



MONROE ENVIRONMENTAL

Water & Wastewater Treatment | Air Pollution Control

ENVIRONMENTAL SOLUTIONS FOR MINING AND MINERALS



ENGINEER | DESIGN | BUILD | INSTALL

Custom Systems for Air Pollution Control and Water & Wastewater Treatment

Monroe Environmental® has decades of experience working with the mining industry. 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
- Quench 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
- Metals precipitation and reduction
- Oil separation and recovery
- Ammonia and VOC stripping
- Mobile water treatment and rentals

Recent Monroe Projects



40 ft. diameter Circular Clarifier for wastewater treatment at a specialty minerals plant. Clarifier was elevated on legs with a tank skirt that went to grade for additional support. Monroe provided the complete clarifier system including tank, drive, mechanism, bridge, and access platform with installation on a turnkey basis. The unit was rated for 1,000 GPM.



Monroe X-Flo Mobile Clarifiers™ for water treatment train at a sand mine. Units were custom built to allow up to 12,000 GPM max hydraulic flow.



10 ft. diameter Circular Clarifier to remove clay fines from wastewater at a minerals plant. System was designed to remove 82 lb/hr of solids from 100 GPM flow.

(2) 1,200 GPM Vertical Plate Clarifiers with thickeners and surface skimming systems treating wastewater at a diamond mine.



300 CFM Packed Tower Scrubber to remove HCl fumes from operations at a magnesia plant using water only.



1,350 CFM Polypro Packed Tower Scrubber with 60 ft. discharge stack to remove HCl from acid tank vent at gold mine.



Quartz Mining: HCl Scrubbers

3,500 ACFM Packed Tower Scrubber for removal of HCl using NaOH at a quartz mine.



2,000 ACFM Packed Tower Scrubber designed to remove HCl and HF fumes with over 99% efficiency.



Gold Mining: HCN Scrubbers

500 CFM Packed Tower Scrubber for HCN gas neutralization at a SART gold mine plant.



1,400 CFM Packed Tower Scrubbing System for HCN gas neutralization at a SART gold mine plant.



Vertical Plate Clarifier with thickener treating wastewater at a minerals terminal. The Clarifier includes chemical mix tanks and is rated for 3,600 GPM.



Vertical Plate Clarifiers treating wastewater at an iron ore pellet mine. Each unit is rated for 2,665 GPM.



Circular Thickener 30 ft. diameter for high density sludge (HDS) treatment of acid mine drainage for silver-gold mine.



7,500 CFM Packed Bed Scrubber to remove NaOH fumes from kiln exhaust at minerals processing facility.

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.



Experience the Monroe Difference

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.

www.mon-env.com • Registered ISO 9001:2015 and ISO 14001:2015



810 West Front Street
Monroe, Michigan 48161 USA
Phone: 734-242-7654 • Toll Free: **800-992-7707**
Fax: 734-242-5275 • Email: sales@mon-env.com

