

# Environmental and Exploration Services for the Bakken Shale

## Environmental Services Fact Sheet

### Single-Source Solutions

From waste disposal, industrial services, and container rentals to seismic surveying, line construction, and shot hole drilling, 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.

- *Container Rental* - rolloff boxes, vacuum boxes, and frac tanks
- *Industrial Cleaning* - frac tank cleaning, mud pit closures, pressure washing
- *Waste 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
- *Mat Rental*
- *Logistics and Transportation* - all varieties including truck/rail coordination and scheduling, LTL or FTL, drum, bulk, vacuum, van and frame
- *Emergency Response Services*
- *Turnkey* - container rental, transportation, and disposal

Clean Harbors can 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.

### Treatment and Disposal of Waste from the Drilling Process

Clean Harbors' Sawyer, North Dakota facility serves the Bakken Shale market with disposal of contaminated soils, drill cuttings, mud from closed drilling systems, frac sand, and invert sludge. Prior to acceptance, waste streams are analyzed for VOC content, including benzene concentration and Naturally Occurring Radioactive Material (NORM). The facility is serviced by truck and by a rail yard conveniently located only 10 miles from the site. Clean Harbors is able to offer second-to-none, liability protection to customers by way of a triple composite liner system engineered into the landfills as well as excellent insurance and financial assurance.



## 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.



### Industrial Services

With a local presence in North Dakota and support from five Midwest field offices and facilities across North America, Clean Harbors provides industrial and field services to the Bakken Shale exploration and production operations.

- *Fixed and Portable Tank Cleaning*
- *Vacuum Services including Hydrovacs*
- *Excavation and Removal - Soil Remediation (earth removal)*
- *Site Closures*
- *High Pressure Cleaning*
- *Pit Cleaning (mud pits, truck, wash bays)*

## Environmental and Exploration Services for the Bakken Shale

### Exploration Services Fact Sheet

#### Exploration Services

Clean Harbors Exploration Services offers turnkey solutions for geophysical needs and total project management with expertise to lay out, cut, and survey source and receiver lines and perform seismic drilling. Our self-contained, rubber track-mounted mulchers and drills minimize environmental impact.

- *Hazard Surveys*
- *GPS-oriented Seismic Surveying*
- *Seismic Line Construction*
- *Seismic Shot-Hole Drilling*

Clean Harbors provides industrial lodges and drill camps with premier accommodations to oilfield and energy companies.

#### Directional Boring

Clean Harbors provides directional boring services to the oil and gas industry for installing pipelines, gas, fiber optics, cable, and water and sewer lines. We cross a variety of areas including roadways, railways, waterways, buildings, and environmentally-sensitive areas.

- *Directional Drilling*
- *Directional Punching*
- *Pipe Ramming*
- *RG-05 Rock Shield*

#### Pipeline Integrity Services

Clean Harbors' advanced pipeline integrity services can increase pipeline flow efficiency as much as 15% to 30%. To maintain cleanliness and peak efficiency, Clean Harbors can help design a program that can be administered periodically.

- *Internal Pipeline Rehabilitation and Coating*
- *Pipeline Chemical Cleaning*
- *Pipeline Pigging*
- *Hydro-static Pipeline Testing*
- *Hydro-static Test Water Treatment & Disposal*
- *Pipeline Dehydrating (Drying)*
- *Pipeline Inspection Services*
- *On-stream Mechanical Cleaning*



## 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).

