Comprehensive Solutions for Site Remediation & Dewatering

Cost-Effective Treatment Systems Engineered and Built for the Toughest Water Challenges

newterra

clean water. modular solutions. simple.
Bringing Innovation to Remediation

Lowering the Volume of Remediation

Cost-Effective Iron Removal

Eliminating the Threat of Sound Violations

certerra is a pioneer in developing sound attenuated solutions that comply with stringent local sound bylaws. Our innovative systems eliminate the threat of a shutdown due to sound violations, as well as the potential of expensive retrofits or replacement equipment. certerra systems:

• Isolate equipment and piping to reduce structure-borne noise
• Incorporate customized acoustic enclosures
• Minimize flanking paths that can radiate acoustic energy
• Feature acoustically-tuned mufflers on ventilation openings

Two States of Iron

Iron starts out in the dissolved state in groundwater and converts to the insoluble state in a treatment system after coming in contact with oxygen present in tanks and air strippers.

Surface & Storm Sewer Discharge Requirements:

• Consumes oxygen; strains aquatic life
• Discharge regulations can be lower than naturally occurring concentrations

Iron Fouling of Remediation Systems:

• Requires frequent backwashing and media & filter replacement
• Precipitate plugs up equipment, piping and sewer lines

The presence of iron in groundwater can pose significant design, operational and cost implications to remediation processes. certerra Iron Removal technology provides an effective, cost-efficient approach:

• High levels of iron removal
• Chemical-free iron oxidation
• Uses less backwash water
• Higher backwash iron concentrations

New Build & Retrofit Sound Abatement Solutions

certerra offers remediation solutions featuring our sound abatement technology for new build systems, as well as field retrofits to existing systems that are in non-compliance.

New Build system being tested at our MET certified facility.

Retrofit to existing San Francisco remediation system.

newterra Iron Removal Advantages

• Compact footprint
• Low operating & maintenance costs

Clean & Saturated Media

Backwash Iron Concentration: Pre & Post Treatment

DISSOLVED IRON
You can’t see it, but it’s there

INSOLUBLE IRON
Reddish-brown slimy material you can see

+O2
Comprehensive Remediation Solutions

Vacuum Extraction

newterra has decades of experience offering customized solutions for vacuum extraction of water, air and product from wells. Our low maintenance, operator-friendly systems offer a wide range of options for inlet headers, air flow meters, process valves, piping, fittings, and filters – and are available skid mounted or enclosed.

Multiphase & Dual Phase Extraction
• Rotary lobe, rotary claw and liquid ring vacuum pump packages
• Safe, efficient high-vacuum recovery of volatile organic contaminants (VOCs), water and free product from soil and groundwater

Soil Vapor Extraction
• Custom designed packages for recovery of VOCs from soil and groundwater
• Utilize regenerative, rotary lobe and rotary claw technologies

Air Sparging Packages
• Available for any flow and pressure requirement
• Specialize in rotary claw compressors for 5-30 psi requirements, and rotary screw compressors for 30+ psi

Air Cooled Heat Exchangers
• Air cooling solutions for vapor streams prior to carbon treatment
• Systems based on detailed modeling to ensure process success

Certified Production Facility

newterra has dedicated production facilities in Canada, the United States and Germany. Our primary 175,000 sq. ft. plant incorporates a strategic process flow based on Lean Manufacturing tools, including value stream mapping, SS and Kanban.

UL Listed Panel Shop: All newterra control panels are electrically certified, including the components and enclosure rating – thus eliminating potential delays and costs of red-tagged panels at the job site.

MET Certified: The MET Laboratories designation allows newterra to build pre-approved full systems to Canadian and US electrical standards for both hazardous and general purpose ratings.

Skilled Trades: Full-time licensed electricians, millwrights, plumbers, pipefitters and carpenters are part of our Production Team.

Water Treatment

newterra offers a wide range of technologies to address the treatment and remediation of groundwater and other water sources. Our solutions include:
• Tanks for inlet settling, equalization, and batch processing
• Oil/Water Separators featuring full modeling results
• Air Strippers. We’re an approved distributor and system integrator for QED
• Particulate Filters including bag, cartridge, self-indexing and sand filters
• Carbon & Specialty Media Filters including virgin and regenerated water phase carbon, TM100 clay and alumina

Air Treatment

At newterra, we have extensive experience treating contaminated vapor streams at varying flow rates and contaminant concentrations.
• Carbon Vessels from small disposable DIS series to large, carbon-steel VPC series vessels with a wide range of operating pressures and flow rates
• Thermal & Catalytic Oxidizers
• Gas Scrubbers with catalytic oxidizers for chlorinated hydrocarbon sites with concentrations exceeding vapor phase carbon capabilities
A Robust Rental Fleet

At newterra, we continue to expand our 100+ rental fleet of process systems and components to accommodate remediation equipment needs that are short term, require a rapid response, or are not within current capital budgets. Our fully warrantied rental systems can include an optional services contract, and are also available for purchase.

- **Site Remediation:** A full range of systems and equipment, from multi-phase extraction systems to catalytic oxidizers, oil/water separators and more.
- **Pilot Systems:** Short term pilot studies are the best method for determining site requirements and specifications of full scale, long term solutions. Our rental fleet includes a wide selection of large and small systems optimized for piloting.
- **Construction Dewatering:** Our rental fleet includes water processing systems capable of treating flows up to 500 gallons per minute, as well as pumps, tanks and other accessories for contaminated construction dewatering projects.

Contact us at 1-800-420-4056 or info@newterra.com about your specific rental needs.

A Solid Customer Support Network

Our commitment to supporting customers with all makes and models of remediation systems is demonstrated by our strong service network. With three facilities strategically located throughout North America, newterra can deliver service, parts, field support and rental equipment quickly and efficiently. Many newterra systems feature telemetry for remote monitoring, diagnostics and troubleshooting, allowing proactive maintenance.

- **Start-up Assistance & On-Site Training:** Full system inspection, process alarm testing and training support.
- **Operating & Maintenance Contracts:** Detailed programs are available to maximize efficiency and minimize unscheduled downtime. Our standard 1-year warranty can also be extended.
- **Emergency Troubleshooting & Repair:** Responsive deployment of our trained technicians with the parts and tools to address emergency repairs.
- **Field Installation & Modifications:** Our licensed tradespeople can install your system and perform system modifications on-site.
- **Full Inventory of Parts & Spares:** We're committed to offering the best over-the-counter availability in the industry, as well as one-stop convenience for operation and maintenance suppliers.

Contact us at 1-800-420-4056 or visit us online at www.newterra.com
About newterra

A Global Water Technology Leader
newterra is recognized as a leader in the development of sustainable treatment solutions for water, sewage, wastewater and groundwater remediation for industrial, municipal, land development, commercial & residential markets. Our heritage of innovation in providing clean water solutions dates all the way back to 1863. Over that time, newterra has grown to over 250 people and we’ve installed thousands of treatment systems – some of which operate in the most extreme conditions on the planet.

Full Control from Start to Finish
At newterra, we take full control of virtually every aspect of the treatment systems we build – from process design and engineering to manufacturing, installation, operation and ongoing parts & service support. That also includes manufacturing our own MicroClear® UF membranes in newterra's ISO 9001:2008 certified facility. This award-winning approach ensures newterra treatment systems meet our high standards for quality and on-time delivery.

250+ Employees
40+ Professional Engineers
10,000+ Installations Worldwide

Burlington, ON
Engineering & Sales Office

Toronto, ON
Marketing Office

Brockville, ON
Head Office & Manufacturing Facility

Calgary, AB
Sales Office & Service Center

Venice & Lakeland, FL
Sales Office, Manufacturing Facility & Service Center

Langgöns, Germany
MicroClear Office & Manufacturing Facility

Trooper, PA
Engineering & Sales Office

Macon, GA
Manufacturing Facility

Santiago, Chile
Sales Office & Service Center

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