

Environmental, Exploration, Drilling & Production Support Services for Marcellus Shale

Fact Sheet

Single-Source Solutions that Maximize Your Operational Efficiency and Minimize Environmental Impact

From seismic surveying, line construction, and shot-hole drilling to waste disposal, field services, and container rentals, Clean Harbors is a single-source provider for the oil and gas industry. We offer all environmental, exploration, and field service solutions and ensure continued production at the drilling site.

Treatment and Disposal of Waste from the Oil and Gas Drilling Process

- *Container Rental* - rolloff boxes, vacuum boxes, and frac tanks
- *Waste Transportation and Disposal* - drum or bulk, routine or hard-to-handle, liquids, sludges, solids, and gases
- *Containment* - secondary containment for portable tanks, run-off, and temporary units
- *Logistics and Transportation* - all varieties including truck and rail coordination and scheduling, LTL or FTL, drum, bulk, vacuum, van, and frame
- Clean Harbors' *EnviroSORT Waste Containers* - self-contained single unit solutions with segmented bins for the collection, storage, transportation, and disposal of recyclables metals, cardboard, plastics, refuse, and municipal waste
- *Turnkey* - container rental, transportation, and disposal
- *Material supply and stabilization solutions for both solids and fluid disposal*

Clean Harbors' Sunbury, Pennsylvania facility serves the Marcellus Shale exploration field as a treatment facility for wastewaters and as a transfer station for other wastes including solids, flammables, oxidizers, poisons, and reactive materials. The facility manages large volumes of frac, production, and flow-back waters as well as muds that are generated in the drilling process. Serviced by truck and rail, the Sunbury facility offers tremendous flexibility in meeting the logistic needs of our most demanding customers.

Our water treatment system is a proven process to remove metals and ensures facility compliance with metals and Total Dissolved Solids (TDS) permit limits.

Clean Harbors can also manage PCB and low-level radiological contaminated waste and equipment. We also provide pyrophoric filter change outs, dispose of filters, and perform pipeline valve draining.



Safety is Clean Harbors' #1 Priority.

Since 1980, Clean Harbors' number one priority has been the health, safety, and compliance of our operations on your sites and ours. Employees at all levels of the company share this philosophy and are committed to ensuring all safety goals are met.



Oil & Gas Field Services

With a local presence in Pennsylvania, Ohio, West Virginia, and New York, and with service locations across North America, Clean Harbors provides field services to the oil and gas industry.

- *Industrial Cleaning* - frac tank cleaning, mud pit closures, and pressure washing
- *Emergency Response Package Rentals* - fixed or mobile spill containment equipment necessary to control and manage small environmental spills or contaminant releases
- *Emergency Response and Remediation Services*
- *Fixed and Portable Tank Cleaning*
- *Pits, Sumps, and Truck Cleaning*
- *Vacuum Services*
- *Excavation and Removal*
- *High Pressure Cleaning*
- *Site Closures*

Environmental, Exploration, Drilling & Production Support Services for Marcellus Shale

Fact Sheet

Exploration Services

Clean Harbors Exploration Services offers integrated, front-end seismic services for geophysical needs and total project management, including:

- *Land and Seismic Surveying* - permitting, production survey, pipeline locating, hazard assessment, line locating, GPS tracking, and LiDAR geospatial technology
- *Low-impact Line Clearing* - mulching, hand cutting, right-of-way vegetation management, and site preparation
- *Shot-hole Drilling* - track and heli-portable drills
- *Directional Boring* - pipelines, gas, fiber optics, cable, and water and sewer line installation in a variety of areas including roadways, railways, waterways, buildings, and environmentally-sensitive locations
- *Buried Facility Locating Services*

Drilling Support Services

We provide integrated services for closed-loop solids control, wellsite accommodations, and wastewater treatment.

- *Closed-loop Solids Control Systems* - patented auger tank technology that reduces water consumption and hauling costs by 40-60%; variable speed system centrifuges that reduce drilling costs and waste volumes; and hydraulic centrifuge stands that eliminate the need for picker units on site to rig the centrifuges in and out
- *Wellsite Accommodations* - portable wellsite accommodations and facilities that include single-end accommodations, 10-person units, command centers, and geologist labs
- *Wastewater Treatment Facilities* - fully portable, low-maintenance solutions for wellsite needs, as well as sewage holding tanks

Pipeline Integrity Services

Clean Harbors' advance pipeline integrity services can increase pipeline flow efficiency as much as 15%-30%. To maintain cleanliness and peak efficiency, Clean Harbors can help design a program that can be administered periodically. Our services range from internal pipeline rehabilitation and coating to pipeline pigging to hydro-static pipeline testing.



Safety is Clean Harbors' #1 Priority.

Clean Harbors' training protocols and health and safety procedures are unsurpassed and we continue to drive down our Total Recordable Incidence Rate (TRIR); Days Away, Restricted, or Transferred (DART); and Experience Modification Rates (EMR).

