Khangisa Waste
CONSULTING

PULP SLUDGE ASSESSMENT REPORT

Prepared for
MPACT PAPER – SPRINGS MILL

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A composite sample of the stream was forwarded Talbot Laboratories to analyse per requirements dictated in the National Norms and Standards (GNR 635) for the assessment of waste for landfill disposal.

Per Regulation 4(1) of the GNR 635 document, the TC of all elements and chemicals substances specified in section 6 of the Norms and Standards that are known to occur, likely to occur or can reasonably be expected to occur in the waste must be determined. The implication is Regulation 4(1) of GNR 635 would apply to the LC of the identifiable and potentially identifiable COCs as well.

An evaluation pH of 7.3, per Talbot report W01612/22, has been established for the waste stream. The pH implies the stream meets the disposal to landfill restrictions imposed per GNR 636 and would not require pH adjustment prior land-filling. This, however, would be load and spot sample dependent per receptive facility established protocol.

The stream characterisation indicates the stream would be unreactive under the mild basic conditions that would be encountered in South African landfills producing leachate.

The stream characterisation indicates the stream would not react violently with moisture or water to generate explosive mixtures or toxic gases in a landfill environment. Radioactivity is not considered to be a hazardous property of concern given the input materials in the waste generation process.

Taking into consideration the intention is to secure access to a landfill facility for the disposal of the stream; the waste, per item 8 (1) of the Waste Classification and Management Regulations, has been assessed in accordance with the Norms and Standards for Assessment of Waste for Landfill Disposal.

Per 4(1) of the GNR 635 document, only the quantification of the Total Metal Cations and the Leachable metal cations were deemed necessary for assessment purposes. The decision logic behind this reasoning is dictated by the initial stream characterisation.

Per attached Annexure 1 and Talbot report W01613/22, the following is applicable for the Cadmium and Selenium: LC < LCT2 and for Copper and Mercury: TC < TCT1.

The stream, per 7(1) (b) of the National Norms and Standards for the Assessment of Waste for Landfill Disposal, is Type 2 Waste.

Type 2 wastes, per 4(1) of the National Norms and Standards for Disposal of Waste to Landfill, may be disposed at a Class B site or previously classified GLB+ landfill.