The *Monroe Environmental*™ X-Flo™ Mobile Clarifier is a completely integrated mobile clarification solution for temporary job sites and/or bypass operations. The system can be utilized as a stand-alone clarifier or as a retrofit to improve the performance of existing mobile tanks.

**X-Flo Mobile Clarifier Design**

The Monroe X-Flo Mobile Clarifier is designed to be a combination of traditional clarification technologies with standard mobile water tanks to produce an economic means of solids separation, oil removal, and waste stream clarification on a job site. It is designed to remove settleable solids as well as floating solids/oils from your wastewater and process liquids — something that cannot be achieved with other plate clarifier systems.

As the process stream flows horizontally through the cartridge, heavier solids settle on the surface of the plates while lighter contaminants rise on the under-side of the plates. The settled solids collect at the bottom of the tank while the floating materials are collected by an adjustable pipe skimmer and are removed from the system. An integral retention baffle prevents the separated floating material from discharging with the clarified effluent stream and aids in the use of the slotted pipe skimmer.

ClariFier

Clarified liquid exits the unit through the effluent box, which consists of an effluent weir, launder, and flanged discharge.

**Applications**

- Fracking & produced water
- System bypass treatment
- Temporary treatment
- TSS reduction
- Metals reduction
- Oil/water separation
- Dredging
- Mining
- Surge flows
Monroe Environmental has taken their diverse application experience and applied it to a growing mobile treatment industry. We’ve adapted a tried—and—true clarification technology into a cutting edge new product that boosts efficiency and lower costs for suppliers and end users alike.

**Process Features**

- Removal of floating and settleable contaminants all in one clarification step
- Solids, grit, oil, and scum removal
- Co-current cross-flow principal
- Still water channels for quiescent zone to prevent re-entrainment
- Greatly increases settling surface area within mobile tank
- Extreme-duty, chloride resistant tank coating

**X-Flo Mobile Clarifier Components**

- **Diffusion Wall** — Stabilizes flow and dissipates velocities to maximize settling
- **X-Flo Cartridge** — Increases settling area and allows for removal of settleable and floating contaminants in one simple step. Includes: plate pack, surface oil skimmer, and retention baffle.

- **Effluent Collection Trough** — Allows for take-off of clarified process liquid
- **Sludge Collection** — Full-length manifold header with single pump-out port. Individual sludge valves allow for isolation as needed.
- **Optional Screw Auger** — Agitates, collects, and conveys heavier settled solids to single discharge port
- **Optional Sludge Pump Skid** — Available to rent or purchase. Includes two pre-piped sludge pumps with controls.
- **Optional pretreatment chemical addition and mixing tanks** can be incorporated when required
- **Optional enhanced inlet diffusion and oil removal** prior to X-Flo Cartridge

**Rent, Retrofit, or Buy**

There are many ways to get the Monroe X-Flo Mobile Clarifier technology to your job site. The complete, integrated clarifier can be sold as a stand alone system or rented on a monthly basis. If you already have existing tanks, just send them to us and we will retrofit with the X-Flo Cartridge for improved performance.

Monroe Environmental designs, fabricates, and retrofits custom wastewater treatment equipment all the time. We are experts. Contact an Applications Engineer today to review your requirements and we’ll customize a solution for your application and needs.