Sediment Removal Using Industrial Vacuum Equipment

Gary Loveland
Terra Contracting, LLC
SEDIMENT REMOVAL USING INDUSTRIAL VACUUM EQUIPMENT
Overview of Terra Contracting

Company History
OVERVIEW OF TERRA CONTRACTING

COMPANY HISTORY

- Founded in 2001 By Steve Taplin – Environmental Remediation
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- Founded in 2001 By Steve Taplin – Environmental Remediation
- Family business dates back to 1952
  - Septic Tank Cleaning and Installation
  - Expanded to include Industrial Cleaning Services
Overview of Terra Contracting

Company History

- Founded in 2001 by Steve Taplin – Environmental Remediation
- Family business dates back to 1952
  - Septic Tank Cleaning and Installation
  - Expanded to include industrial cleaning services
- 2003 Sediment Project
Terra Contracting Sed-Vac® Process
Advantages of Sed-Vac®
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- Quick Setup
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- Sediment Removal With Pinpoint Accuracy
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- Automatic Separation of Solids
A D V A N T A G E S  O F  S E D-V A C ®

- Quick Setup
- Sediment Removal With Pinpoint Accuracy
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- Removal of Hard Or Soft Deposits
Advantages of Sed-Vac®

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- Sediment Removal With Pinpoint Accuracy
- Automatic Separation of Solids
- Removal of Hard Or Soft Deposits
- Little Resuspension of Solids, If any
ADVANTAGES OF SED-VAC®

- Quick Setup
- Sediment Removal With Pinpoint Accuracy
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- Removal of Hard Or Soft Deposits
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- Ability to Work Around Obstructions
Advantages of Sed-Vac®

• Quick Setup
• Sediment Removal With Pinpoint Accuracy
• Automatic Separation of Solids
• Removal of Hard Or Soft Deposits
• Little Resuspension of Solids, If any
• Ability to Work Around Obstructions
• Complete Containment of Excavated Material
Sed-Vac® Components
Sed-Vac® Components
Dredge Site
Sed-Vac® Mounted on Crane
Sed-Vac® Mounted on Long-Reach Excavator
Sed-Vac® Mounted on Mini-Excavator
SED-VAC® COMPONENTS

WATER BLASTING NOZZLES BREAK UP HARD DEPOSITS
SED-VAC® COMPONENTS
VACUUM PIPE
Sed-Vac® Components
Vacuum Pipe

• 8-Inch Diameter
• 8-Inch Diameter
• Suction Hose or Solid HDPE Pipe
SED-VAC® COMPONENTS
VACUUM PIPE

- 8-Inch Diameter
- Suction Hose or Solid HDPE Pipe
- Can Be Hundreds of Feet Long
Sed-Vac® Components
Vacuum Pipe
SED-VAC® COMPONENTS
VACUUM PIPE
SED-VAC ® COMPONENTS
VACUUM BOX
- Separates Larger Solids From Liquid
SED-VAC® COMPONENTS
VACUUM BOX

- Separates Larger Solids From Liquid
- Placed In-Line Near Vacuum Loader
• Separates Larger Solids From Liquid
• Placed In-Line Near Vacuum Loader
• Two or More Used
- Separates Larger Solids From Liquid
- Placed In-Line Near Vacuum Loader
- Two or More Used
- Most Projects - Solids Dewater Enough for Landfill Disposal
Sed-Vac® Components
Industrial Vacuum Loader

- 5,800 CFM @ 28” Vacuum (Hg)
Sed-Vac® Components
Industrial Vacuum Loader

- 5,800 CFM @ 28” Vacuum (Hg)
- Liquid, Suspended Solids and Air Pulled Into Unit’s Tank
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• Liquid, Suspended Solids and Air Pulled Into Unit’s Tank
• Air Exhausted to Atmosphere
**Sed-Vac® Components**

**Industrial Vacuum Loader**

- 5,800 CFM @ 28” Vacuum (Hg)
- Liquid, Suspended Solids and Air Pulled Into Unit’s Tank
- Air Exhausted to Atmosphere
  - Particulate Matter – Baghouse
Sed-Vac® Components
Industrial Vacuum Loader

- 5,800 CFM @ 28” Vacuum (Hg)
- Liquid, Suspended Solids and Air Pulled Into Unit’s Tank
- Air Exhausted to Atmosphere
  - Particulate Matter – Baghouse
  - Vapors/Odors – Carbon Cells, Thermal Oxidizer, Etc.
• 5,800 CFM @ 28” Vacuum (Hg)
• Liquid, Suspended Solids and Air Pulled Into Unit’s Tank
• Air Exhausted to Atmosphere
  • Particulate Matter – Baghouse
  • Vapors/Odors – Carbon Cells, Thermal Oxidizer, Etc.
• Liquid and Suspended Solids Pumped to Water Treatment System
Representative Project
Representative Project

MGP Site – Marshall, MI
Representative Project

MGP Site – Marshall, MI
Representative Project

Oil Refinery, Martinez, CA
Representative Project

Oil Refinery, Martinez, CA
REPRESENTATIVE PROJECT

OIL REFINERY, MARTINEZ, CA
Representative Project

Oil Refinery, Martinez, CA
Representative Project

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Oil Refinery, Martinez, CA
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MGP Site, Burlington, VT
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Pipeline Oil Spill, Marshall, MI
Representative Project

Pipeline Oil Spill, Marshall, MI
Representative Project

Pipeline Oil Spill, Marshall, MI
Sediment Removal Using Industrial Vacuum Equipment

ONGOING DEVELOPMENT
Sediment Removal Using Industrial Vacuum Equipment

Ongoing Development

• Tee Inlet Head With Auger
Sediment Removal Using Industrial Vacuum Equipment

Ongoing Development

- Tee Inlet Head With Auger
- More Air
Sediment Removal Using Industrial Vacuum Equipment

On-going Development

- Tee Inlet Head With Auger
- More Air
- Vacuum Trucks In Series
Thank You!

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