGD recycle clarifiers at a power plant. The solids contact clarifier drives (non-Monroe unit) were misaligned and wearing rapidly. The drive rebuild prevented a possible emergency shutdown if they had failed.



at a biorefinery. The
system included a chain
and flight conveyor and
oil roll + pipe skimmer
for oil removal. The
separator is designed to
remove free solids and oil

prior to a DAF.

420 GPM API Separator for wastewater treatment



1,500 ACFM Packed Tower Scrubber to remove H₂S from syngas conversion process at a biodiesel plant. Unit was built and stamped to ASME VIII code; 316L SS construction.



150 GPM Vertical Plate Clarifier to treat disc filter backwash at natural gas power station. System included clarifier, chemical mix tanks, access platform, ladder, and support structure.



Two Horizontal Clarifiers for solids and oil removal from stormwater at a coal-fired power plant. Scope included clarifiers with bolted steel covers, flocculation tank with mixer, skimmed oil storage tanks, and access platform. Clarifiers were rated for 600 GPM each.



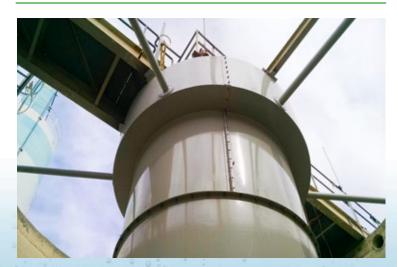
X-Flo Mobile Clarifier™ deployed for temporary treatment of produced water at a fracking well. The X-Flo Clarifier replaced multiple weir tanks with a single unit and outperformed other separators.



Monroe belt skimmer **Oil Recovery Unit** for oil removal from wastewater holding basin at a large coal-fired power plant. The belt retrieved oil from tanks approx. 20 ft. below the mounting surface.



Monroe X-Flo Mobile Clarifier™ for treatment of wastewater (produced water, drilling mud, etc.) from oil and gas hydraulic fracking operations. System provided TSS removal and oil/water separation for 300 GPM flow.



32 ft. diameter **Solids Contact Clarifier** treating river water for government energy plant. The clarifier included reaction well, mixer, sludge rakes, drive, launders, and access bridge.



Monroe X-Flo Mobile Clarifier™ for continuous treatment of hydrotest water during commissioning of a new gas pipeline. Treated flow varied between 500 – 1,000 GPM.

ABOUT MONROE ENVIRONMENTAL

Unsurpassed Experience and Reputation

Monroe Environmental is a premier provider of air pollution control and water/wastewater treatment systems and services. For over 50 years, Monroe has provided thousands of systems for industrial, municipal, institutional, commercial, and government facilities. We have installations throughout North America, from northern Canada to southern Mexico, and around the globe. As a testament to our outstanding reputation, some of the largest and most prestigious manufacturing companies in the world routinely turn to Monroe to solve their most challenging environmental problems.

One-Stop Shopping – Systems, Services, and Solutions

Monroe is a full-service company offering a complete line of pollution control equipment that is designed, engineered, and manufactured for the needs of each customer and application on an individual basis. We have complete in-house fabrication and shop assembly capabilities that serve to reduce project costs, provide superior quality control, and expedite project completion times. We also have the experience and capabilities to provide turnkey installations along with a wide array of related services ranging from engineering and design through permitting, project management, and commissioning.

Monroe's staff of engineers, technicians, and project managers is highly experienced at evaluating, custom-designing, fabricating, installing, and commissioning cost-effective, durable, and reliable systems. In addition, in order to help ensure

continued successful system operations with minimal downtimes and peak efficiencies, we offer a complete menu of support options that include extensive spare and replacement part inventories, as well as

annual, as-needed, and emergency services.





The foundation of Monroe's success, reputation for excellence, and continued growth is our commitment to providing each customer the highest levels of service and support in combination with the best, highest quality, and most cost-effective systems for ensuring long-term successful operations. This, combined with our top-notch staff, in-house capabilities, and wide array of offerings distinguish Monroe Environmental as one of the finest environmental equipment providers.

Contact us today and let us help determine the best solution to your air and water pollution control needs. Join the ranks of countless satisfied customers who have experienced the Monroe difference.

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