ENVIRONMENTAL ENGINEERING CAPABILITY STATEMENT

Jones & Wagener is a firm of engineering and environmental consultants, established in 1966. Our Environmental Engineering capabilities are discussed below in more detail.

ENVIRONMENTAL ENGINEERING

The focus of our Environmental Engineering division is mine closure planning, designing pollution prevention infrastructure and pumped water systems, primarily on mining and industrial sites. Rehabilitated landform designs for opencast mines and discard dumps forms another core competency.

The goal of this division is the integration of environmental sciences and engineering principles to prevent, limit or mitigate the negative impact of anthropogenic developments on the natural environment through the implementation of practical, cost-effective and sustainable solutions.

Our engineers always work under the supervision of professionally registered staff members. In addition, we are actively involved in professional bodies such as the Land Rehabilitation Society of South Africa (LaRSSA). In 2013 Jones & Wagener was awarded the International Association for Impact Assessment (SA) award for excellence in Integrated Environmental Management for our submission entitled, “Predictive rehabilitation modelling for integrated, proactive planning of sustainable opencast mine rehabilitation”.

Some of the major industries and clients that we have serviced over many decades, and keep servicing, include:

- **The Mining Industry:** Coal, Gold, Iron Ore, Diamonds.
  - Anglo American, GlencoreXstrata, BHP Billiton, Kumba Iron Ore, Sasol, DeBeers, Exxaro, Kuyasa Mining
- **Power Industry:** Coal Power Plants.
  - Eskom, KiPower
- **Heavy Industrial Plants:** Smelters, Processing and Manufacturing Plants etc.
  - Sasol
The services we offer include:

- Design of post-mining landforms for the rehabilitation of opencast mines and discard dumps
- Mine closure planning
- Mine closure cost estimates
- Design of pump stations and pipeline systems
- Design of pollution control dams, silt traps and other pollution prevention infrastructure
- Water management planning
- Constructed wetlands and wetland rehabilitation
- Procurement & Construction Management Service

Our professional services incorporate all stages of the project life cycle, from project inception, concept and viability, design development to documentation and procurement.