APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND VARIATION TO AN ATMOSPHERIC EMISSION LICENCE AT SAPPI NGODWANA MILL

November 2022

Background Information Document (BID) and Invitation to Comment

1. INTRODUCTION

Sappi Southern Africa Limited (Sappi) operates a pulp and paper Mill in Ngodwana, Mpumalanga Province (Figure 1). Due to growth aspirations of Sappi, Sappi Ngodwana (25°34'40.53"S 30°39'52.72"E) is proposing to produce additional packaging volumes on the existing Paper Machine #2 (PM2). Various mill expansion options are being considered, and these will include changes to the following infrastructure and/or processes at the Mill: soft wood storage area, Fibre Line #2, Fibre Line #3, Refibre Plant, Chemical Recovery Furnace and the Turbine House.

The purpose of this document is to provide Interested and Affected Parties (I&AP) with:

- Information on the proposed project.
- An outline of the Environmental Authorisation (EA) application process.
- An opportunity to comment on the application.
- Provide information on how stakeholders can participate in this process.

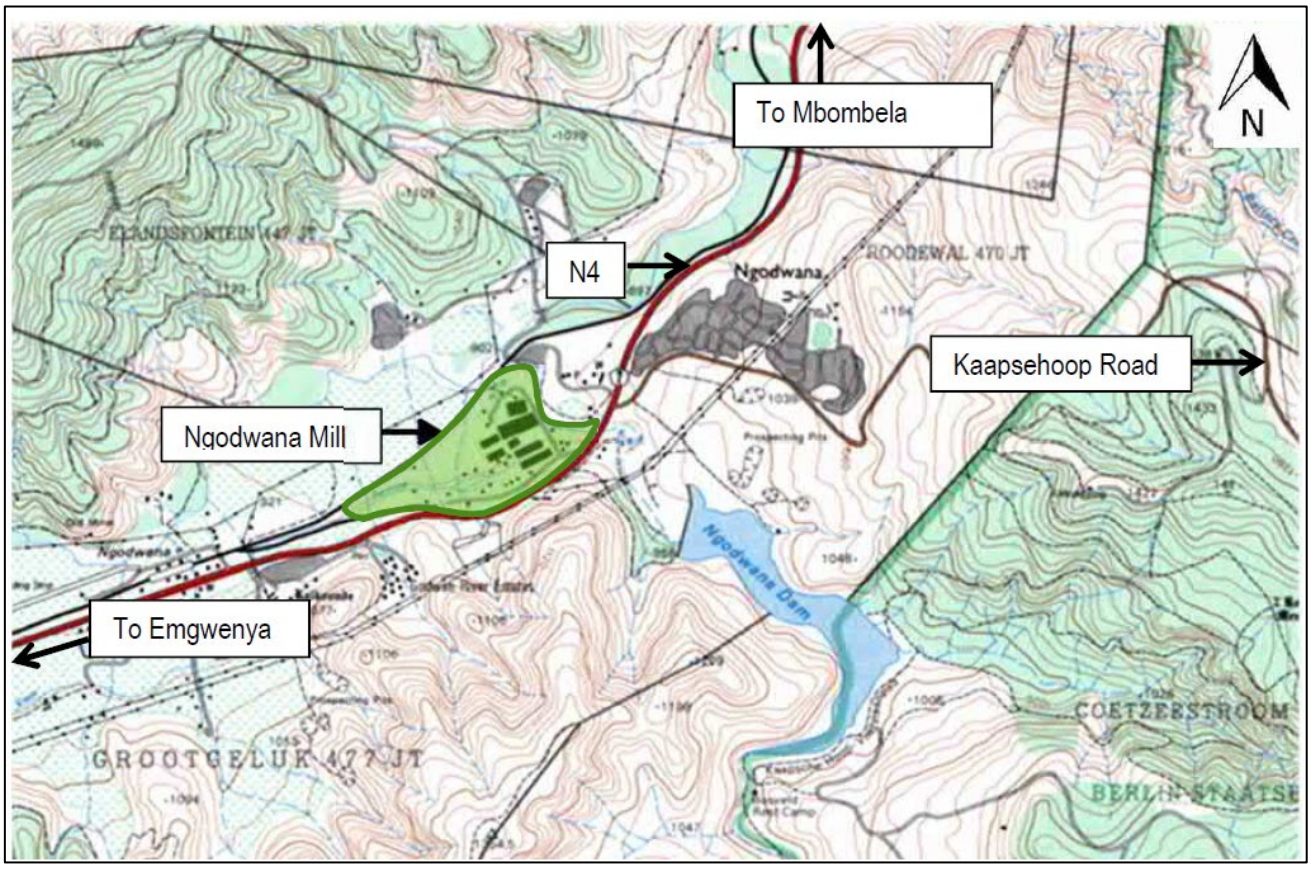

Figure 1: Sappi Ngodwana Mill locality map

2. PROJECT DESCRIPTION

The Sappi Ngodwana Mill commenced operations in 1966, with further expansions occurring between 1981 and 1985 to increase the product range produced at the Mill. In 1995, an ozone bleaching plant was installed to eliminate the use of elemental chlorine in the bleaching process, thus making the mill elemental chlorine free. In 2013 the Mill converted a portion of the paper-grade pulp production to dissolving wood pulp (DWP) production. The Mill currently produces paper grade pulp, newsprint and containerboard (370 000 t/a) and dissolving wood pulp (215 000 t/a), with the majority of the products being exported. Additionally the Mill generates its own energy (steam) and electricity from renewable and other sources.

Fibre for the manufacturing of pulp and paper is supplied to the Mill mainly by Sappi Forests and the balance is supplied by private growers. A number of tree species are used, mainly acacia and eucalyptus species. A Kraft pulping process is used to produce unbleached pulp and bleached specialised cellulose (dissolved wood pulp). A major proportion of the unbleached pulp produced is consumed in the production of Kraft Linerboard (KLB). The balance is sold as market pulp. Mechanical pulping is also used to produce ground wood pulp for the manufacture of newsprint.

Figure 2 provides an overview of the current mill process.

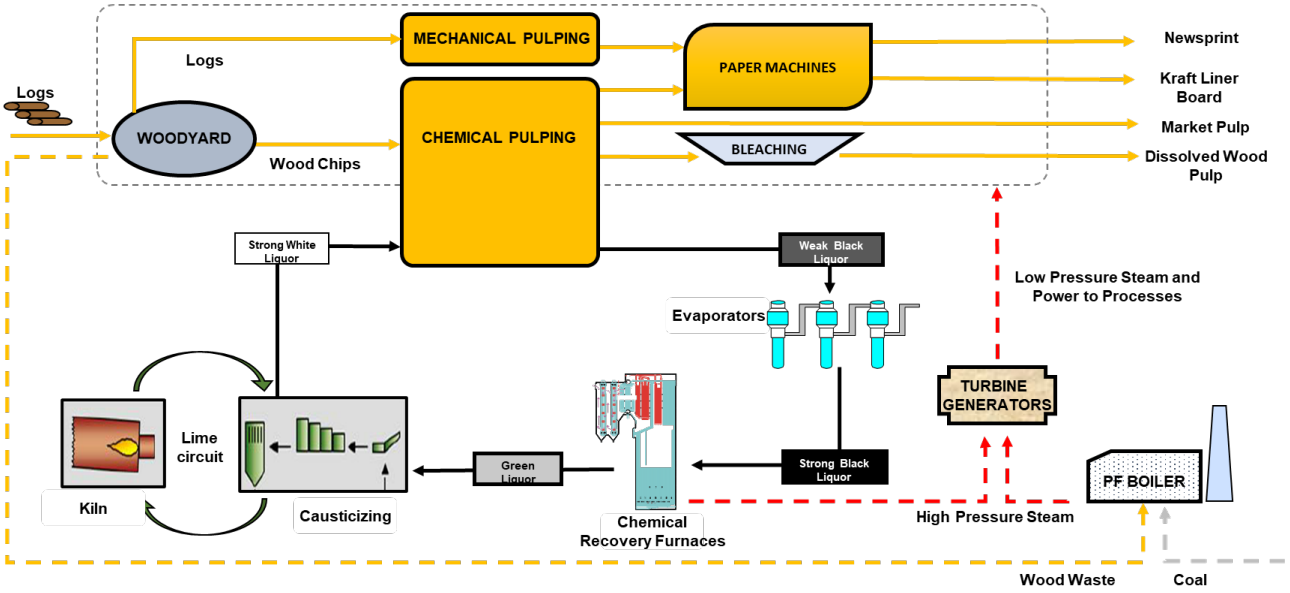

Figure 2: Mill Manufacturing Process (van der Merwe-Botha & Wille, 2017)

Sappi is proposing to upgrade PM2 and ancillary infrastructure to accommodate market demand. The proposed changes to the Ngodwana Mill are as follows (refer to Figure 3 for the location of the proposed changes):

1) Production output: the Mill is investigating two alternatives which will produce either 160 kilo tons per annum (ktpa) of Brown Paper Grade using Fibreline #2 or 215ktpa using the Fibreline #2 process, with an interim step of utilising ground wood or recycled fibre. The latter option is the preferred alternative.
2) Refibre Plant: The refibre plant consists of a repulper which dilutes recycled fibre for screening and cleaning purposes. The plant has an existing coarse and fine screening section which will be redesigned to minimise waste and enable incremental increase of production.

3) Fibreline #2 and Fibreline #3: Fibreline #2 will be upgraded to increase production capacity (from 220 ktpa to 340ktpa) and Fibreline #3 will be upgraded to increase capacity between 275ktpa to 285ktpa of 94% alpha cellulose pulp, from mixed hardwood species.
4) Chemical Recovery Plant: The Mill currently has 2 Chemical Recovery Furnaces (CRF1 and CRF2) to convert Black liquor to re-usable chemicals (mainly Sodium Carbonate and sulphide) and to recover energy (steam and power). An additional CRF is required (CRF3) and 2 alternative scenarios are being investigated:
   - **Option 1** will include CRF1 being mothballed, CRF2 remaining unchanged and a new CRF3 and associated stack being installed, which would be similar in size to CRF2. CRF3 will be installed in the Digester 1 area (pt 7 on Figure 3). This is currently the preferred alternative.
   - **Option 2** will include decommissioning CRF1 and CRF2 and replacing them with one large boiler and associated stack that will have sufficient capacity to meet the needs of the Mill (i.e. 5 000 tons of dry solids/day).
5) Turbine Generator: The changes to PM2 will increase the steam available for exporting to power generation. As such, an additional Turbine Generator (TG3) will be installed. This will require an extension of the existing turbine hall to accommodate the additional turbine. TG3 will generate in the order of 30MW of power. However, the existing TG1 is aging and Sappi are investigating the option of installing a 65MW generator and decommissioning TG1.
6) High voltage yard: The cables feeding the existing high voltage yard within the boundaries of the Mill be upgraded to accommodate the additional power generated.
7) Wood storage: The altered process will require an increase in the softwood storage capacity. A slasher deck may be installed at the wood yard to enable 6m length logs to be cut to the required 3m lengths on site.
8) Laydown areas: Laydown areas will be required during the construction phase of the project. There is limited capacity within the boundaries of the Mill for these laydown areas. Several sites have been identified in close proximity to the Mill (refer to blue polygons in Figure 3).

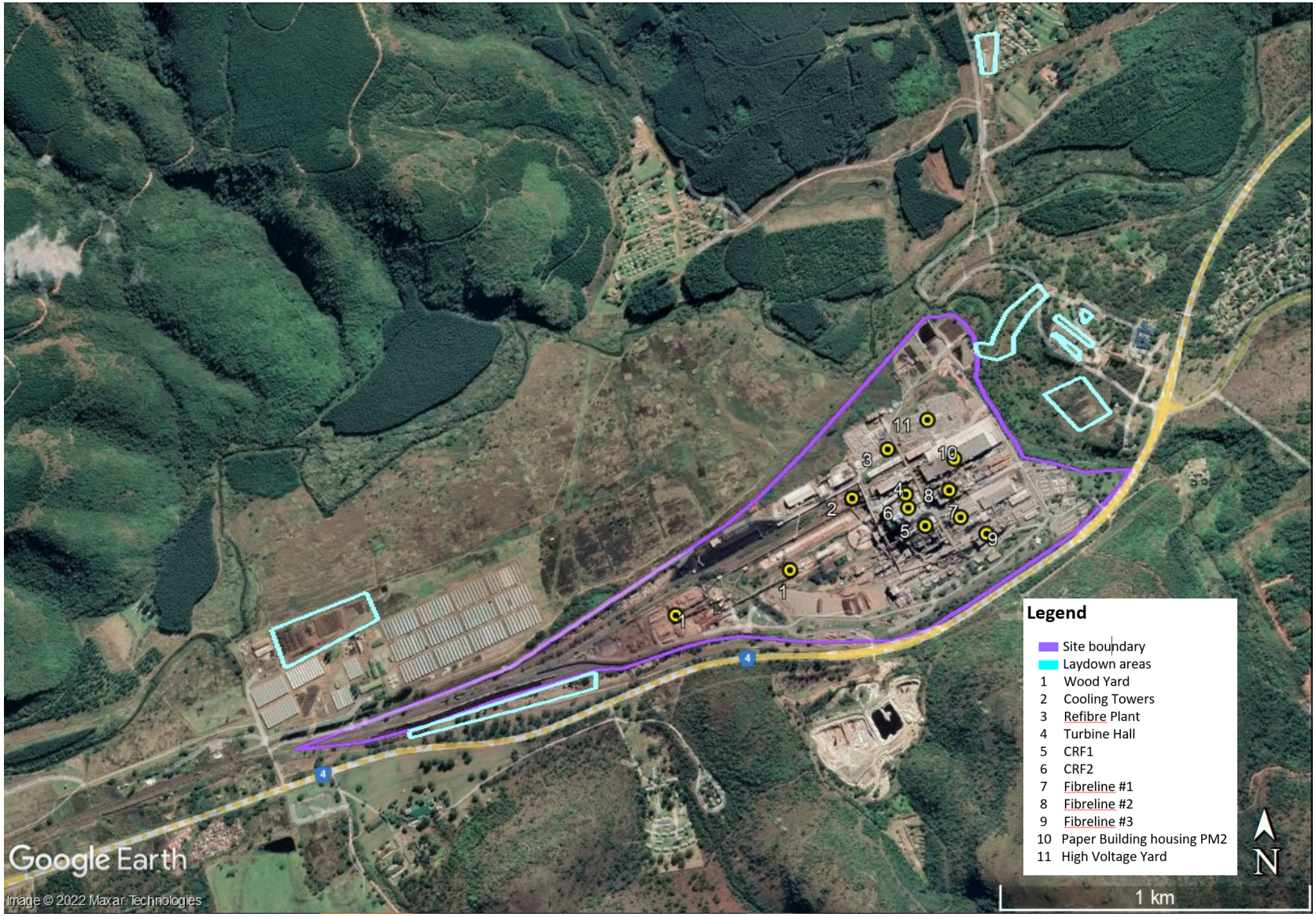

Figure 3 : Layout Map

3. LEGISLATIVE REQUIREMENTS

The proposed changes to the Mill will trigger listed activities in terms of the 2014 Environmental Impact Assessment (EIA) Regulations (as amended), promulgated in terms of the National Environmental Management Act No. 107 of 1998 (NEMA). As such, Environmental Authorisation for the proposed project is required.

The following listed activity is applicable:

- Listing Notice 1 of Government Notice (GN) No. 983 (as amended):
  - Activity 34 *relating to the expansion of existing facilities where such expansion will result in the need for an amended permit or licence in terms of national legislation governing the release of emissions, effluent or pollution.* An Atmospheric Emission License (AEL) amendment is required (further details relating to Sappi's current AEL is provided below).

A Basic Assessment process in terms of the NEMA is required to be undertaken to obtain Environmental Authorisation.

Sappi currently holds an Atmospheric Emission Licence (AEL) (No. 17/1/3/1/AEL-NSSA/COM/20/28) in terms of the National Environmental Management: Air Quality Act No. 39 of 2004 (NEM:AQA). The proposed changes to the Mill will require a variation to the following NEM:AQA listed activities in Sappi's current AEL:

- Category 9: Sub-category 9.2 – The recovery of chemicals from the treatment of spent liquor using furnaces.

It is still to be determined whether amendments will be required to Sappi's existing Water Use Licence (WUL) and/or Waste Management Licence (WML).

SRK Consulting (South Africa) (Pty) Ltd. (SRK) has been appointed as the independent Environmental Assessment Practitioner (EAP) to undertake the required BA process and AEL Amendment application on behalf of Sappi for the proposed project.

4. PUBLIC PARTICIPATION PROCESS

Public participation is an integral part of any environmental assessment process and aims to include all potentially Interested and Affected Parities (I&APs) in the process by notifying them of the proposed project and encouraging them to raise comments and ask questions.

The following steps will be undertaken to engage with you as part of the public participation process for this application process:

- Notification of project: You will be notified of the project through advertisement in the local newspaper, the Lowvelder, and circulation of the Background Information Document (i.e. this document).
- Interaction with you: It is important that you are afforded an opportunity to understand the technical issues associated with the project so you can meaningfully participate in and contribute to the application processes.
- Feedback: Feedback will be provided to you via direct communication and all relevant I&AP contributions will be reflected in the Basic Assessment Report.
- Submission to Mpumalanga Department of Agriculture Rural Development and Environmental Affairs (DARDLEA): Following closure of the comment period on the Draft Basic Assessment Report, the Final Basic Assessment Report and associated documentation, will be submitted to the Competent Authority Mpumalanga DARDLEA for a decision on the project. Once a decision

has been made all registered I&APs will be notified of the decision, as well as the procedure to appeal the decision, should you wish to do so.

5. TECHNICAL PROCESS

The technical evaluation component aims to identify the environmental and social impacts associated with the project and develop management measures. More specifically it involved the following tasks:

- Screening of potential environmental and social risks.
- Engagement with the project design team to proactively address risks and impacts during the planning phase of the project.
- Undertake the following specialist investigations:
  - Atmospheric Impact Assessment (AIA).
  - Climate Change Impact Assessment.
  - Socio-economic Impact Assessment.
  - Visual Impact Statement.
  - Civil Aviation Authority approval for the new stack.
  - Traffic study.
- Consideration and assessment of feasible site and design alternatives.
- Undertake the impact assessment process.
- Develop mitigation and management measures.

Please submit your comments in writing by no later than 6 January 2023 to Mrs. Tamaryn Hale and or Ms. Kirsten King as per the contact details below.

STAKEHOLDER ENGAGEMENT AND TECHNICAL QUERIES

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