

# **KRIGER 2.0 MW<sub>th</sub> BIOMASS BOILER INSTALLATION MCP/SG ENVIRONMENTAL PERMIT APPLICATION JCG HALE LIMITED JUNE 2019**

## **Environmental Management Systems**

JCG Hale Ltd has an environmental management system (EMS) that covers the company's business activities associated with the design and construction of timber framed buildings and civil works. A copy of the EMS manual is appended to this section.

The manual defines the company's EMS and contains:

- a) The Environmental Policy;
- b) Statements of responsibility and authority;
- c) An overview of the company's environmental procedures and controls;
- d) The identification of the resources and training allocated to management, performance of work and verification activities including internal audit;
- e) The appointment of the Environmental Management Representative (EMR); and
- f) The arrangement for periodic management reviews.

The purpose of the manual is to demonstrate that the EMS meets the company's forthcoming ISO14001 accreditation requirements, and provides guidance and direction for the implementation and operation of the EMS to all personnel, including all relevant documents.

JCG Hale Ltd will develop additional procedures to direct the operation of the Kriger 2.0 MW<sub>th</sub> biomass boiler, including specific environmental management procedures. These procedural documents will be available for inspection at site upon request. This will include control procedures for the wood chip fuel, operational controls and environmental monitoring, preventative maintenance, record keeping, and emergency action plans and notifications, to ensure comprehensive and effective control of the Kriger 2.0 MW<sub>th</sub> biomass boiler.

## **Precautions Against Noise and Odour**

The site operations are not expected to greatly increase the existing noise or odour level in the surrounding area, with operations being carried out using the best practicable means at all times. The most significant potential for noise is anticipated during the chipping of the virgin timber offcuts, and JCG Hale Ltd will use its best endeavours to minimise noise where practicable, ensuring that potentially noisy process operations are undertaken within the process building.

No wood chip fuel is expected to be stored on site for more than three months. Once delivered into the walking floor fuel store, the wood chip fuel is held within the process building, and the main doors will be closed to minimise the potential for fugitive dust or odour emissions. This will also mitigate external noise levels associated with the operation of the biomass boiler and associated process equipment.

Given the nature of the virgin timber wood chip fuel to be utilised by the Kriger 2.0 MW<sub>th</sub> biomass boiler, and the frequent turn-over of fuel delivered to the fuel store, no specific controls for the potential creation of noise or odour nuisance are deemed to be required.

## **Record Keeping**

In line with documented EMS procedures, records will be maintained in relation to the following:

- Maintain records on the quantity of waste timber burned by the Kriger 2.0 MW<sub>th</sub> biomass boiler;
- Waste acceptance criteria and Duty of Care Transfer Notes for all wastes leaving the site;

- Daily boiler inspection reports and weekly site inspection reports;
- Maintenance and cleaning schedules and records;
- Other inspections and interventions by internal personnel or external contractors or regulatory bodies;
- Log of extra-ordinary events at the facility;
- Records from annual compliance check emissions monitoring data, in addition to any air quality monitoring, odour monitoring and drainage inspections;
- Recorded environmental effects including minor and significant pollution incidents;
- Details of any complaints from the public;
- Non-conformances of site operational procedures; and
- Records of training.

All records, which are to be held in electronic or paper form, will be available at the site for viewing by the relevant authorities, and will be kept for a minimum of six years.

## Training

There are no specific technical qualifications required for operators of biomass boilers, but JCG Hale Ltd will ensure that all personnel employed to operate the Kriger 2.0 MW<sub>th</sub> biomass boiler have appropriate skills and technical capabilities to understand the operation of the process, and their obligations under the terms and conditions of the environmental permit to be issued by NRW.

Novalux Energy Systems will provide training to operational staff at JCG Hale Ltd to enable them to undertake routine interventions and response to alarm conditions. This will involve checking the boiler operating status and alarm status. Any specific training will be conducted by the boiler commissioning engineers, details of the personnel involved will be recorded, and operator training certificates will be issued.

Any detailed interventions required will either be conducted by Novalux Energy Systems Limited personnel, or a suitably trained third-party agent. If using a third-party agent, this person will have detailed training by the commissioning engineers, and a certificate will be issued. The boiler's PLC will be password protected with different access according to the user level, such that untrained personnel will be unable to operate the boilers. Copies of all training records will be available for inspection upon request.