

WASTEservices at Kaizen

The WASTEservices Division– Part 1, An Introduction

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Become Waste Wise!!

Here are some simple first steps:

- identify areas for waste reduction and implement a waste reduction strategy
- support re-use, recycle and refurbishment schemes
- identify the non-hazardous wastes produced by your company which can be recycled and set up a recycling scheme
- encourage employees to reduce, re-use and recycle at work and at home
- keep abreast of – and be compliant with – present & forthcoming legislation

The **WASTEservices** Division of **KAIZEN Environmental Services (Trinidad) Ltd.** provides comprehensive waste management services to the industrial, petrochemical energy sectors and business community at large of Trinidad and Tobago.



The **WASTEservices** Division provides service in three specific areas:

1. Waste Disposal, The LABIDCO/ **KAIZEN** Waste Treatment Facility
2. Waste Management Services
3. Spill Response Services



Custody transfer documentation, waste identification and waste manifesting is the foundation of the **WASTEservices** Division QA/QC .

From rapid spill response services, to end of life destruction certificates, the **KAIZEN** Team stands behind its services and **KAIZEN'S** commitment to our clients waste liability management.

The LABIDCO / KAIZEN Waste Treatment Facility

The **KAIZEN** Waste Treatment Facility is managed and operated by Kaizen International Inc. [Kaizen] of Alberta, Canada, through its local subsidiary **Kaizen Environmental Services (Trinidad) Limited, WASTEservices** Division.

The Facility provides the most comprehensive industrial and oilfield waste disposal services in Trinidad & Tobago.

The Facility site infrastructure was originally designed and built by **KAIZEN** for the purposes of oily waste remediation, associated with the remedial and reclamation works to the Brighton Oilfield of the Petroleum Company Of Trinidad & Tobago (Petrotrin), for the purposes of constructing the LABIDCO Industrial Estate.

Benefits of the LABIDCO Waste Treatment Facility

- Engineered bioremediation facility.
- On-site laboratory support, immediate assessment of incoming waste streams and real time analytical assessment and monitoring of the bioremediation process.
- Excellent deep water Port access — LABIDCO PORT.
- Secure location, out of mainstream traffic.
- Liability is transferred at point of custody transfer (either at generator site or at the WTF gate) to the LTF facility.
- One Stop Waste Management Service.

Operations at the Facility are divided into three areas of operation and responsibility, these are as follows:

Destruction Services

Incineration Operations (Solid/ Liquids)
 Drum/ Container, Cleaning Destruction & Disposal
 Fluorescent Bulb Disposal
 Lab Waste Disposal
 Medical Waste Disposal (Sharps, bandages)
 Pharmaceuticals
 Expired Products/ Insurance, Supplier Claim Destruction
 Confidential Document Disposal

Remediation Services

Landfarming/ Bioremediation
 Stabilization
 Waste/ Chemical Fixing
 Slops Processing

Chemical Blending & Recycling

Waste Oil Recycling: lubes, Hydraulic oils, industrial
 Lubricants
 Solvent Recycling

Specialty WASTEservices Equipment

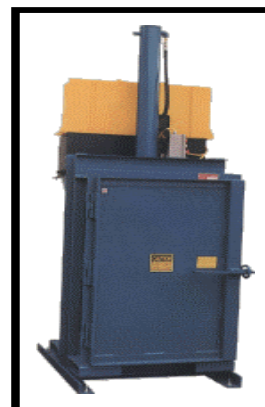


Fluorescent Bulb Processor

- System exceeds both OSHA and ACGIH standards for mercury vapor exposure.
- Eliminate storage hassles - Reduce your needed storage space for lamps by crushing over 1350 T8 4' lamps per 55-gallon drum .
- Safer work environment .

Hydraulic Drum Crusher—HDC—900

- 38,000 pounds of crushing power.
- Protective plastic cover on power unit.
- 15 gallon oil reservoir.
- Meets OSHA and JIC standards.



Liquid Incinerator & Solid Incinerator

KAIZEN has acquired two incinerators to complement the bioremediation facility, this makes **KAIZEN** the foremost disposal option present in Trinidad and Tobago. These incinerators allow the **WASTEservices** to destroy any waste material that otherwise could not be remediated.

Liquid Incinerator

Waste Types

- Methanol
 - Formaldehyde
 - Oil
 - Grease
 - Various Hydrocarbon based chemicals and solvents
- Capacity – 4000 litres/day (Depending on waste type)

Solid Incinerator

Waste Types

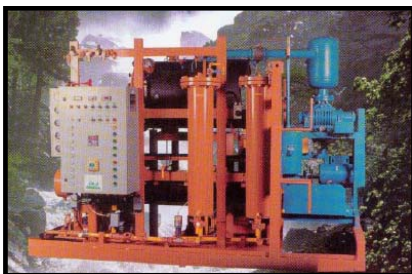
- Water
 - Soil (clay)
 - Oil/Solvent
 - Polypropylene
 - Wood
 - Paper
 - Plastic (except PVC)
 - Filters
- Capacity – 800 kg/ day max. (Depending on waste type)



What's New!!

Introducing the OMEGA Transformer Oil Regeneration System and RS-30 Multi-purpose Solvent Distillation System. These pieces of equipment were recently acquired by **KAIZEN** to address the evolving waste management needs of our valued customers.

Transformer Oil Regeneration System (TORS)



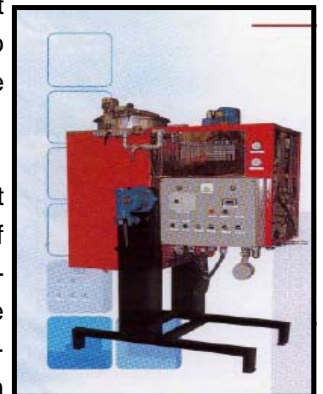
Oil contaminants are generally water (free or emulsified) air and various gases, solids, volatile contaminants, soluble contaminants (gums, resins waxes etc...) surfactants and many more. All these contaminants affect the performance of the oils and reduce their effectiveness to perform the purpose for which they were developed. The TORS efficiently restores oil, removing any inhibitors without altering the original state of the oil.

The system is especially designed to treat the insulating oils used in high voltage transformers and switchgears. It encompasses the latest technological innovations yielding extraordinary performance without sacrificing ecological aspects.

RS-30 Multi-Purpose Solvent Distillation System

Most industries today generate waste solvents in their processes. It is a known fact that these solvents can generally be recycled to their original state and successfully returned to production for reuse. The secret however to a successful recycling program is selecting the right equipment. The Omega RS system, recycles up to 95% of polluted solvents.

Omega Solvent recyclers do not use filters or any type of chemicals to achieve solvent purification. They are stand-alone units that function on the time proven concept of distillation. The product to be recycled is poured into a boiler. The boiler shell is itself surrounded by a thermal oil filled heating jacket. One or more electric resistances heat the thermal oil, which eventually brings polluted solvent to its boiling point. Pure solvent vapours are then channeled to an air or water cooled condenser. Condensed pure solvent, in liquid form, is then directed to a collecting container.



Meet the New Kaizen Staff!!

Vinod R. Mahabirsingh

Sales and Marketing Manager – WASTEservices



Mr. Mahabirsingh is currently completing his International Masters of Business Administration, his specialization being Innovation and Entrepreneurship; he possesses a Bachelor of Science degree in chemistry (major) and zoology as well as a certificate in Project Management (PMBOK).

At **KAIZEN** Environmental Services (Trinidad) Limited, he holds the position of Sales and Marketing Manager of the **WASTEservices** Division, and has extensive experience in the marketing field having held the position of Marketing Executive at his previous job where he was responsible for the development and implementation of business strategic plans, development and maintenance of customer service management, supply chain management as well as budgetary control and costing management.

In addition to this, Mr. Mahabirsingh also has a wealth of expertise in development of project scope of works, report analysis (sales and marketing), budget development and conducting market research, data analysis.

Sven Somair

Section Manager – Assessments / Corporate HSE Manager – PROJECTServices



Mr. Somair is currently pursuing his Masters Degree in Environmental Engineering and possesses his Bachelor of Science degree in Chemical Process Engineering attained through the University of The West Indies.

At **KAIZEN** Environmental Services (Trinidad) Limited he has a dual portfolio of both Section Manager – Assessments, which falls under the **PROJECTServices** division as well as the Corporate HSE Manager.

In addition to his experience in the Health Safety and Environmental field, having held the positions of Safety Officer and HSE consultant, Mr. Somair has very extensive training in Environmental Impact Assessments, Site and Risk Assessments / Consequence Analysis and has developed, implemented and analyzed numerous Environmental Monitoring Programmes.

Kaizen at University of West Indies World of Work Recruitment Fair!



This was **KAIZEN's** first time participating in the University of the West Indies World of Work Programme (recruitment fair). The aim of the programme is to prepare students for the world of work via vacation or graduate training. **KAIZEN** recognizes the importance of this and as such decided that we should become key players in the growth and development of students in preparing them for their career path.



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