

OUR **CAPABILITIES**



**Hazardous &
Regulated Wastes**



**Packaged
Chemical Wastes**



**Resource Recovery
& Re-Use**



**Contaminated Site
Remediation**



Hazardous & Regulated Wastes

WestRex Hazardous & Regulated Wastes

Our sustainable range of hazardous waste treatment technologies and regulated waste disposal services are focused on maximising resource recovery from various waste streams and reducing the volumes of waste going into landfills.

WestRex are licensed to receive the following types of hazardous and regulated wastes:

Hydrocarbon Liquids
& Sludges

Industrial Liquids &
Wash Waters

Contaminated Drilling
Mud & Fluids

PFAS Liquids and Sludges

Sewage & Septic

Contaminated Soils

Hydrocarbon Liquids & Sludges

Our WestRex Jackson and Wacol waste processing and resource recovery facilities are licensed to receive the following types of hydrocarbon liquids and/or sludges:

- Flammable Liquids & Sludges
- Combustible Liquids & Sludges
- Oily Water & Sludges
- PCB Contaminated Oil
- Waste Oil & Transformer Oil
- Halogenated Solvents

Industrial Liquids & Wash Waters

In addition to hydrocarbon liquids and sludges, WestRex also accepts a broad range of other industrial liquids and wash waters at our licensed facilities, including:

- Asbestos Waters & Sludges
- Wash Bay Waters
- Paints & Solvents
- Acids & Alkalis
- Bases & Caustics
- Pesticides & Herbicides



Contaminated Drilling Muds & Fluids

Drilling mud commonly contains bentonite, additives (barite, chalk or hematite), thickeners, defloculates and other chemical contaminants. WestRex utilises a range of technologies to treat these contaminants and then recover the treated liquid and solid materials for processing and beneficial re-use.

PFAS Liquids & Sludge

Per- and Poly-fluoroalkyl substances (PFAS) are hazardous and extremely mobile contaminants that persist in the environment and are generally associated with historic fire-fighting activities involving the use of Aqueous Film Forming Foam (AFFF).

WestRex is fully licensed to receive, store and consolidate PFAS liquids and sludges at our Jackson facility. PFAS liquid acceptance is subject to review of NATA-accredited laboratory testing reports and approval by our on-site chemist.



Sewage & Septic

WestRex provides a beneficial reuse program for sewage, septic and organic liquid wastes, via our on-site composting activities. Organic liquids include kitchen grease trap waste and other biodegradable liquids suitable for composting. The compost produced is tested for compliance and quality, before being utilised in broad-acre applications and other suitable uses.



Contaminated Soils

WestRex provides contaminated soil treatment and disposal services at our Jackson facility, particularly for soils with contaminant concentrations above landfill acceptance criteria and require prior treatment. Our treatment methods include bioremediation, chemical fixation, chemical oxidation and stabilisation. Soil contaminants we can successfully treat include hydrocarbons, heavy metals, PAH's, acid sulphates and salts. Contaminated soil acceptance at our Jackson facility is subject to review of NATA-accredited laboratory testing reports and approval by our on-site chemist.



WestRex can also provide contaminated soil transport and disposal services, through our broad network of industry partner haulage contractors and licensed landfill disposal facilities. We undertake a full review of the analytical data and arrange landfill acceptance letters and/or interstate consignment authorisations. We can also assist with preparing soil disposal permit and waste levy exemption applications and provide guidance on completing waste tracking documentation. Our service includes provision of weighbridge dockets and summary reports to our clients.



Packaged Chemical Wastes

WestRex Packaged Chemical Wastes

WestRex are industry leaders in the identification, categorisation, transport, and disposal of a broad range of liquid and solid packaged chemical wastes. Our in-house team of chemists and scientists are constantly developing and improving our treatment technologies, to maximise recovery of re-usable resources from these types of hazardous wastes.

WestRex accepts a broad range of packaged chemical wastes, at both our Jackson and Wacol waste facilities, including but not limited to:

- Flammable Liquid
- Paints & Solvents
- Household Wastes
- Transformer Oil
- Drum Waste
- PCB Contaminated Oil
- Laboratory Chemicals
- Waste Oil
- Acids & Bases
- Combustible Liquids
- Condensates
- Fluorescent Light Tubes

Disposal of hazardous chemicals is regulated and therefore requires correct packaging, licensed transport and waste tracking documentation, including interstate consignment authorisations. Our team of experts provide advisory and management services to facilitate compliant disposal of hazardous and regulated chemical wastes, within Queensland and from interstate.



Product Destruction Services

WestRex provides secure product destruction services for a range of waste materials including expired, recalled or damaged stock, such as food and beverages, chemicals, paints, pharmaceuticals and cosmetics. Specific destruction and disposal processes are followed at our waste facilities, to ensure these materials are destroyed correctly and not returned to consumers.

Container Collection & Disposal

We also offer a collection and disposal service for empty chemical containers, drums and IBCs. We will arrange collection, transport, triple rinsing and appropriate cleaning at our WestRex facilities. Containers are re-used where possible, with unsuitable containers destroyed and disposed to a licensed landfill.



We come to you!

Where chemicals are stored at your home or workplace that are not labelled, incorrectly labelled or unable to be identified, one of our trained chemists will come to you and undertake an assessment of the waste, including:

- Sample, analyse, identify and categorise the waste materials.
- Provide you with an accurate quotation for collection, transport and disposal of the wastes.
- Complete a transport manifest and waste tracking documents, including any interstate consignment authorisations, where required.
- Arrange appropriately licensed transport and disposal.
- Provide final copies of waste tracking certificates, waste dockets and/or weighbridge summary reports.



At WestRex, we employ qualified industrial chemists to assess the chemical compounds within each waste product and to identify the most appropriate treatment method. Waste treatment at all WestRex facilities is undertaken based on three key pillars:

- Always maintaining environmental compliance
- Always protecting the safety of our people, workplace and site visitors
- Always providing the most cost effective treatment solution to our customers

For an obligation free assessment and quote, just give us a call and one of our friendly waste experts will arrange a time to visit your site and assist you with your packaged chemical waste requirements.



Resource Recovery & Re-Use

WestRex Resource Recovery & Re-Use

All WestRex waste processing facilities are fully licensed and operated to maximise resource recovery from various waste streams and to recycle or re-use these materials into other usable products.

Waste streams accepted at our facilities for recovery, recycling and re-use, include:

- | | | |
|-----------------------|-----------------------|---------------------------|
| • Flammable Liquids | • Blackjack Grease | • ACM Wash Waters |
| • Transformer Oil | • Contaminated Soils | • PCB Contaminated Oil |
| • Drilling Mud | • Oily Water & Sludge | • Oil Filters & Oily Rags |
| • Combustible Liquids | • Solvents & Coolants | • Batteries |

WestRex are leaders in efficient processing and recovery of re-usable resources from hydrocarbon materials. This includes flammable liquids such as unleaded fuels and solvents, combustible liquids such as diesel, hydrocarbon contaminated liquids such as oily water, and other types of hydrocarbons such as waste oil and grease. We are licensed to receive and process hydrocarbon contaminated sludges, including flammable sludge, and we also recycle oil filters and oily rags.



Our WestRex facilities are operated with a focus on sustainability and continuous development of innovative waste treatment technologies. This includes operation of specialist G-Force equipment at our Wacol facility, which is designed to maximise the recovery and re-use of oil, fuels, sludges and industrial wastewater. Aside from the recovery value associated with these materials, our equipment and operational compliance ensures these wastes don't end up in our waterways or landfills.



WestRex provide specialist waste oil collection services, including PCB and other contaminated oil, for processing and recovery at our Wacol facility. We also have direct access to licensed partner facilities that provide specialist waste oil disposal and recycling services in North QLD and NSW. This allows us to provide true lube-to-lube oil collection and recycling solutions to our customers across a broader geographic area.



Contaminated Site Remediation

WestRex Contaminated Site Remediation

In addition to our existing integrated hazardous waste processing and resource recovery capabilities, WestRex also provides a range of contaminated site remediation contracting services through our site remediation team.

This range of services includes:

Contaminated
Soil Excavation &
Disposal

Contaminated
Soil Remediation
& Treatment

Contaminated
Water Treatment
& Groundwater
Remediation

Underground
Petroleum Storage
System (UPSS)
Decommissioning

Asbestos Removal
& Disposal

Regulated Waste
Transport & Disposal

Site Reinstatement
Services

With our added site remediation contractor capability and our own in-house solid and liquid waste processing and resource recovery facilities, WestRex are perfectly positioned to provide a one-stop-shop for your contaminated site remediation requirements.

CONTAMINATED SOIL EXCAVATION & DISPOSAL SERVICES

WestRex specialise in contaminated soil removal and disposal services, with our contaminated site remediation team managing the following key components of the project.

- Technical data review and landfill acceptance
- Soil Disposal Permits and QLD Waste Levy Exemption Applications (where applicable)
- Health, safety, environment and quality documentation
- Excavation plans
- Site establishment and staff amenities
- Erosion, sediment and odour controls
- Contaminated soil excavation, on-site stockpile management and vehicle loading
- Regulated waste licensed transport
- Weighbridge summaries and waste tracking documentation



Where contaminant levels exceed landfill disposal acceptance criteria, treatment of the contaminated soil will be required, which can be undertaken either in situ or ex situ, and either on-site or off-site.

CONTAMINATED SOIL REMEDIATION & TREATMENT

WestRex provide innovative in-situ and ex-situ soil remediation and treatment services, which are optimised to meet the unique nature of every project we assess and to deliver successful outcomes that satisfy our customer's objectives.

We undertake in-house soil treatment trials, utilising various treatment reagents, to assess for the most effective and efficient reduction in contaminant concentrations to meet the target criteria. Following successful bench-scale treatments trials, the same methodology can be upscaled into pilot-scale treatment trials undertaken at the contaminated site. Once the treatment method has been proven, the project generally consists of conceptual design and planning, project execution, testing, validation and project completion.



Our contaminated soil remediation and treatment services cover a broad range of organic and inorganic contaminants and include the following remedial methods:

- Bioremediation
- Encapsulation
- In-situ chemical oxidation
- Immobilisation and stabilisation
- Neutralisation
- Soil Washing
- Sludge de-watering and solidification

All soil remediation and treatment services are conducted in accordance with legislative requirements and our WestRex Health, Safety, Environment and Quality management systems.

CONTAMINATED WATER TREATMENT & GROUNDWATER REMEDIATION SERVICES

WestRex offers a range of engineered water remediation and treatment solutions, incorporating both in-situ and ex-situ treatment technologies. We can design, construct, operate and maintain small-to-large scale water treatment systems, that target and remove identified contaminants of concern from groundwater and wastewater, allowing the treated water to be discharged in accordance with legislative and site-specific requirements.

Examples of our in-situ and ex-situ water treatment techniques include:

- Air stripping / sparging
- Bioventing and bioaugmentation
- Carbon absorption, ion exchange and chemical precipitation
- In situ chemical oxidation and chemical injection
- Multi-phase vacuum extraction
- Permeable reactive barriers
- Pump and treat
- Reverse osmosis

With our in-house chemists and laboratory facilities, we undertake treatment trials and scaled tests to select the most suitable treatment technology and to optimise the effectiveness of the treatment method for meeting the required discharge criteria. Depending on the number and types of contaminants requiring treatment, our systems are often comprised of a combination of treatment technologies.



UNDERGROUND PETROLEUM STORAGE SYSTEM DECOMMISSIONING

Underground tanks that have been used for the storage of petroleum products or other flammable or combustible liquids must be decommissioned in an appropriate manner when they are no longer required or suitable for such use.

Underground Petroleum Storage System (UPSS) decommissioning services undertaken by WestRex, are in accordance with Australian Standard AS 4976-2008 – **The Removal and Disposal of Underground Petroleum Storage Tanks.**

Our decommissioning services include:

- Removal and disposal of residual liquids
- Purging and disconnection of fuel lines
- Tank flushing and certified degassing
- In situ decommissioning
- Removal, transport and disposal
- Tank destruction certificates
- Removal of contaminated soils
- Backfilling and compaction
- Surface reinstatement

The preferred option for decommissioning underground tanks is to remove them, however in certain instances, it is also acceptable to decommission tanks in situ.



ASBESTOS REMOVAL AND DISPOSAL SERVICES

WestRex is licensed to undertake non-friable (Class B) asbestos removal work, including the removal and disposal of asbestos contaminated soils. Our asbestos removal services include:



- WHS notification requirements
- Asbestos Removal Control Plans
- Personnel and plant decontamination equipment
- Asbestos Containing Material (ACM) removal
- Asbestos contaminated soil removal
- Licensed transport & disposal
- Asbestos encapsulation cells

All licensed asbestos works are undertaken in adherence with WHS regulations and Asbestos Removal Codes of Practice to ensure safe removal and without releasing airborne asbestos fibres into the environment.

All workers involved in asbestos removal works are trained and have attained the relevant certifications for non-friable asbestos removal work.



REGULATED WASTE TRANSPORT & DISPOSAL

WestRex offers our clients a complete waste management solution, by providing licensed transport and disposal services for the removal of your regulated waste.

With our own waste facilities located in Wacol, Jackson and Injune, and access to a range of affiliate waste processing & disposal facilities throughout QLD, WestRex has your waste removal needs covered, including:

- Contaminated soil transport & disposal
- Contaminated sludge transport & disposal
- Liquid waste transport & disposal
- Construction and demolition waste transport & disposal
- Other regulated and hazardous waste transport & disposal services

All waste transport and disposal services are undertaken in compliance with current legislation, regulatory requirements and specific licence conditions.



SITE REINSTATEMENT SERVICES

Westrex provides a range of site reinstatement services that can be implemented following contaminated site remediation works.

These include:

- Importation of clean backfill materials
- Backfilling, compaction & testing to required specifications
- Surface dust suppression solutions
- Hydro-mulching and landscaping services
- Concrete and asphalt re-surfacing



To find a cost effective solution for your site's environmental contamination problem, please contact us to speak with one of our site remediation experts.





Murarrie | Jackson | Wacol | Injune

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www.westrex.com.au



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