

- o Ambient air quality monitoring and dispersion modeling
- o Dust follow out monitoring
- o Noise level assessment
- o Geochemical assessment
- o Acid Mine drainage assessments
- o Environmental Management System development
- o Environmental performance monitoring

• Analytical Services,
Expand the Analytical Lab in Kabwe to offer the following services:

- o Microbiological analysis
- o Mobile Laboratory
- o Set up another analytical laboratory

• Radiation Safety Services:

- o Personal radiation dosimetry services
- o Random gas sampling and assessments
- o NORM sample analysis



Niton XRF Analyzer



Lead Care II Blood lead analyzer



Lead testing in children and expectant mothers



Analysing lead in blood samples

OUR VISION

To be a leader in the provision of environmental consultancy and technical services in Zambia and within the SADC region.

OUR OBJECTIVES

The main business objectives are:

- To extinguish all the legacy environmental obligations of the parent company, ZCCM-IH
- To extend provision of environmental consultancy services to other clients within Zambia and abroad.
- To provide quality analytical services to clients within Zambia and abroad.
- To promote excellence in radiation protection for our clients and provide practical, cost effective radiation protection solutions for our clients
- To grow the business from inception to a fully-fledged environmental and analytical services provider within the shortest time possible.

OUR VALUES

- Integrity
- Professionalism
- Teamwork
- Accountability
- Innovation
- Efficiency

OUR QUALITY POLICY

It is the policy and primary business objective of METS to provide services of the highest quality standards that meets customer specified needs while maintaining full compliance to statutory and international requirements.

SAFETY AND ENVIRONMENT POLICY

METS acknowledges the importance of having a safe and healthy environment in an organization. METS recognizes the fact that safety, health and environmentally sound programs aim to protect not only the employees, but also the public from work place hazards. It is therefore Company policy to comply with all applicable safety, health and environmental laws and regulations. The company is further committed to minimizing the impact of its business on the environment with methods that are socially responsible, scientifically based and economically sound. The Company encourages conservation, recycling and energy use programs that promote clean air and water and reduce land degradation.

“...we provide services of the highest quality standards that meets customer specified needs while maintaining full compliance to statutory and international requirements”

Investments House, Plot 1591 Kantanta Street, P.O. Box
20172 Kitwe, Zambia.
Phone: +260 212 245822, 245819
Cell: 0966 782893 / 0977 203489 / 0978 372828
Email: musondan@mets.com.zm
Company Registration No. 107730



METS

Misenge
Environmental &
Technical
Services Ltd

COMPANY BACKGROUND

Misenge Environmental and Technical Services Ltd (METS) is the former Environment Department of ZCCM Investments Holdings Plc (ZCCM-IH).

The Department traces its existence back to 1994, when Zambia Consolidated Copper Mines (ZCCM) Ltd established Group Environmental Services (GES), with designated personnel at the Operations Centre of ZCCM Ltd and at each of the operating divisions. In 1997, in order for ZCCM Ltd to comply with the Mines and Minerals Act of 1995, GES spearheaded the development of the ZCCM Ltd Environmental Impact Statement for Chambishi, Chibuluma, Kansanshi, Konkola, Luanshya, Mufulira, Nampundwe, Nkana, Nchanga mines and Ndola Lime Company Ltd.

Following the privatization of the assets of ZCCM Ltd and the transformation of the Company into ZCCM-IH, the GES was transformed into an Environment Department with the responsibility of addressing the Government of the Republic of Zambia (GRZ) and ZCCM Ltd statutory and contractual environmental historical obligations that were not passed on to the new mine investors.

In 2003, as part of the privatization process, the World Bank, Nordic Development Fund and GRZ funded Copperbelt Environment Project (CEP). Through the initiative of Government, ZCCM-IH established ZCCM-IH Environmental Coordination Unit (ZECU) with the responsibility of implementing the Copperbelt Environment Project. The CEP came to an end on 31st March 2011 and ZECU reverted to an Environment Department within ZCCM-IH.

Subsequently ZCCM-IH decided to transform the Environment Department into a wholly owned Subsidiary company, namely Misenge Environmental and Technical Services Limited.

BUSINESS LOCATION

Misenge Environmental and Technical Services Ltd Head Office is located at Investments House plot 1591 Kantanta Street in Kitwe and also operates an Office and runs an Analytical Services laboratory in Kabwe.

Investments House, Plot 1591 Kantanta Street, P.O. Box 20172
Kitwe, Zambia. Phone: +260 212 245822, 245819
Cell: 0966 782893 / 0977 203489 / 0978 372828
Email: musondan@mets.com.zm
Company Registration No. 107730

COMPANY SERVICES

METS is a multifaceted full service company with a traceable excellent knowledge and record of environmental management in the mining and mineral processing industry in Zambia. METS professionals have the technical expertise, strength in project management, and a focus on delivery of high quality products to its clients. METS offers specialized services in the following areas:

1. Environmental Services

- Environmental Impact Assessment (EIA)
- Environmental Project Brief (EPB)
- Environmental Due Diligence (EDD)
- Project Management
 - o Hazardous Waste assessment, packaging, transportation and disposal
 - o Demolition and Site cleanup of defunct facilities
 - o Revegetation of tailings dams
 - o Remediation of contaminated sites
 - o Environmental Audits

2. Radiation Safety

RPA has entered into a memorandum of Understanding (MoU) with METS for the later to provide radiation safety services to the industry so as to enhance the protection of the people, workers and the environment from harmful effects arising from the use of ionising radiation and exposure from natural occurring radioactive materials (NORM).

Services offered include:-

- Radiation Monitoring
- Radiological Survey
- Conditioning of Radioactive Waste
- Radiation Protection Officer (RPO) Services

METS operates on behalf of ZCCM-IH an Interim Radiation Waste Storage facility for storage of spent sealed radiation sources and conditioned spent sealed radiation sources.

3. Analytical Services

METS owns an Analytical Laboratory located in Kabwe and offers quality services to its clients using the latest equipment and technology listed below:

- Lead Care II machine – Analysis of lead (Pb) in Blood.
- Turbidity and conductivity meters – determination of electrical conductivity and turbidity of industrial effluents and wastewater.
- Octagon sieve shaker – Analysis of particle size of ores, concentrates, cement, feeds and tails including other materials
- Contra 300 High Resolution Continuum Source Atomic Absorption Spectroscopy
 - o Determination of elementals in industrial, waste water and drinking water.
 - o Determination of elementals in soils, geological, exploration and mining samples.
- Determinations of various elements in concentrates.

- Determination of impurities in finished products (metals).
- Determination of various elements in Soil using Niton XRF Machine.
- Electro gravimetric determination of Copper in Matte, Ores, Concentrates, finished copper metal and feeds and tailings.
- Titrimetric Determination of Copper in Concentrates by Short Iodide Method.
- Gravimetric determination of Sulphur, Silica and Insolubles (insols) in Concentrates.
- Gravimetric determination of Sulphates in industrial effluents, waste water and domestic /drinking water.

- Gravimetric determination of Volatile matter, Ash, Moisture and Fixed Carbon in coal.
- Gravimetric determination of Total Suspended Solids (TSS) in industrial effluents, waste water and domestic /drinking water.
- Volumetric determination of Calcium in Limestone.
- Volumetric determination of Iron in Concentrates and Slags.
- Volumetric determination of Total Hardness and Total Alkalinity in industrial effluents, waste water and domestic /drinking water.
- Argentometric determination of Chlorides in industrial effluents, waste water and domestic /drinking water.
- Determination of various parameters in industrial effluents, waste water and domestic /drinking water using DR 6000 UV/Vis Spectrophotometer. Potentiometric Determination of Cobalt in Cobalt Concentrates using a Radiometer
- Determination of Silica, Iron, Copper, Cobalt, Manganese, Zinc, Calcium and other impurities in Cement
- Determination of Xanthate purity and Xanthate strength in Solution by acetone extraction method

4. Engineering Services

METS is a registered Civil Engineering and Environmental Consultancy firm with Engineering Institute of Zambia (EIZ) and is also a registered construction company with National Council for Construction (NCC) in Grade 5; Categories B, C, M and R.

Services offered under engineering include:-

Construction

- Road Infrastructures;
Drainage works, Culverts, pavements, walkways, small bridges, feeder roads and spot maintenance.

- Buildings;
Housing, offices, roofing, toilets, car parks and shelters.

- Tailings Dams;
Storm water control, re-profiling breached dam walls and general dam maintenance.

Consultancy Services

The company provides civil engineering consultancy services in design of water supply and sewerage systems.

METS owns the Trimble S8 Total Station surveying equipment. It's designed to deliver high performance and productivity in:-

- Land surveying
- Performing boundary and cadastral surveying.
- Mapping.
- Specialized engineering applications.
- Stockpile scanning and volume report generation.

IMMEDIATE PLAN

Certification to the following standards:

- ISO 9001:2008
- ISO 14001:2004
- OHSAS 18001:2007
- Accreditation to ISO/IEC 17025:2005

METS intends to develop the following capacity in the near future:

- Environmental Services: