



MAINTENANCE MANAGEMENT FLOW CHART



HOLISTIC RAIL SOLUTIONS

We are a company of railway specialists offering expert railway solutions. At R&H we understand that rail is a system representing a combination of infrastructure disciplines and rail operations aiming to address a logistics challenge in the most feasible operating manner.

We also realise the importance of maintenance in securing long term benefits of the operations and infrastructure. R&H consists of three divisions each incorporating a unique service provision within the rail sector;

- Consulting Engineering
- Rail Operations and Maintenance Training
- Maintenance Planning and Management

MAINTENANCE MANAGEMENT

Our Maintenance Management division is currently managing over 715 km of private sidings in Southern Africa which collectively carry more than 100 million tons of freight per annum. The involvement varies from quarterly routine rail and rolling stock condition inspections, to fulltime management of rail infrastructure maintenance contracts.

Services offered include condition assessments and review, determining maintenance strategies, the procurement and management of resources required to maintain the rail infrastructure, rolling stock, and liaising, on behalf of our clients, with Transnet, PRASA and the Rail Safety Regulator.



Maintenance



In order to deliver a value adding, professional service to the rail operator or infrastructure owner, R&H offers a structured approach to management of the maintenance activities of the entire railway system. This includes Perway, OHTE, Rail Area Lighting and Signalling.

The following is a brief summary of the services offered in line with our internally developed Rail Infrastructure Maintenance Cycle approach.



This approach can easily be adopted and altered to suite specific client operating and/or infrastructure requirements:

- Infrastructure Condition Assessment
- Compile an asset register
- Determine network requirement
- Determine workload
- Perform a risk assessment
- Develop a maintenance plan
- Compile a budget
- Acquire and manage resources
- Asset valuation
- Safety and quality inspections
- Respond to emergency callouts and assist with derailment and breakdowns
- Rail accident and incident investigations
- Liaison with other stakeholders and relevant authorities
- Contract and contractor management
- Client feedback
- Engineering investigations and design



MAINTENANCE MANAGEMENT SITES AND PROJECTS

We are responsible for the routine infrastructure condition assessment, planning and maintenance management of rail infrastructure. We ensure that the rail infrastructure belonging to the following clients is maintained in line with the respective quality management plans compiled in accordance with the Rail Safety Regulator's (RSR) requirements:

- Richards Bay Coal Terminal (RBCT)
- Glencore Operations South Africa
- PPC Ltd
- Assmang
- South32
- Exxaro
- Msobo Coal
- Natal Portland Cement (NPC)
- Richards Bay Minerals (RBM)
- uMhlathuze Municipality
- Zululand Anthracite Colliery
- United Manganese of Kalahari (UMK)



MAINTENANCE PLANNING

Maintenance is offered as a support service to infrastructure owners as well as forms an integral part of the infrastructure design development and operational planning process. To this extent we provide the necessary inputs into the planning and design process to efficiently incorporate maintenance requirements, which facilitate the development of long-term maintenance and reinstatement strategies.

Typical recent Maintenance Design and Planning Projects include:

- Khumani Iron Ore Mine: (2009 – Current)
Khumani, one of the largest exporters of Iron Ore appointed R&H to perform the full rail asset maintenance management at the siding. Included is mechanized maintenance and measurements, the asset condition assessment, procurement and management of the contractors performing railway maintenance and rehabilitation works.
- RBCT – Rail Siding Maintenance Management: (1984 - Current)
RBCT, a leading coal export terminal in the world has appointed R&H to provide fulltime representation on site to perform rail asset maintenance management by putting together five-year maintenance strategy, the material replacement plan, allocation of resources and the management of rail maintenance contractor and suppliers.
- PPC Limited – South Africa: (2010 - Current)
PPC, the leading supplier of cement and related products has appointed R&H to perform asset maintenance management of twelve sidings throughout RSA. The task includes periodic rail track inspection, workload determination, and plan and execute rehabilitation projects, manage the contractor's maintenance and construction works.

ASSET MANAGEMENT

R&H assists clients with compilation of their rail databases that give input to long-term sustainability of the rail infrastructure. The approach taken is to provide:

- Asset inventory
- Asset condition measurement
- Maintenance input history
- Cost information

This information forms the basis for all interventions required in order for the infrastructure to support the business requirement.