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## **Executive Summary**

Sonae is one of the largest producers of wood based panel products in the world. The acquisition of Novobord has resulted in establishing Sonae Novobord as one of the leading manufacturers of particle board and medium density fibreboard (mdf) products in South Africa.

The Sonae Novobord plant is located in Rocky Drift between Nelspruit and White River in the Mpumalanga Province.

The following activity changes will be required for the expansion project at the existing Sonae Novobord plant in Rocky Drfift in the Mpumalanga Province:

- Installation of a new drier;
- Installation of a new heating device;
- Expansion of wood yard;
- Installation of a fume extraction and cleaning system; and
- Changes to internal receiving and dispatching routing.

The proposed project falls within the scope of Regulation 4(6) of Government Notice (GN) No R1182 under section 21 of the Environmental Conservation Act, 73 of 1989, as amended by GN R670 of 10 May 2002. Therefore, an assessment of the potential environmental impacts of the activity must be completed.

An integral part of the EIA is the Public Participation Process (PPP). The following tasks were undertaken as part of the PIP:

- Preparation of site notices, which were displayed around the project site;
- Preparation of a Background Information Document, which was distributed to Interested and Affected Parties (I&APs) to inform them about the project; and
- Placement of an advertisement to advertise the project and
- The public meeting.

The following key environmental issues were identified during the scoping phase by the I&APs:

- Volume of traffic and adequacy of vehicular access;
- Air pollution;
- Job creation and economic opportunity;
- Noise pollution; and
- Increased consumption of water.

I&APs will have the opportunity to view the Draft Scoping Report and submit their comments, issues and concerns in writing. The Draft Scoping Report will be made available at key public locations for a period of two weeks for public comment.

A number of specialist investigations have been commissioned for the project to ensure that all issues relating to the project are addressed with the appropriate level of detail.

Once the Scoping and Specialist Study Phases have been completed, and all the other relevant environmental data has been collected, it will be necessary to synthesize the data and evaluate the impacts of the project in the form of an Environmental Impact Assessment (EIA) Report.

I&APs will have the opportunity to view the Draft EIA Report and submit their comments, issues and concerns in writing. The Draft EIA Report will be made available at key public locations for a period of three weeks for public comment.

The comments period will allow I&APs the opportunity to comment on the linkage between the identification of the social and environmental impacts, the rating of the significance of the impacts (with and without mitigation) and the recommended mitigation measures.

## 1 Introduction

## 1.1 PROJECT BACKGROUND

Sonae is one of the largest producers of wood based panel products in the world. The acquisition of Novobord has resulted in establishing Sonae Novobord as one of the leading manufacturers of particle board and medium density fibreboard (mdf) products in South Africa. The company has three strategically located major manufacturing plants in South Africa. Sonae Novobord produces and upgrades particle board and medium density fibreboard (mdf) at its Rocky Drift Plant. The following table details the historic events of Sonae Novobord.

#### **Table 1: Historic Events**

Novobord 1	Particle Board Manufacturing		
	First Production December 1981		
SAPPI takeover	January 1982		
Novobord 2	Particle board Manufacturing		
	First production October 1989		
	Medium density fibre board		
	First production June 1990		
Sonae takeover	September 2000		

Sonae Novobord serves both the domestic (furniture manufacturers, office furniture manufacturers, kitchen manufacturers, built-in cupboard manufacturers, shop fitting, building industry, coffins, caravans, DIY, sign writing, etc) and export markets (niche markets).

## 1.2 PROJECT LOCATION

The proposed activity will be undertaken at the existing Sonae Novobord factory which is situated on Portion 3 of the Farm Dingwell 276 JT and Portion 5 and the Remainder of the Farm Paarlklip 280 JT in Rocky Drift between Nelspruit and White River in the Mpumalanga Province. The location is indicated in Figure 1. Sonae Novobord falls within the Mbombela Local Municipality which forms part of the Ehlanzeni District Municipality.

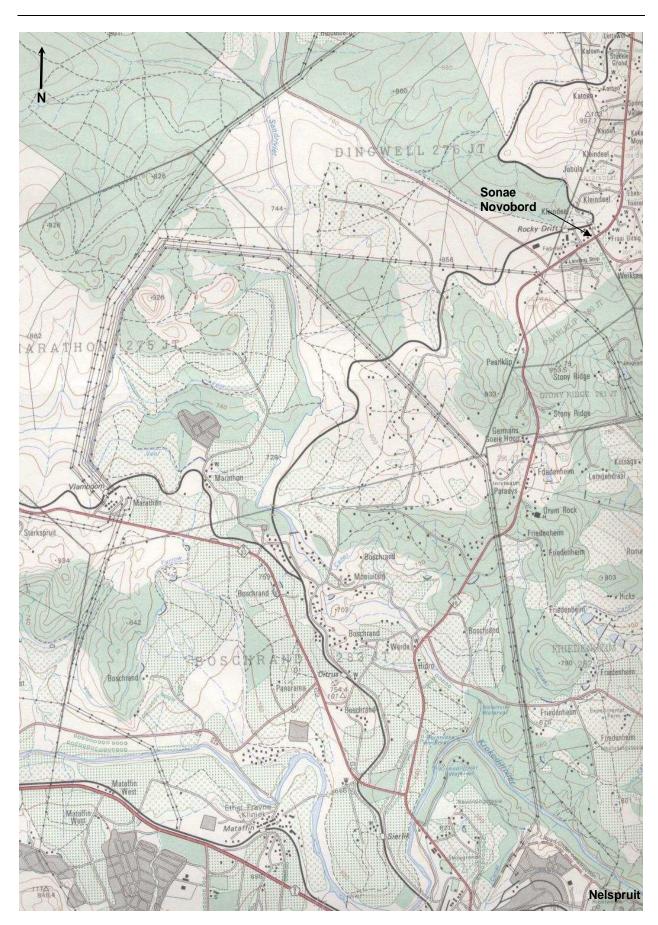


Figure 1: Locality Plan (1: 50 000 Topographical Map)

### **1.3 PROJECT PROPONENT**

The project proponent of the proposed project is:

Name of Applicant	Sonae Novobord		
Contact Person	Mr Anton Claassen		
Telephone Number	013 758 2153		
Fax Number	013 758 1168		
Postal Address	Private Bag X839 White River 1240		
E-mail	Anton.claassen@sonae.co.za		

#### 1.4 ENVIRONMENTAL CONSULTANT

The environmental consultant and contact person of the proposed project is:

Name of Consultant	WSP Environmental (Pty) Ltd		
Contact Person	Nicoletta Pera		
Telephone Number	011 233 7891		
Fax Number	011 807 1362		
Postal Address	PO Box 5384		
	Rivonia		
	2128		
E-mail	npera@wspgroup.co.za		

## 2 Legislative Requirements

The proposed project falls within the scope of Regulation 4(6) of Government Notice (GN) No R1182 under section 21 of the Environmental Conservation Act, 73 of 1989, as amended by GN R670 of 10 May 2002, under the following:

Schedule 9: 'Scheduled processes listed in the Second Schedule to the Atmospheric Pollution Prevention Act (45 of 11965) including Scheduled Process 67 Wood-burning and wood-drying processes'.

Therefore, an assessment of the potential environmental impacts of the activity must be completed. The environmental component of the project will comply with the requirements of *inter alia* the following national and provincial legislation (and the Regulations promulgated there under):

- The Constitution of South Africa;
- The National Environmental Management Act (NEMA) (Act 107 of 1998);
- The Environment Conservation Act (Act 73 of 1989);
- The National Water Act (Act 36 of 1998);

- The National Heritage Resources Act (Act 25 of 1999); and
- The National Environment Management Air Quality Act (Act 39 of 2004).

Sonae Novobord appointed WSP Environmental (Pty) Ltd (WSPE) to undertake the necessary Scoping Study to identify and evaluate the potential environmental impacts of the proposed expansion to the plant.

## 3 Scoping Study Objectives

The objectives of the Scoping Study are to:

- Inform a broad range of Interested and Affected Parties (I&APs) about the project and obtain their issues, concerns and queries regarding the project;
- Identify the potential positive and negative impacts associated with the proposed expansion;
- Suggest mitigation measures to ameliorate negative impacts and enhance the positive impacts;
- Provide sufficient information to enable the authorities to make an informed decision on the project; and
- Comply with the relevant environmental legislation.

An important part of any scoping study is the public participation process (PPP), which aims to:

- Inform a broad range of I&APs about the project and the environmental process to be followed;
- Establish lines of communication between I&APs and the project team;
- Provide ample opportunity to all parties to exchange information and express their views and concerns;
- Encourage and obtain contributions from I&AP's and ensure that all issues, concerns and queries raised are documented and addressed; and
- Identify all the significant issues in the project.

## 4 Approach to Environmental Impact Assessment Process

## 4.1 APPLICATION FOR AUTHORISATION AND PLAN OF STUDY

An application for Authorisation was compiled and submitted to the Department of Agriculture and Land Administration (DALA) on 16 March 2006 at the pre-application meeting held at the DALA offices. The Plan of Study was submitted to DALA on 31 March 2006.

## 4.2 AUTHORITY CONSULTATION

The following Government Authorities have been identified and invited to become involved in the process to date:

- Department of Agriculture and Land Administration (DALA);
- Department of Water Affairs and Forestry (DWAF); and
- Mbombela Municipality.



## 4.3 INTERESTED AND AFFECTED PARTIES (I&APS) CONSULTATION

The identification and registration of I&APs has been an ongoing activity during the course of the project. WSPE developed and maintained an electronic database for the duration of the project where I&AP details were captured and automatically updated as and when information was obtained. I&APs were identified via the following means:

- Existing list of I&APs obtained from Sonae Novobord;
- A newspaper advertisement placed in the Lowvelder;
- Three (3) site notices;
- Comments received from neighbouring businesses;
- Distribution of Background Information Documents (BID's) to neighbouring industries, businesses and land owners; and
- A public meeting

#### 4.3.1 Advertising

In accordance with the EIA regulations an advertisement was placed in the Lowvelder on 11 April 2006. In addition three (3) on-site notices were placed at the site. Refer to Appendix A for a copy of the newspaper advertisement and on-site notice. The photographs below indicate the location of the site notices.



Photograph 1: Site Notice at Entrance to Sonae Novobord





#### Photograph 2: Site Notices on Main Road

4.3.2 Background Information Document (BID)

A BID was compiled and distributed to all those registered as I&APs on the database. The purpose of the BID is to:

- Provide background information on the proposed project;
- Outline the environmental process;
- Notify I&APs of the date, time and venue of the public meeting; and
- Provide the identification of other stakeholders.

Refer to Appendix B for a copy of the BID distributed to the various I&APs.

#### 4.3.3 Public Meeting

A public meeting was held on 25 April at the Bundu Country Lodge. At the meeting the project was presented to the I&APs. In addition the environmental process was discussed and all comments and issues were recorded. Refer to Appendix C for the minutes of the meeting.

#### 4.4 SPECIALIST STUDIES

Were available existing information will be used. In addition the following specialist studies will be undertaken as part of the EIA phase:

- Air quality assessment (which will consist of dispersion modelling, formaldehyde measurements and dust fallout monitoring);
- Traffic count;
- Heritage baseline assessment (as part of the air quality assessment); and
- Noise assessment.



### 4.5 DRAFT SCOPING REPORT

A Scoping Report has been compiled that comprises an overview of the proposed expansion project and the social and environmental issues on the project and I&APs issues, concerns and queries.

#### 4.6 PUBLIC COMMENTS PERIOD

The Draft Scoping Report will be made available at for a period of two (2) weeks. I&APs will have the opportunity to view the Draft Scoping Report and submit their comments, issues and concerns in writing or telephonically to WSPE by the closing date. This will represent the end of the Scoping Phase and the beginning of the EIA phase.

### 4.7 ENVIRONMENTAL IMPACT ASSESSMENT REPORT

The EIA Report will comprise an overview of the assessment of the proposed extension and upgrade and an outline of the issues, concerns and queries raised by I&APs during the EIA process.

Mitigation and Management Measures will be compiled as part of the impact assessment process for the Scoping Report. The Mitigation and Management Measures will be included in the Report to allow I&APs an opportunity to comment on the linkage between the identification of the environmental impact, the rating of the significance of the impact (with and without mitigation) and the Mitigation and Management Measures.

The final updated EIA report will then be submitted to DALA for their consideration.

### 4.8 PUBLIC COMMENTS PERIOD

The Draft EIA Report will be made available at suitable public locations for a period of three (3) weeks. I&APs will have the opportunity to view the Draft EIA Report and submit their comments, issues and concerns in writing or telephonically to WSPE by the closing date.

#### 4.9 RECORD OF DECISION

Once a Record of Decision has been issued, all I&APs registered on the database will receive a letter detailing the outcome of the decision as well as the appeal process to be followed, should any of the I&APs want to appeal the decision made by DALA.

## 5 Description of the Environmental Setting

## 5.1 GEOLOGY

The geology of the area consists of the Nelspruit Suite which consists of Potassic gneiss and migmatite with some phenocrysts; strongly porphyroblastic veined by granodiorite.

#### 5.2 TOPOGRAPHY

The site has been developed and is relatively flat. However a slight downward gradient from south to north does exist.

#### 5.3 CLIMATE

The area has sub-tropical climate with warm, wet summers and dry winters. Rainfall occurs during the summer months of October to March in the form of thunderstorms. The yearly average rainfall for the Nelspruit area is 767 mm. This average was calculated using data obtained from 1961 to 1990 from the Nelspruit weather station. The table below indicates the climatic data for Nelspruit for the period 1961 – 1990.

	Temperature (°C)				Precipitation		
Month	Highest Record	Average Daily Maximum	Average Daily Minimum	Lowest Recorded	Average Monthly (mm)	Highest 24 Hour Rainfall (mm)	
January	40	29	19	11	127	113	
February	39	29	19	11	108	130	
March	38	28	18	10	90	83	
April	36	27	14	5	51	72	
Мау	35	25	10	2	15	37	
June	32	23	6	-2	9	46	
July	32	23	6	-1	10	44	
August	35	25	9	-1	10	32	
September	38	27	12	2	26	74	
October	40	27	14	5	75	77	
November	38	27	17	10	115	73	
December	38	28	18	10	131	65	
YEAR	40	27	13	-2	767	130	

Table 2: Climati	c Data (I	Nelspruit	1961 - 1	1990)
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Source: South African Weather Services

#### 5.4 SOIL

Majority of the area within the factory boundary has been built over. Broad soil patterns fall within the red dysotrophic and / or mesotrophic soils.

#### 5.5 LAND USE AND LAND CAPABILITY

The property is located within an industrial area in Rocky Drift. Land use is thus seen as mainly industrial with limited land capability for purposes other than industry.

#### 5.6 SURFACE WATER

The area falls within the X22 Drainage Region that is part of the Inkomati River Catchment. A tributary of the Sandspruit River flows in close proximity to the factory area

#### 5.7 GROUNDWATER

Groundwater comes from two sources:

- Water observed above the pebble marker strata which is a result from the summer rains in the area; and
- Water well below the pebble marker in the residual granites. This water table area appears to be confined as it was not observed throughout the site.



#### 5.8 FAUNA AND FLORA

The project area falls within the savanna biome. The site of the proposed development is highly disturbed and no endangered or rare plant or animal species have been observed. Previous houses and buildings were demolished when the area was zoned as Industrial II.

#### 5.9 AIR QUALITY

Sources that could lead to dust dispersion could include the chipper, drier and material transport systems of the Sonae Novobord activities. Various other businesses and industries with point source emissions are situated in the area. These may also contribute to the dust and ambient air quality of the area.

#### 5.10 NOISE

Sources of noise that could arise from the plant include the chipper, drier and high pressure blowers. Various other businesses and industries are situated in the area. These may also contribute to the ambient noise levels in the area.

### 5.11 CULTURAL AND ARCHAEOLOGICAL SITES

The site of the proposed development is highly disturbed and no known sites of cultural or archaeological sites exist on the property. According to I&APs some rock art sites are located in the surrounding areas. The exact location of these sites have not been revealed by the Rock Art Institute due to security reasons.

### 5.12 SOCIO-ECONOMIC

#### 5.12.1 Rocky Drift

The site of the proposed development is situated in the Rock's Drift Industrial Area. The surrounding properties belong to various landowners. The standard of living in the area is high. Employment levels in the area are high and it is estimated at approximately 70 - 80%. In addition the education standard is high.

The housing component in the greater Nelspruit / White River area consists of suburbs with residential housing. The area is fully serviced by the Mbombela Municipality.

#### 5.12.2 Mbombela Local Municipality

The following tables indicate information obtained for the Mbombela Local Municipality from the Demarcation Board. The table below indicates the breakdown of age groups for the Mbombela Local Municipality. As can be seen the majority of the population is in the age group of less than 19 years old. The total population for 2001 was 476 592. Of that 249 083 are female and 227 510 are male.

labi	e 3:	Age	

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Description	2001
0-4	52 153
5 – 9	54 742
10 – 14	57 904
15 – 19	57 322
20 – 24	46 724
25 – 29	44 683

Description	2001
30 – 34	35 771
35 – 39	32 439
40 - 44	23 539
45 – 49	19 478
50 – 54	13 897
55 – 59	9 714
60 - 64	9 317
65 – 69	6 105
70 – 74	5 751
75 – 79	2 965
80 and over	4 088
TOTAL	476 592

Source: Demarcation Board

The table below indicates the employment status of people in the Mbombela Local Municipality. As can be seen a high number (108 239) are employed.

## Table 4: Employment

Description	2001
Employed	108 239
Unemployed	65 686
Not Economically Active	12 0513

#### Table 5: Education Level

Description	2001
No Schooling	63 257
Some Primary	39 232
Complete Primary	14 971
Some Secondary	62 742
Std 10 / Grade 12	54 907
Higher	62 742

## 6 Detailed Project Description

The following sections detail the process at the Sonae Novobord factory including the changes which are proposed. The figure below indicates the process flow at the Sonae Novobord factory.

Photograph 3 indicates an aerial view of the proposed expansions at the factory. Two driers are shown in this photograph; the new and old drier. The old drier will be disassembled once the new drier is installed and in working condition.

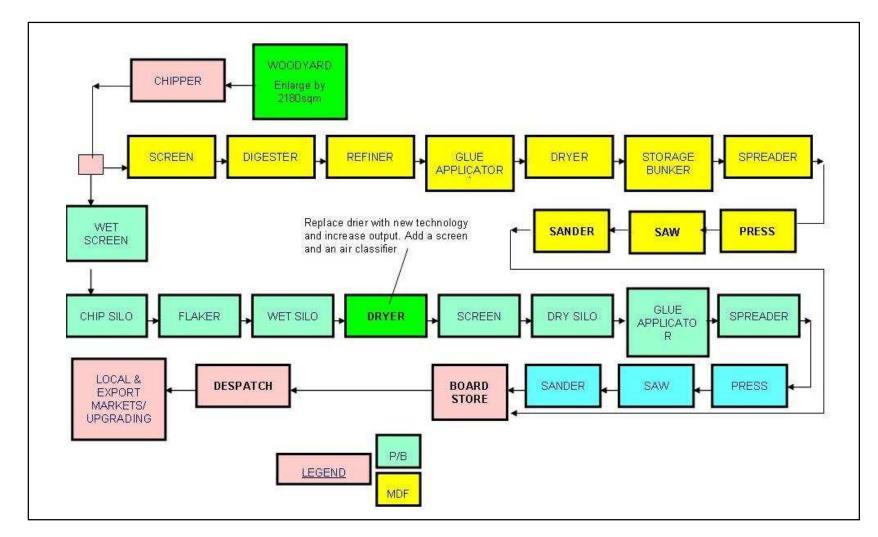


Figure 2: Process Flow Diagram



Photograph 3: Aerial View of Proposed Changes (Two driers are shown above. The old drier will be demolished once the new drier is built).



### 6.1 ZONING

The property forms part of what was originally identified as a decentralised industrial development zone, originally earmarked by the South African Government as part of its independent homeland policy. The Rocky Drift area was identified as a so-called 'border industrial node' and enjoyed a special dispensation in respect of development contributions to road infrastructure and servicing infrastructure, relocation grants and related benefits. As a result, the properties were incorporated into the area of jurisdiction of the White River Town Planning Scheme. During this process the subject properties were allocated a zoning of 'industrial'.

## 6.2 FACTORY ENTRANCE

All receiving and dispatching is routed over a weighbridge at a central entrance. The internal routing will be changed to avoid congestion at the main entrance as well as outside the main entrance. Two weighbridges will be installed to cope with in-bound and out-bound logistics respectively. An application for two entrances has been made to the Roads Department to prevent congestion outside of the premises as vehicles are currently parking on the side of the municipal road.

### 6.3 WOOD YARD AND CHIPPER

Waste timber, consisting of round wood, planks, chips and shavings are transported to the weighbridge where the weight of the materials is determined. From here the vehicles move to the wood yard, where the wood I inspected and off-loaded. All timber received is currently stored in the wood yard. The maximum amount of timber stored is approximately 5 days' supply (approximately 4 500 tons). The wood yard will be increased by approximately 2 280m<sup>2</sup>. This will be accomplished by paving the area next to the existing wood yard. This increase in timber will also be from waste timber that was normally left in the environment or burned in incinerators. This will now be collected and used as raw material instead of good material. The round logs and off-cuts are fed into a chipper to produce wood chips.

#### 6.4 WET SCREEN PREPARATION

Chips are loaded into hoppers using front-end loaders. The hopper screws carry the chips forward onto the conveyor belt, which carries the chips to the wet screen. Here the oversize moves over the screen through the hammer mill for recycling and the screened material falls onto a conveyor belt, which carries the material to the silo bin. Two screws from the silo feed the material to the flakers, where the material is reduced to small flakes for board production. A chain conveyor carries the material to the wet flake silos. Improvements to the transport cyclones are planned and this will reduce emissions.

#### 6.5 MATERIAL DRYING AND SCREENING

Wet flakes are introduced into a flow of hot air. This air is heated by the Korting burner which burns sander dust (process waste) in an oxygen rich environment. The air carries the material to the rotating drier drum where the material is dried. After drying the material is discharged at the out feed. The air is circulated via multicyclones to the recirculation chamber and the stack. From the out feed screw, the material drops onto the reddler conveyor, which transports the material to the dry flake silo. Dry flake material is carried from the dry flake silo to the screens. The screens separate the material into four different fractions, the oversize, core layer, surface layer and dust. Dust is collected at the dust filter and transported to the dust silos. Oversize material moves over the top screen and is transported to the Pallman Refiner where it is reground and transported. Core material and surface material is transported to the core layer silo and surface layer silo respectively.

A new drier will be built to replace the current drier. As soon as the new drier is operational, then the old drier will be decommissioned. The output of the new drier will increase from 600m<sup>3</sup> to 1000m<sup>3</sup> of press production per day. The new drier will be designed around planned emissions of less than 100mg/m<sup>3</sup>. Current air emissions are in the region of 160 mg/m<sup>3</sup> solid particulate matter (current permit is set at 400mg/m<sup>3</sup>). This will be achieved by using high efficiency cyclones to clean emissions. One additional dry material screen and one air screen will be added to the process. This drier is the latest available technology.



#### 6.6 PRESS LINE

Core layer and surface layer material is separately conveyed from the dry silos to the dosing bins, on the top deck of the glue deck. The rakes in the doisng bin form a smooth amount on the dosing belt. From there the material falls down onto an impact scale and into the blender, where it is mixed with the resin.

From the glue deck, the material is conveyed to the forming machine, where a smooth mat is formed on a Forming belt. The steel belt on the press line moves forward and the newly formed mat is carried into the press.

An additional press heating device will be installed in the current boiler area to heat oil for the new press. The new heating device will be similar to the current heating device, but with the option of using saw mill waste as a source of fuel. The technology used in the heating device result in very efficient burning of wood waste.

#### 6.7 PRESS FUME EXTRACTION

Fumes from the current and new press will be cleaned by utilising active scrubbers. The collected material will be recycled through the process or incinerated in the Konus (6.6).

#### 6.8 SANDER

As the solid board exits the press it is cut to size by cross cut saws. The manufactured board is sanded at the sanders to ensure a smooth finish and a board of consistent thickness. Sander dust is recycled and used as fuel for the drier.

#### 6.9 WAREHOUSE STORAGE

Boards are stored in the finished goods warehouse until dispatching to a client.

#### 6.10 ELECTRICITY

Electricity is supplied by the Mbombela Local Municipality through the regional electricity network. An increase in electricity will be required. It is anticipated that the increase in electricity will be to 10 MVA.

#### 6.11 WATER

Water will be obtained from the Mbombela Local Municipality via the proposed water pipeline expansion project. The quantity of water required will be 438 kl/day.

#### 6.12 WASTE

Solid waste produced at the plant will be used as boiler fuel. Solid waste, other than wood chips, is removed by the Mbombela Local Municipality and disposed of at the municipal landfill site.

#### 6.13 RAW MATERIAL

Two studies were undertaken at the end of 2005 (one local and one at a national level) in order to assess the availability of raw material for Sonae Novobord. The report identifies various sources which will be able to provide for the expansion and increased production at Sonae Novobord.

#### 6.14 SITE ACCESS

Access to the factory is via the Heidelberg Road (D1903) off the R40 at the existing traffic light intersection.



# 7 Alternatives

Various options were considered before deciding on the Drier. The first option was to upgrade the current drier. This would mean that old technology is upgraded and that the emissions would remain the same. The second option was to move away from wood dust as a fuel and use electricity to generate heat. At 30MW this is not practical due to the unavailability of electricity and the inefficiency of this type of heating. A negative spin-off of this would be that sander dust will become a waste product instead of a fuel for the burner. The third option was to install a new, proven drier that would be able to meet low emission levels. From the above it was determined that the best option would be to install a new drier. Various new driers were considered. The main criteria were:

- Emission levels; and
- Efficiency in terms of energy use.

Of all the driers assessed, the Recalor was chosen based on guaranteed emissions that are below 100mg/m<sup>3</sup> and the efficiency of the drier.

## 8 Issues Identified and Raised During Consultation

This section of the report documents the concerns, comments, viewpoints and questions (collectively referred to as 'issues') raised by the Authorities, I&APs and WSPE during the consultation process. In response WSPE has compiled detailed responses to each if available. Where responses have not been provided they will be investigated and included in the Environmental Impact Assessment Report. The following table (referred to as an 'Issues Table') lists all the issues / comments together with the responses.



## Table 6: Issues Raised During the Consultation Process by I&APs

Issue and Concerns	Commentator	Source	Response		
Air Pollution					
Emissions of toxins	R Wagner (Resident)	BID Response	An air quality assessment will be undertaken and included in the EIA report.		
Air Pollution	R Mirrens (Resident) M Bam (Resident) T Mason (Resident) R Wagner (Resident)	BID Response	An air quality assessment will be undertaken and the results compared to legal limits. This will be included in the EIA report.		
Increased release of Formaldehyde into the atmosphere resulting in respiratory disorders.	Luke Martin (Resident)		The plant uses urea formaldehyde based resin. The emissions from the presses are in vapour form and breaks down easily. An assessment of possible formaldehyde beyond the Sonae Novobord fence will be undertaken and included in the EIA report.		
			Active scrubbers will be employed to reduce emission levels from the current and new press.		
Our concerns lie mainly with the near continuous and apparently heavy emissions of fume and smoke from the factory and its effect on the local people.	M Rossaak and S Evered ( WESSA)	BID Response	An air quality assessment will be undertaken and included in the EIA report.		
			The current drier is running near its maximum capacity. During the rainy season, wet material is dried and this causes the drier to run to the maximum permissible levels. The new drier is over designed and this will result in consistent efficiency and therefore less emissions.		

Issue and Concerns	Commentator	Source	Response
Concerned about the Volatile Organic Compounds (VOC's) that are likely to be, and are being released into the air. A more efficient cyclone will be installed, that will be twice as efficient as the current cyclone. But, if production will be doublng, the dust emissions will then be the same as they are at present, resulting in no real improvement for the environment. The cyclone will not remove any VOC's from the air, and if production will double, then so will the VOC's emitted into the air. Formaldehyde is a carcinogen. Request that a thorough scientific study by an independent party, with no vested interests, be carried out before any expansion takes place, and that it includes the studying of current as well as proposed increases in emissions.	M Attwood (Resident)	E-mail Public Meeting	<ul> <li>Wood burning in an oxygen rich environment such as the drier will convert the small amount of VOC's into water vapour and CO<sub>2</sub>. VOC's are not associated with this type of wood burning process.</li> <li>The emission levels will be less than 50% of the current emissions but with the increase in volume the total emissions might be the same as current.</li> <li>Active scrubbers will be employed to reduce emission levels from the current and new press.</li> <li>An air quality assessment will be undertaken and included in the EIA report.</li> <li>The active scrubber on both presses will reduce formaldehyde emissions. In addition formaldehyde testing will be undertaken by an accredited, independent organisation.</li> </ul>
Current stack emissions appear to be inadequately controlled. Is fume extraction going to be installed on all stacks?	R Clanahan (C.R.H. Clanahan & Associates)	BID Response.	An air quality assessment will be undertaken and included in the EIA report.
Wood dust from the factory is also a concern.	BR Coulson (Bundu Rocky Wild Park)	Letter dated 30 May 2006.	This will form part of the EMP and will be included in the EIA report.
People are currently unhappy so despite future developments air quality needs to be addressed.	A Rossaak (Resident)	Public Meeting	An air quality assessment will be undertaken and included in the EIA report.
There are smoke emissions that disperse at low altitude for kilometres. At Bundu Rockies the smoke can be perceived	BR Coulson (Bundu Rocky Wild Park)	Letter dated 30 May 2006.	An air quality assessment will be undertaken and included in the EIA report.

Newspaper Article

T Mason and M

An air quality assessment will be undertaken and

strongly at times.

In terms of air pollution and what we breath this means

Issue and Concerns	Commentator	Source	Response
formaldehyde and fibre particles in the air. One of the concerned people bought a bank bag full of dust to the public meeting that was just one day's accumulation in his workspace that is upwind of the factory. This dust has formaldehyde in it. Short term and long term inhalation exposure to formaldehyde in humans can result in respiratory symptoms and eye, nose and throat irritation. Human studies report an association between formaldehyde exposure and lung and nasopharyngeal cancer. Based on available scientific information, a level of formaldehyde exposure below which no carcinogenic effects are anticipated cannot be identified, which implies that there is no safe level of exposure. In order of cancer potency formaldehyde ranks above asbestos and chloroform. At the meeting a representative from the plant said that there is an exposure limit of 2 parts per million for the workers over an eight hour period. In the USA the exposure limit has been reduced from 1 to 0.75ppm to avoid non-cancer effects in workers, thus the workers at the plant have an excessive exposure to the chemical. Those of us who live in the vicinity of the plant have a 24-hour exposure to the waste.	Attwood (Resident)	26/04/2006	<ul> <li>included in the EIA report.</li> <li>The plant uses urea formaldehyde resin with a free formaldehyde of 0.4%. during board pressing the resin is subjected to heat and pressure. Free formaldehyde is released at the press out feed. The occupational exposure limit is 2 ppm. However Novobord's central limit is 1 ppm. The plant is operated well within the legal limits.</li> <li>Formaldehyde monitoring will be undertaken and the results included in the EIA.</li> </ul>
What are the current stack emissions?	M Attwood (Resident)	Public Meeting	The current drier emissions are in the region of 160mg/m <sup>3</sup> .
What chemicals do the emissions contain?	T Mason (Resident)	Public Meeting	They contain normal emissions from wood burning processes.
What emissions do you get from the glue?	T Mason (Resident)	Public Meeting	The emissions contain small amount of water vapour and formaldehyde.

Issue and Concerns	Commentator	Source	Response
Is there sulphur in the emissions and will the scrubber remove the smell of sulphur.	R Mitton (Resident)	Public Meeting	A small amount of sulphur is emitted when the burner is using a light furnace fuel and the smell would be noticeable. The burner runs on light furnace fuel only when dust is not available, which is less than 10% of the time.
What emission limits will be placed on the plant with the new drier?	H Kammeyer (Resident)	Public Meeting	Limits will be determined by legislation. Sonae Novobord will comply with these limits and their permit conditions.
Could the dust emissions be reduced?	R Schormann (Resident)	Public Meeting	<ul> <li>There is technology available which would cost R30 million in order to install. This is a WESP which would reduce the amount of solid particulate. R30 million is a substantial amount but this will be considered in the future.</li> <li>The expected legal limit will be 120 mg/m<sup>3</sup>. The patented design cyclone will yield results of below 100 mg/m<sup>3</sup>.</li> </ul>
What will the emissions be in m <sup>3</sup> ? What is the mass and outflow?	R Schormann (Resident)	Public Meeting	This will depend on the final drier design. This will be included in the EIA report.
Are any measurements of the emissions taken in the area?		Public Meeting	Emissions are measured in the factory, but not outside the perimeter.
There are many residential developments which are proposed for the area. Many of these are low cost housing initiatives. They still deserve good air quality.	R Schormann (Resident)	Public Meeting	Comment noted.
Visitors to the area complain about the dust.	R Schormann (Resident)	Public Meeting	Comment noted.
The dust is visible in prevailing wind conditions.	R Schormann (Resident)	Public Meeting	Comment noted.
Prevailing winds are in an east-west direction. Therefore certain areas for residential developments could not be	H Kammeyer	Public Meeting	Comment noted.

Issue and Concerns	Commentator	Source	Response
considered due to the poor air quality.	(Resident)		
Air quality can be improved by the Sonae Novobord plant.	H Kammeyer (Resident)	Public Meeting	Actions will be included in the EMP.
What are the options with regard to the stack heights as it seems as if the emissions are getting caught in the inversion layer?	M Rossaak (WESSA)	Public Meeting	Stack heights will not influence the emissions caught in the inversion layer.
It was stated in a previous public meeting that formaldehyde is not a problem. From experience in cleaning chicken coops it is a dangerous chemical.	R SChormann (Resident)	Public Meeting	There is a difference between liquid formaldehyde resin formaldehyde which is used in the process. The emissions from the press are in vapour form and breaks down easily.
What is the concentration of formaldehyde emitted by Sonae and can this level cause pollution?	A Rossaak (WESSA)	Public Meeting	No, liquid formaldehyde is not used in the process or stored on site. Formaldehyde vapour disperses and breaks down quickly. As the levels in the factory are below 2 ppm it is highly unlikely that pollution can occur. A specialist stuffy will be undertaken and the results included in the EIA report.
Is there a threshold for formaldehyde?	M Attwood (Resident)	Public Meeting	The legal threshold is 2 parts per million but Sonae's limit is 1 part per million.
Please define the formaldehyde threshold limits in the Report.	H Kammeyer (Resident)	Public Meeting	An air quality assessment will be undertaken and included in the EIA report. The limits will be defined and included.
Acetone is not nearly as hazardous as formaldehyde and people treat it very seriously. The fact that the limit for formaldehyde is 2 parts per million shows how dangerous formaldehyde is.	M Attwood (Resident)	Public Meeting	Comment noted.
If Sonae were to install the R30 million cleaning device what would it take out of the emissions?	M Attwood (Resident)	Public Meeting	Most chemicals would be removed but they would still be present as a concentrated sludge. The scrubber will

Issue and Concerns	Commentator	Source	Response
Would it take out chemicals, specifically formaldehyde?			remove solid particulates and some element that could
Would it not be better to have concentrated waste to deal with rather than emit it in the air?			cause a smell.
Where are the formaldehyde levels measured?	R Schormann (Resident)	Public Meeting	The formaldehyde levels are measured throughout the plant.
The dust emitted needs to be tested because not only is it emitted into the atmosphere but it is also in the solid waste which then becomes aerated. This should be included in the air quality study. Not only should a model be undertaken but collections and measurements should also be undertaken.	R Schormann (Resident)	Public Meeting	This is part of a specialist study and will be included in the EIA report.
An on-going assessment must be undertaken in the future.	R Schormann (Resident)	Public Meeting	This will be listed in the EMP.
In the EMP more stringent fallout tests need to be discussed. People have a problem with the emissions therefore there needs to be transparency in the procedures.	A Rossaak (WESSA)	Public Meeting	This will be listed in the EMP.
Cultural and Archaeological			
There is deterioration of the rock painting art sites which are to the south of the plant. These paintings have shown a dramatic decline over the last few years due to the impact of air pollution in the area. The Sonae Novobord plant is the main contributor to air pollution in the area.	T Mason (Resident).	Newspaper article / response to advertisement.	Air quality results will be used in conjunction with SAHRA to determine the impact and EMP. This will be included in the EIA report.
The representatives of the company and the environmental consultants, employed by the plant, were unaware of these sites.	T Mason (Resident)	Public Meeting / Newspaper Article	Information such as this is mostly obtained through the I&APs as they know the area better than the consultants.

Issue and Concerns	Commentator	Source	Response		
Request that a specialist study regarding the rock art sites be undertaken. Contact the WITS Rock Art Institue.	T Mason (Resident)	Public Meeting	WITS, UNISA and overseas experts will be contacted and information used as part of a specialist study.		
Economic	·				
Who owns Sonae Novobord?	T Mason (Resident)	Public Meeting	Sonae Industria owns the company.		
Is the company Internationally owned?			It is an international company?		
How much profit remains in South Africa and how much goes overseas?			A portion of the profit goes overseas since they are shareholders.		
At the plant it seems that we have a situation of an overseas company using South African labour and raw materials, to produce a product, 95% of which is sold to South Africans, to make money out of us that then leaves the country. Only 5% of their product is exported thus limiting the foreign exchange earnings for us. Is the environmental and health cost worth it?	T Mason and M Attwood (Resident)	Public Meeting, 25/04/2006	Comment Noted.		
The expansion is seen as an economic benefit by Sonae Novobord but it is seen as a negative economic benefit by the people living in the area. I cannot find tenants because of the pollution. Filters have had to be installed in the air conditioners. People do not want to work in the area because of the pollution so employers have to pay employees higher salaries.	R Schormann (Resident)	Public Meeting	Many people will benefit economically during and after the project. Comment noted.		
Environmental Process					
What exactly does the EIA focus on?	S Eigenhuis (Resident)	Public Meeting	The EIA will focus on the expansion activities discussed in the Scoping report.		
Is WSPE contracted by Sonae?	T Mason (Resident)	Public Meeting	WSPE is contracted by Sonae Novobord but it is an independent company.		

Issue and Concerns	Commentator	Source	Response
The project is so sensitive and there is so much public interest that a copy of the Scoping Report should be made available to all I&APs.	R Schormann (Resident)	Public Meeting	The Scoping Report will be copied onto CD. I&APs may collect the CD from the Sonae Novobord factory once it is available.
Can the public review period be extended?	M Rossaak (WESSA)	Public Meeting	The review period for the Scoping Report is two weeks. The review period for the EIA report will be three weeks.
Request that a full EIA be undertaken. There are serious concerns that need to be addressed and specialist studies need to be undertaken.	H Kammeyer (Resident)	Public Meeting	DALA has requested that a full EIA be undertaken. A full EIA will be undertaken.
The Scoping Report should look at possible alternatives.	M Rossaak (WESSA)	Public Meeting	Alternatives have been discussed in the previous sections and include the following: <ul> <li>Upgrade of the current drier;</li> </ul>
			Use electricity to generate heat; and
			Install new technology.
General			
With the experienced problems we are strongly against the proposed expansion unless emissions and noise are cut and the company is held accountable through public reporting on its environmental monitoring programme.	BR Coulson (Bundu Rocky Wild Park)	Letter dated 30 May 2006.	Actions will be included in the EMP.
The amount of workers in Rocky Drift far exceeds those employed by Sonae Novobord and that it is these workers whose health is being endangered by the emissions of the plant.	T Mason and M Attwood (Resident)	Newspaper Article 26/04/2006	Comment noted.
The plant representative revealed that the plant is on what is zoned as agricultural land and yet they pay industrial rates and taxes. Is this possible?	T Mason and M Attwood (Resident)	Newspaper Article 26/04/2006	The land is Dingwell and Paarlklip (portions 3 and 5 respectively). The land was zoned as Industrial II. Rates and taxes paid are therefore for Industrial.

Issue and Concerns	Commentator	Source	Response
We feel that the expansion must be stopped and that current production at the plant be thoroughly examined by independent environmental experts.	T Mason and M Attwood (Resident)	Newspaper Article 26/04/2006	An EIA will be undertaken in order to ascertain the impacts associated with the proposed expansion.
If there is enough timber for the expansion, why have many of the smaller mills closed down?	M Attwood (Resident)	Public Meeting	The other mills require a better quality wood than Sonae Novobord. Sonae is increasing the intake of waste wood. This is wood that would normally be incinerated at saw mills.
What happens to the ash? Saw some at the brick works and it was stated that it comes for the Sonae plant. Has it been assessed whether or not the ash is hazardous?	H Kammeyer (Resident)	Public Meeting	A small quantity of wood ash is generated and unlike ash from coal fired boilers the ash is not used for bricks.
Road maintenance and monitoring needs to be included in the EMP.	A Rossaak (WESSA)	Public Meeting	The road is a national road therefore Sonae Novobord is not permitted to maintain the road. A traffic assessment will be undertaken as part of the EIA.
Are safety and health pollution standards followed by Sonae the same as those in Europe?	R Schormann (Resident)	Public Meeting	The relevant legislation and standards of the country are adhered to. In addition the plant is ISO14001 certified.
The accusation could be made that South Africa is a nice place to work because the standards are lower than most European countries so international companies come here to make the most of it.	R Schormann (Resident)	Public Meeting	Comment noted.
Many chemicals do not have set standards in South Africa therefore international standards should be adhered to.	H Kammeyer (Resident)	Public Meeting	Reference will be made to understand standards.
How much does Sonae Novobord pay for water supply, rates and taxes and the site. What is Sonae's contribution to the municipality?	R Schormann (Resient)	Public Meeting	This information will be provided in the EIA report.
Are any environmental audits undertaken?	A Rossaak (WESSA)	Public Meeting	Regular environmental audits are undertaken by an accredited third party.

Issue and Concerns	Commentator	Source	Response			
ISO 14001 audits may investigate the site but it does not take into consideration the surrounding areas where it really affects the environment and the community.	R Schormann (Resident)	Public Meeting	Comment noted.			
Health						
Many people in the area suffer from health problems such as sinus problems.	R Schormann (Resident)	Public Meeting	Comment noted.			
Formaldehyde is unsafe for workers and it does not break down in the environment.	A Rossaak (WESSA)	Public Meeting	Formaldehyde emissions in the plant are well below the legal limits. Measurements are done weekly. Formaldehyde in vapour form and in the presence of water vapour as currently at the plant breaks down quickly.			
Worker health has been addressed but what about the health of the people living in the surrounding areas.	R Schormann (Resident)	Public Meeting	An air quality assessment will be undertaken as part of the EIA.			
There is a doctor in the area that has proof that the emissions are causing health problems to people living in the surrounding areas.	R Schormann (Resident)	Public Meeting	This comment is being investigated.			
Light Pollution						
Light Pollution	R Mirrens	BID Response	Comment noted.			
Noise Pollution	Noise Pollution					
Noise Pollution	R Mirrens R Wagner	BID Response	A noise assessment will be undertaken as part of the EIA.			
Noise is particularly bad at night, when the white noise of tractors, tree felling etc is not there to screen it. We bought land in a rural area in order to experience peace and quiet and are concerned that expansion of the plant is going to	T Mason (Resident)	Response to Newspaper Advertisement /	A noise assessment will be undertaken as part of the EIA. Preliminary investigations have revealed an increase of			

Issue and Concerns	Commentator	Source	Response
increase the noise. We live about 6kms from the site and one would not expect to be affected by noise pollution.		Newspaper Article	0.2dB (legal limit is 7dB and 2dB for continuous noise).
Noise from the factory is also a concern.	BR Coulson (Bundu Rocky Wild Park)	Letter dated 30 May 2006.	A noise assessment will be undertaken as part of the EIA.
The noise levels of the drier are very high and seem to be worse than a highway. It is sometimes necessary to wear ear plugs when sleeping. Will the noise levels double with the new drier?	T Mason (Resident)	Public Meeting	Once the new drier has been installed the old drier will be decommissioned and it is not expected that there will be an increase in the noise level.
What are the perimeter noise levels?	M Rossaak (WESSA)	Public Meeting	A noise assessment will be undertaken as part of the EIA.
Where is the noise coming from? Will there be an increase in the noise level?	T Mason (Resident)	Public Meeting	Noise comes mainly from the chipper and the high pressure blowers. It is not anticipated that there will be an increase in noise levels.
Is the noise monitored by Sonae or an external consultant?	H Kammeyer (Resident)	Public Meeting	Both Sonae and an accredited consultant monitor the noise.
Does the plant have a legal limit regarding the noise levels?	H Kammeyer (Resident)	Public Meeting	Sonae Novobord currently follows the OHS Act and have a limit of 85db.
Request that the current and future noise profile be addressed and the residential areas are taken into account.	H Kammeyer (Resident)	Public Meeting	A noise assessment will be undertaken as part of the EIA.
A noise assessment must be undertaken.	T Mason (Resident)	Public Meeting	A noise assessment will be undertaken as part of the EIA.

Issue and Concerns	Commentator	Source	Response		
Odour	Odour				
What is causing the smell?	R Schormann (Resident)	Public Meeting	The burning wood could be causing a smell.		
The smell of urea formaldehyde has also been experienced at a number of homes in the evenings.	BR Coulson, (Bundu Rocky Wild Park)	Letter dated 30 May 2006.	Air quality sampling will be done continuously over a period of 7 days and the results included in the EIA report.		
Project Related	· · · · · · · · · · · · · · · · · · ·	·			
How much more timber will be used in the expansion?	R Schormann (Resident)	Public Meeting	The intake will double, over time.		
Will the chipper need to be upgraded?	M Attwood (Resident)	Public Meeting	<ul><li>There are two options which are being investigated:</li><li>Obtaining a new chipper; or</li><li>Modifying the existing chipper by increasing the motor capacity.</li></ul>		
How much will the chipper be increased by?	T Mason (Resident)	Public Meeting	There will be an increase of approximately 25%.		
What size will the new heating device be?	T Mason (Resident)	Public Meeting	The new heating device will be approximately the same size as the current heating device (7 MW).		
How many days' supply will the expansion of the wood yard contain after the expansion?	T Mason (Resident)	Public Meeting	The days' storage will remain the same. The wood will be used at a faster rate.		
How much does a log weigh?	R Schormann (Resident)	Public Meeting	This depends on the size, species, moisture etc. The typical density is 450 kg/m <sup>3</sup> – 720 kg/m <sup>3</sup> .		
What is a scrubber?	H Kammeyer	Public Meeting	A scrubber is a device which is employed to remove particulate matter from the emissions.		
What alternative products can be used in the process?	M Rossaak (WESSA)	Public Meeting	Alternatives exist but are not locally available and		

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Issue and Concerns	Commentator	Source	Response
			economically viable.
Will there be an increase in the area where the wood is harvested from? Are there enough plantations to supply for the increase?	M Attwood (Resident)	Public Meeting	A study has been undertaken in order to identify whether sufficient timber will be available for the increased production. It was concluded that sufficient timber exists in the surrounding areas in order to supply Sonae for the increased production. Most of the increase will come from timber waste.
What is the quantity of logs used and the quantity of waste used?	M Attwood (Resident)	Public Meeting	It is approximately a 50 / 50 split.
Is there sufficient timber for the expansion?	M Attwood (Resident)	Public Meeting	Sufficient timber will be available for the expansion.
How many people are currently employed and by how much will employment be increased by?	T Mason (Resident)	Public Meeting	Currently 130 people are employed. This will increase to approximately 160 direct employment. The plant will also increase other indirect employment.
What other waste is produced by the plant.	H Kammeyer (Resident)	Public Meeting	All process waste is recycled except for municipal waste.
Public Participation Process			
The Matsafeni Trust who represents the Mdluli clan and who are the biggest landowners to the West of the plant were not invited to the meeting.	T Mason and M Attwood (Resident)	Newspaper Article	Site notices were placed at the site. In addition the project and public meeting was advertised in the newspaper.
For accuracy the public meeting should have been tape recorded.	R Schormann (Resident)	Public Meeting	Meeting notes were taken at the meeting by WSPE. The meetings will be recorded in future.
Rocky Drift will require more copies of the Scoping Report because they are directly affected.	R Schormann (Resident)	Public Meeting	The reports will be copied to CD and copies made available from Sonae Novobord. In addition hard copies will be placed at agreed upon public locations.

Issue and Concerns	Commentator	Source	Response			
Social	Social					
Impact on houses at Bundu Lodge	H Wasmus	BID Response	This will be investigated in the EIA report. No significant change from the current situation is foreseen.			
Traffic						
The Nelspruit / White River road already carries very high volumes of traffic and the expansion will add to this.	BR Coulson, (Bundu Rocky Wild Park)	Letter dated 30 May 2006.	A traffic count and study will be undertaken as part of the EIA. Accident statistics will be obtained and included in the EIA report.			
Increased trucks on the R40 Road will lead to further congestion and accidents at Rocky's Drift.	L Martin (Resident)	Response to Newspaper Advertisement	Accident statistics will be obtained and included in the EIA report.			
The log and wood waste trucks that supply the plant with its raw materials will double. There are two routes to the plant. One is along the R40, which already experiences congestion due to the trucks and there have been a number of fatal accidents at the traffic lights where you turn to access the plant. The other route is the dirt road that meets the R40 from the Heidelburg Valley and Brondal road. This route is used by trucks that one suspect are trying to dodge the traffic department, as their vehicles are overloaded and often unroadworthy. The road is in a bad state of repair. Trucks lose part of their loads along this road and make it a hazard for other motorists.	T Mason and M Attwood (Resident)	Newspaper Article	<ul> <li>The suppliers have been informed of the situation and they have been informed that spillage will lead to a ban on delivering to Novobord.</li> <li>Letters have been sent to suppliers stating the liability of spillage on the national roads.</li> <li>Suppliers used to use the main road via White River instead of the Heidel Road.</li> <li>Sonae cleans the road weekly. This occurs on Mondays.</li> <li>Log nets will be compulsory as of 01 August 2006.</li> </ul>			
The R40 and Sonae Novobord entrance intersection needs to be upgraded as there have been numerous accidents.	L Martin	Response to Newspaper Advertisement	As it is a national road Sonae Novobord does not have permission to upgrade the intersection. The Roads Agency would need to be contacted with this regard.			
How many truck loads will be travelling to the plant per day?	R Schormann (Resident)	Public Meeting	There are currently approximately 50 trucks and it is anticipated that this will increase to approximately 120.			

Issue and Concerns	Commentator	Source	Response
The intersection needs to be upgraded as there have been numerous accidents.	R Schormann (Resident)	Public Meeting	The Roads Agency would need to be contacted with this regard.
What will be done about the roads if more trucks are going to be travelling along the roads?	T Mason (Resident)	Public Meeting	A traffic study will be undertaken as part of the EIA.
Request that a traffic impact study be undertaken.			
The doubling of traffic can cause serious traffic problems on all roads.			
There is a problem with the 8 ton trucks on the road. People are especially concerned with the timber trucks. The intersections are strained beyond capacity. People are dying due to accidents often caused by timber trucks. Slip ways must be installed at the intersections and this is not negotiable.	R Schormann (Resident)	Public Meeting	A traffic count will be undertaken as part of the EIA. As the road is a national road Sonae does not have permission to install slip ways. Discussions are currently underway with the Roads Department.
Trucks slow down traffic. Nelspruit and White River should be regarded as one economic unit. Lots of people commute and an accident affects the entire R40 and the N4. This causes traffic congestion. A baseline traffic study must be undertaken especially with regards to heavy vehicles.	R Schormann (Resident)	Public Meeting	A traffic count will be undertaken as part of the EIA.
Trucks which transport logs to the plant use back roads in order to avoid the traffic officers as they are overloaded. As a tax payer I am unhappy that the trucks are degrading these roads.	T Mason (Resident)	Public Meeting	Sonae is ISO14001 certified therefore the trucks are inspected and weighed to ensure that they are not over weight. If trucks are found to be over loaded they are dealt with appropriately.
What procedures are followed if trucks are found to be over loaded and has this happened before?	A Rossaak (WESSA)	Public Meeting	It has happened before. Trucks were refused entry to the Sonae Novobord Plant and instructed to comply.
Logs fall off the trucks and cause accidents.	T Mason (Reseident)	Public Meeting	This will be investigated in the EIA report.

Issue and Concerns	Commentator	Source	Response
The impact regarding the logs should not be excluded from the EIA just because this service is sub-contracted. Sonae should take responsibility for the trucks as well.	R Schormann (Resident)	Public Meeting	This will be addressed in the EIA report.
ISO14001 requires a cradle to grave approach therefore Sonae should take responsibility for the trucks as well.	S Evered (WESSA)	Public Meeting	Comment noted. This will be addressed in the EIA report.
Water Quality			
Is water quality monitored?	M Rossaak (WESSA)	Public Meeting	Yes it is.
Water Requirements			
Water is a great concern as restrictions are constantly being levied.	BR Coulson (Bundu Rocky Wild Park)	Letter dated 30 May 2006.	Comment noted.
What will be the increase in water consumption (% and cu.m/day)?	R Clanahan (C.R.H. Clanahan & Associates)	Response to the BID.	Consumption is estimated to double to approximately 438 kl/day.
The plant has not contributed to the costs of the water pipeline that will be built between Nelspruit and White River and yet with their doubling of production they will be beneficiaries.	T Mason and M Attwood (Resident)	Newspaper article	Existing water users will be taxed at a rate of R4386 / kl of additional use. The supply of Novobord was included in the design of the supply line.
What will the increased consumption of water with the expansion be?	R Wagner	BID Response	Consumption is estimated to double to approximately 438 kl/day.
What will the increased water consumption be?	M Rossaak (WESSA)	Public Meeting	Water consumption will increase to approximately 438 kl/day.
What is the current water consumption?	T Mason (Resident)	Public Meeting	This varies depending on the product being produced.
Where will the increased water supply be obtained from?	M Rossaak (WESSA)	Public Meeting	Existing water users will be taxed at a rate of R4386/ kl of additional use. The supply of Novobord was included

Issue and Concerns	Commentator	Source	Response
			in the design of the supply line.
Is the borehole licensed?	A Rossaak (WESSA)	Public Meeting	It is registered. Licenses will only be issued once water reserves have been determined by DWAF.
Sonae did not contribute to the establishment of the pipeline so how can they now claim that they will obtain water from the pipeline. The design and size of the pipeline was finalised and it did not include any requirements for Sonae. Each contributor paid towards the pipeline and they stated how much water they would require.	J Izebord (Resident)	Public Meeting	Existing water users will be taxed at a rate of R4386 / kl of additional use. The supply of Novobord was included in the design of the supply line.
Severe water shortages have been experienced in the area. Assumes that Sonae has never had this problem so would like to know how much Sonae pays for water.	R SChormann (Resident)	Public Meeting	Comment noted.
Has Sonae experienced any water shortages?	R Schormann (Resident)	Public Meeting	Yes they have.
Waste			
Is there any other waste that could be used in the boiler?	A Rossaak (WESSA)	Public Meeting	There is no other waste which can be used.
What is done with the resin waste?	A Rossaak (WESSA)	Public Meeting	The solid resin waste is dried to ensure it is a chemically stable form before it is discarded at the White River landfill site.
None of the landfill sites in the area are lined.	M Rossaak (WESSA)	Public Meeting	Comment noted.
If the water which is used in the boiler is contaminated then it will leave a contaminated waste when it evaporates.	A Rossaak (WESSA)	Public Meeting	Waste will be recycled.
Request that a specialist study be undertaken for all the waste especially air quality.	H Kammeyer (Resident)	Public Meeting	Comment noted. An air quality assessment will be undertaken and included in the EIA report.

Issue and Concerns	Commentator	Source	Response
What happens to the sewage?	M Rossaak (WESSA)	Public Meeting	Sewage is treated at the municipal sewage works.
Need to address if sewage / effluent increases will be handled with the expansion.	H Kammeyer (Resident)	Public Meeting	It is not anticipated that there will be any significant increase in sewage / effluent. The effluent system was designed for more than double the current number of employees.
Wetlands	·	•	
If Sonae has stated that there is no waste water then why are there artificial wetlands?	R Schorman (Resident)	Public Meeting	The wetlands are for the treatment of surface water and stormwater during the rainy season.
What testing has been done on the wetland and river area that is found across the railway line below the plant and which runs into the Sand River.	T Mason (Resident)	Response to Newspaper Advertisement	Water monitoring is undertaken on site. Water analysis is undertaken by the medical research council. Water quality conforms to national standards.
Zoning			
Will zoning change?	M Rossaak (WESSA)	Public Meeting	The current zoning of Industrial II is valid. A township establishment application is lodged to formalise the land management in line with new legislative requirements.

# 9 TERMS OF REFERENCE AND SCOPE OF WORK FOR EIA

Based on the environmental setting discussed under Section 5, as well as the issues raised during consultation as presented in Table 6, WSPE has identified the main impact areas requiring specialist studies.

#### Table 7: Impacts Identified by WSPE

Issue	Impact
Air Quality	Impact on air quality due to dust and emissions.
Noise	Impact on noise levels
Traffic	Increase in traffic due to increased number of trucks.

### 9.1 SPECIALIST INVESTIGATIONS

A number of specialist investigations will be commissioned for the project to ensure that all issues relating to the project is addressed with the appropriate level of detail. The specialist investigations will be conducted by a team of professionals, each with specific expertise in the study area.

Each specialist study will address the standard requirements for an investigation of this nature. In addition, the issues raised during the consultation process will be addressed / taken into account by the specialists. An outline of the approach and the aspects to be addressed under each study is provided below.

A baseline description will be provided for the environmental components from information obtained from previous studies. The table below indicates the additional proposed specialist investigations to be undertaken for the Sonae Project as part of the EIA.

Specialist Investigation	Activities Proposed
Air Quality	<ul> <li>A qualitative baseline description of the air quality in the project area, with particular emphasis on the dust emissions and Identification of any fatal flaws associated with the air quality in the area;</li> <li>Determination of the effect and impact on the Air Quality due to the proposed project;</li> <li>Formulation of management and mitigation measures related to the Air Quality of the area; and</li> <li>Development of an environmental management programme.</li> </ul>
Noise Assessment	Review of existing noise data; Characterisation of the noise regime of the project area (ambient noise) prior to the proposed project implementation; Field inspection and on-site noise measurement survey and Identification of any fatal flaws associated with the noise regime in the area;
Traffic Assessment	A qualitative assessment of the current traffic review and review of existing data and Identification of any fatal flaws associated with the proposed traffic routes for commuters

#### **Table 8: Specialist Investigations**



### 9.2 IMPACT IDENTIFICATION, ASSESSMENT, MITIGATION AND EMP

### 9.2.1 Rating Criteria

To ensure uniformity, the assessment of potential impacts will be addressed in a standard manner so that a wide range of impacts are comparable. For this reason a clearly defined rating scale has been provided in order to assess the impacts associated with the proposed project.

The potential impacts of the proposed project will be evaluated according to their severity, extent, duration, consequence, probability of occurrence and finally the significance of the impact using the system described in the tables below. This method of risk assessment is taken from T. Hacking (2000).

### Table 9: Assessment and Rating of Severity

Rating	Description	
L	Minimal	Minor deterioration of environment
М	Moderate	Disturbance of environment
Н	High	Complete disturbance/loss or depletion of environment component

#### Table 10: Assessment and Rating of Extent

Rating	Description	
L	Site	Impact limited to the site
М	Local	Impact limited to the surrounding area
Н	Regional	Impact affecting the region

#### Table 11: Assessment and Rating of Duration

Rating	Description	
L	Short term	Impact over 1-2 year period. Reversible
М	Medium term	Impact over 2-10 year period. Reversible over time
Н	Long term	Impact beyond 10 years. Permanent

### Table 12: Determination of Consequence as a factor of Severity, Extent and Duration

Seve	erity = L				
E	Long term	Н			
Duration	Medium term	M			MEDIUM
D	Short term	L	LOW		
Seve	erity = M				
Б	Long term	Н			HIGH
Duration	Medium term	М		MEDIUM	
Du	Short term	L	LOW		
Seve	erity = H				
E	Long term	Н			
Duration	Medium term	М			HIGH
Du	Short term	L	MEDIUM		
			L	М	Н
			Site	Local	Regional
				Extent	

<b>Table 13:</b> Assessment and Rating of Probability of Occurrence
---

Rating	Description	Description	
L	Possible	Unlikely that the impact will occur	
М	Probable	Impact may occur	
Н	Definite	Impact will definitely occur	

### Table 14: Assessment of Impact Significance as a factor of Consequence and Probability of Occurrence

ity	Definite	Н	MEDIUM		HIGH
Probability	Probable	М		MEDIUM	
L L	Possible	L	LOW		MEDIUM
		L	М	Н	
			Consequence		
Impact of Low Significance		Small impact and/or dist	urbance over small area. M	inor impact.	
Impact of Medium Significance		Moderate impact expecting impact.	ted and/or disturbance over	er small area. Noticeable	
Impact of High Significance		Significant impact expected and/or disturbance over a larger area. Unacceptably high impact.			
Fatal flaw		Impacts of a significance that prevents the project from proceeding.			
Undef	Undefined Impact		Cannot be determined.		
The impacts must be identified as po			ositive (+) or negative (-).		

Impacts should be addressed without mitigation measures and with mitigation measures as per the table below. Impacts determined to be of low significant will not require mitigation measures. Impacts requiring mitigation measures will be describe and discuss the implementation of appropriate and cost effective mitigation and management measures.

Without Mitigation Measures	The significance of the impact is rated as if mitigation /abatement measures and Environmental Management Plan <b>are not</b> put in place.	
With Mitigation Measures	The significance of the impact is rated as if mitigation /abatement measures and Environmental Management Plan <b>are</b> in place.	

### 9.2.2 EIA Report Contents

The EIA Report will consist of the following:

- Project Description;
- Methodology applied to the Environmental Impact Assessment;
- Project Details (surface layout, infrastructure, processes);
- Description of the Environment (bio-physical and socio-economical);
- I&AP Process and Issues Raised;
- Motivation for the Proposed Project;
- Consideration of Project Alternatives;
- Environmental Impact Assessment; and
- Environmental Management Programme (management and monitoring); and
- Conclusion.

# 10 Conclusion

Sonae is the largest producer of wood based panel products in the world. It produces and upgrades particleboard and medium density fibreboard (mdf) at its White River Plant.

The following activity changes will be required for the expansion project at the existing Sonae Novobord plant in Rocky Drift in the Mpumalanga Province:

- Installation of a new drier;
- Installation of a new heating device;
- Expansion of wood yard;
- Installation of a fume extraction and cleaning system; and
- Changes to internal receiving and dispatching routing.

The proposed project falls within the scope of Regulation 4(6) of Government Notice (GN) No R1182 under section 21 of the Environmental Conservation Act, 73 of 1989, as amended by GN R670 of 10 May 2002. Therefore, an assessment of the potential environmental impacts of the activity must be completed.

An integral part of the EIA process is the Public Participation Process (PPP). A comprehensive PPP will allow I&APs to contribute and provide feedback on the proposed expansion activities. A variety of issues have been identified during the Scoping Process. The most significant issues raised include:

- Volume of traffic and adequacy of vehicular access;
- Air pollution;
- Job creation and economic opportunity;
- Noise pollution;
- Increased supply of water.

It is proposed that the following specialist studies be undertaken as part of the EIA:

- Traffic count;
- Noise assessment; and
- Air quality assessment.

All issues identified through the Scoping Process will be considered in the compilation of the EIA Report which will then be submitted for public review and then to DALA for approval.



Appendix A Copy of Advertisement and Site Notices



### NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Notice is given in terms of Section 22 of the Environment Conservation Act (Act No. 73 of 1989), GN.R. 1182 (as amended by GN.R. 1355 of 1997-10-17, GN.R. 448 of 1998-03-27 and GN.R 670 of 2002-05-10) and GN.R. 1183 of 1997-09-05 (as amended by GN.R. 1645 of 1998-12-11, GN.R 672 of 2002-05-10 and GN.R. 783 of 2002-06-07) with specific reference to Sections 4, 5 and 6 of GN.R 1183 and Schedule 1(c) and Schedule 9 of GNR 1182, of the intent to carry out the following activity:

### DESCRIPTION

Sonae Novobord is planning to upgrade and expand some of their process activities within their existing company boundary. These upgrades and changes include the following areas:

- Installation of a new drier in order to increase capacity and decrease emissions.
- Installation of a new heating device
- Expansion of the wood yard
- Installation of a fume extraction and cleaning system

### LOCATION

The proposed activity will be located on portion 3 of the farm Dingwell 276 JT and Portion 5 and the remainder of the farm Paarlklip 280 JT in Rocky Drift between Nelspruit and White River in the Mpumalanga Province.

### NAME OF PROPONENT

Sonae Novobord (Pty) Ltd

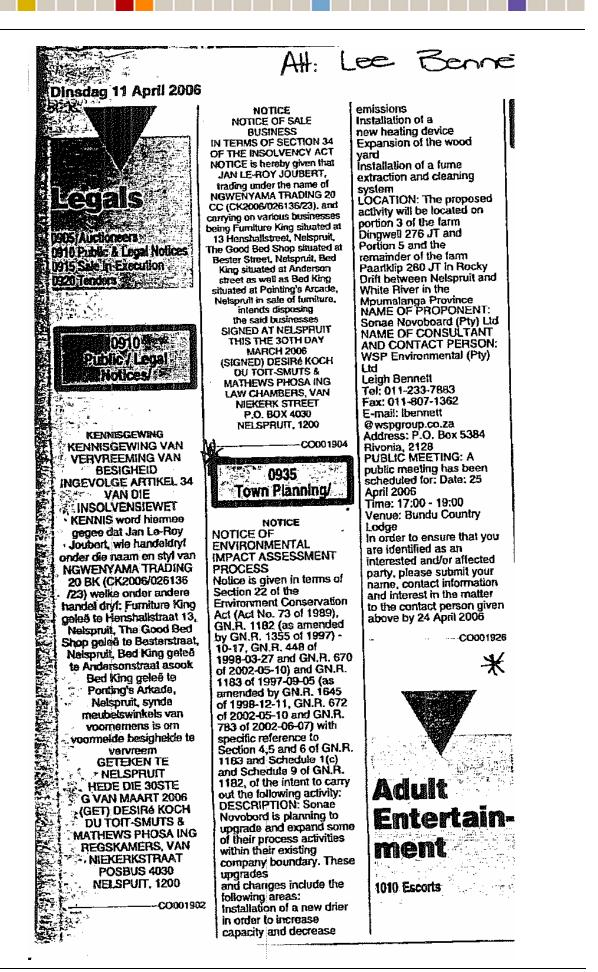
### NAME OF CONSULTANT AND CONTACT PERSON

WSP Environmental (Pty) Ltd Leigh Bennett Tel: (011) 233 7883 Fax: (011) 807 1362 E-mail: Ibennett@wspgroup.co.za Address: PO Box 5384, Rivonia, 2128

### PUBLIC MEETING

A public meeting has been scheduled for: Date: 25 April 2006 Time: 17:00 – 19:00 Venue: Bunda Inn

In order to ensure that you are identified as an interested and/or affected party, please submit your name, contact information and interest in the matter to the contact person given above by 24 April 2006.





Appendix B Background Information Document (BID)

I&AP's are invited to attend a Public Meeting at the following:

VENUE:	Bundu Inn
DATE:	25 April 2006
DATE:	25 April 2006

**TIME:** 17:00 – 19:00

If you wish to register as an I&AP for this project in order to obtain more information in the future, please submit the **REPLY FORM** (outlining your details, issues, concerns and queries) to:

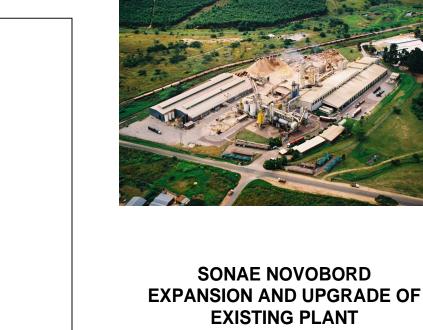
Leigh Bennett WSP Environmental (Pty) Ltd Tel: (011) 233 7883 Fax: (011) 807 1362 Email: lbennett@wspgroup.co.za Address: PO Box 5384, Rivonia 2128

### **REPLY FORM**

SONAE NOVOBORD PLANT EXPANSION PROJECT

Name:	
Organization:	
Postal Address:	
Tel:	
Fax:	
E-mail:	

Please list your questions, comments or concerns in the space provided below:



## BACKGROUND INFORMATION DOCUMENT (BID) AND NOTIFICATION OF PUBLIC MEETING



### 1. PURPOSE OF THE DOCUMENT

The purpose of this document is to:

- Inform a range of Interested and Affected Parties (I&AP's) about the proposed expansion to the plant;
- Briefly describe the Environmental Impact Assessment (EIA) process;
- Describe the role of the public in the process; and
- Invite I&AP's to comment on the project, ask questions and raise issues that should be included in the EIA process.

### 2. LEGISLATIVE REQUIREMENTS

Sections 21, 22 and 26 of the Environment Conservation Act (73 of 1989) makes provision for the assessment of environmental impacts of projects which could be potentially damaging to the environment. Regulation 1182 (5 September 1997) lists activities for which an Environmental Impact Assessment (EIA) process must be followed, and Regulation 1183 (5 September 1997) prescribes methodologies to be followed as part of the EIA process.

According to the above regulations, an EIA is required to assess the potential environmental impacts associated with the proposed expansion and upgrade activity. The proposed expansion falls under the following listed activities:

- Schedule 1 (c): the construction, erection or upgrading of (i) any substance which is dangerous or hazardous and is controlled by legislation including (ii) manufacturing, storage handling, treatment or processing activities for any substance; and
- Schedule 9: scheduled processes listed in the Second Schedule to the Atmospheric Pollution Prevention Act (45 of 11965) including

Scheduled process 67 'Wood-burning and wood-drying processes'.

Sonae Novobord (Pty) Ltd appointed WSP Environmental (Pty) Ltd (WSPE) to undertake an Environmental Scoping Study to identify and evaluate the potential environmental impacts of the proposed expansion.

### 3. PROJECT DESCRIPTION

The proposed expansion and upgrade, which will take place at the Sonae Novobord factory and will include the following:

- Increasing the drier capacity from 600m<sup>3</sup> to 1000m<sup>3</sup> which will require a new drier to be installed;
- Installation of an oil heating device for the new press;
- Timber yard expansion; and
- Installation of fume extraction and cleaning on both presses.

### 4. OBJECTIVES OF THE SCOPING STUDY

The objectives of the Scoping Study are to:

- Inform I&AP's about the project and obtain their issues, concerns and queries;
- Identify the potential positive and negative impacts associated with the proposed upgrade;
- Assess the extent and significance of the identified environmental impacts;
- Suggest mitigation measures to ameliorate negative impacts and enhance positive impacts; and
- Provide sufficient information to enable the environmental authorities to make an informed decision on the project.

#### 5. PUBLIC PARTICIPATION PROCESS

An important part of the Scoping Study will be the Public Participation Process (PPP), which will aim to:

- Inform I&APs about the project and the environmental process to be followed;
- Establish lines of communication between I&APs and the project team; and
- Obtain contributions from I&APs and ensure that all issues, concerns and queries raised are fully documented.

#### 6. KEY ACTIVITIES IN THE ENVIRONMENTAL SCOPING STUDY

The Environmental Scoping Study will comprise the following activities:

- Completion and submission of an Application for Authorisation to undertake the activity;
- Compilation of the Plan of Study for Scoping;
- Consultation with DALA and with other authorities;
- Communication with potential I&APs;
- Collection of project information;
- Conduct a PPP, that includes the following:
  - Compilation of an I&AP database
  - Compilation and distribution of this Background Information Document (BID) and Reply Form to all I&AP's
  - Compilation and placement of site notices and advertisements
  - On-going feedback to I&AP's
  - Conduct a public meeting.
- Compilation of a draft Scoping Report;
- Public Review of the Draft Scoping Report for a period of 14 days;
- Finalisation of the Scoping Report; and
- Submission of the Final Scoping Report to DALA.



# Appendix C Minutes of Public Meeting



WSP Environmental (Pty) Ltd Arivia.kom Business Park Simba Road, Sunninghill Sandton 2157 Tel: +27 (0)11 233 7880 Fax: +27 (0)11 807 1362 http://www.wspgroup.co.za

### MINUTES OF PUBLIC PARTICIPATION MEETING FOR THE EIA PROCESS FOR THE PROPOSED SONAE NOVOBORD PLANT UPGRADE AND EXPANSION.

DATE: 25 April 2006 TIME: 17:00 VENUE: Bundu Country Lodge

### 11 PRESENT

Name	Organisation / Interest	Abbreviation
AW Calder	Civil / Public	AWC
M Wasmus	Bundu	WM
S Eigenhuis	Bundu Resident	SE
RC Mitton	Bundu Resident	RCM
R Schormann	Rocky Drift	RS
H Kammeyer		НК
E Janson	Bundu	EJ
Mark Attwood	Landowner	МА
Tamar Mason	Landowner	ТМ
Joe Izebord	Landowner	JI
Simon Evered	WESSA	SE
Mette Rossaak	WESSA	MR
Andrew Rossaak	WESSA	AR
C Pavoncelli	Home owner	СР
JA Walters	Landowner	JAW
BA Walters	Landowner	BAW
RM Wagner	Landowner	RMW
J Wasmus	Landowner	JW
J Tucker	Sonae	JT
R Pfutzenreuter	Sonae	RP
A Henderson	Sonae	AH
M Roolvink	Sonae	MR
A Claassen	Sonae	AC



Name	Organisation / Interest	Abbreviation
Frans Arnoldi	Sonae	FA
Leigh Bennett	WSP Environmental	LB
Nicoletta Pera	WSP Environmental	NP

### 12 APOLOGIES

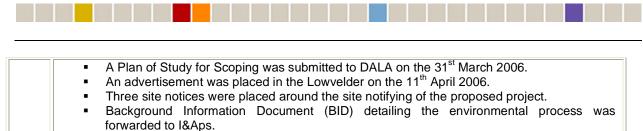
An apology was received from M Bam. He requested that the meeting minutes be forwarded to him.

### 13 PRESENTATION

All question asked during the presentation will be listed under Questions and comments. The minutes must be read in conjunction with the WSPE presentation.

	COMMENT / QUESTION				
1.	1. Welcome and Introduction				
	Nicoletta Pera (NP) introduced herself and welcomed everybody to the meeting and thanked everybo for attending. NP explained that a short presentation of the proposed project and the environmen process would follow.				
2.	Historic Events				
	NP discussed the historic e	events of Sonae:			
	Novobord 1	Particle board:			
		First production December 1981			
	SAPPI takeover Novobord 2	January 1982 Particle board: first production October 1989			
		Medium density fibre board: first production in June 1990			
	Sonae takeover	September 2000			
3.	Main Markets Served				
	The main markets served by Sonae are the following:				
	Domestic: Furniture ma				
	Office furnitu	ire manufacturers			
	Kitchen manufacturers				
	Built-in cupboard manufacturers				
	Shop fitting Building industry				
	Coffins, caravans, DIY, sign writing,etc.				
	Export Niche markets				
4.	Purpose of Meeting				
	NP explained that the purpose of the meeting is the following:				
	<ul> <li>To introduce the proposed project to I&amp;APs and afford them an opportunity to be part of the</li> </ul>				
	process;				
	<ul> <li>Introduce the environmental process;</li> </ul>				
	<ul> <li>To record the issues of concern related to the project through an inter process.</li> </ul>				
5.	Location				
		of the proposed development and indicated the location on a map.			

6.	Project Description
	<ul> <li>NP gave a description of the proposed project. The project will consist of the following activities:</li> <li>Installation of a new drier;</li> <li>Installation of a new heating device;</li> <li>Expansion of wood yard;</li> <li>Installation of a fume extraction and cleaning system;</li> </ul>
	<ul> <li>Expansion of warehouse;</li> <li>Changes to internal receiving and dispatching routing.</li> </ul>
7.	New Drier
	<ul> <li>The new drier will be built next to the current drier.</li> <li>The current drier will be decommissioned once the new drier is operational.</li> <li>Output of the new drier will increase from 600m<sup>3</sup> to 1000m<sup>3</sup> of press production per day.</li> <li>The new drier will be designed around planned emissions of less than 120mg/m<sup>3</sup> by using high efficiency designs to clean emissions.</li> <li>One additional dry material screen and one air screen will be added to the process.</li> </ul>
8.	Press Heating Device
	<ul> <li>An additional press heating device will be installed in the current boiler area to heat the circulating oil for the new press.</li> <li>The new heating device will be similar to the current heating device.</li> </ul>
9.	Expansion of Wood Yard
	<ul> <li>The maximum amount of timber stored is approximately 4 500 tons (5 days supply).</li> <li>The wood yard area will be increased by approximately 2 280m<sup>2</sup>.</li> <li>This will be accomplished by paving the area next to the existing wood yard.</li> </ul>
10.	Press Fume Extraction
	<ul> <li>Active scrubbers will be employed to remove emissions from the new press.</li> <li>The design of the scrubbing system is such that it will incorporate the current press.</li> <li>The collected material will be recycled through the process.</li> </ul>
11.	Warehouse Expansion
	<ul> <li>Boards are stored in the finished goods warehouse until dispatching.</li> <li>The current storage areas will be enlarged to fall within the limits of the zoning certificate and with approval of town planning.</li> </ul>
12.	Factory Entrance
	<ul> <li>The internal routing will be changed to avoid congestion at the main entrance as well as outside the main entrance.</li> </ul>
13.	Environmental Legislation
	<ul> <li>NP explained that the following legislation will be taken into consideration with regards to the environmental process:</li> <li>The Constitution of South Africa;</li> <li>The National Environmental Management Act (NEMA) (Act 107 of 1998);</li> <li>Environment Conservation Act (Act 73 of 1989);</li> <li>National Water Act (Act 36 of 1998);</li> <li>Atmospheric Pollution Prevention Act (Act 45 of 1965);</li> <li>National Environmental Management Air Quality Act (Act 39 of 2004).</li> </ul>
14.	EIA Process
	<ul> <li>NP explained the EIA process that will be followed with regards to the proposed project:</li> <li>An application for authorisation was submitted on the 15th March 2006.</li> </ul>



- A public meeting was scheduled for 25 April 2006.
- Minutes of the proceedings will be forwarded to all attendees.
- The relevant authorities will be contacted and included in the process.
- A draft Scoping Report will be compiled and made available for public review for a period of two weeks.
- The report will be made available at the White River library.
- The final scoping report will then be submitted to DALA for review.
- Once a record of decision (ROD) has been received all I&Aps will be notified.
- I&APs can submit an appeal within 30 days of the ROD.

### 14 QUESTIONS AND COMMENTS

No.	Name	Comment / Question	Response / Action
1.	SE	What exactly does the EIA focus on?	NP: the EIA will focus on the expansion activities discussed in the presentation.
2.	ТМ	Who owns Sonae Novobord? Is the company internationally owned? How much profit remains in South Africa and how much goes overseas?	<ul><li>FA: Sonae Industria.</li><li>FA: Yes it is an international Company.</li><li>FA: A portion of the profit goes overseas since they are the shareholders.</li></ul>
3.	RS	How much more timber will be used with the expansion?	FA: The intake will double.
4.	MA	Will the chipper need to be upgraded?	<ul> <li>FA: there are two options which are being investigated:</li> <li>Obtaining a new chipper;</li> <li>Modifying the existing chipper by increasing the motor capacity.</li> </ul>
5.	ТМ	How much will the chipper be increased by?	FA: there will be an approximate increase of 25%.
6.	ТМ	Asked whether WSPE is contracted by Sonae Novobord.	NP: explained that WSPE is contracted by Sonae Novobord but are independent consultants.
7.	ТМ	Requested clearer maps – based on the presentation.	Comment noted. Clearer maps will be provided.
8.	RS	Requested to see a site layout	The aerial photograph indicating the existing plant as well as the proposed expansion was shown and discussed.

No.	Name	Comment / Question	Response / Action
9.	ТМ	Asked what size the new heating device will be.	FA: explained that the new heating device will be approximately the same size as the current heating device.
10.	ТМ	Asked how many days' supply the expansion of the wood yard will contain after the expansion.	FA: The no. of days' storage will remain the same.
11.	ТМ	Asked where the paved area for the expansion of the wood yard will be.	This was indicated on the aerial photograph (next to the current wood yard).
12.	RS	Asked how much a log weighs.	FA: Depends on the size, species, moisture etc. Typical density is 450kg/m <sup>3</sup> .
13.	RS	Asked how many truck loads will be travelling to the plant per day.	FA: there are currently approximately 50 trucks and it is anticipated that this will increase to approximately 120.
14.	RS	Stated that the intersection needs to be upgraded as there have been numerous accidents.	Comment noted.
15.	ТМ	Stated that the Heidel Road is being damaged by the trucks travelling along the road.	Comment noted.
16.	НК	Asked what a scrubber is.	FA: A scrubber is a device which is employed to remove particles from emissions.
17.	MA	Asked what the current stack emissions are.	FA: The current air emissions are in the region of 160 mg/m $^3$ .
18.	ТМ	Asked what chemicals the emissions contain.	FA: Normal emissions from a wood burning process.
19.	ТМ	Asked what emissions you get from the glue.	FA: Water vapour and a small amount of formaldehyde.
20.	RM	Asked if there is sulphur in the emissions and whether the scrubber will remove the smell of sulphur.	FA: A small amount of sulphur will be emitted when the burner is using Catbot (Oil) as fuel and the smell would not be noticeable. The burner runs on Catbot only when dust is not available, which is less than 10% of the time.
21.	ТМ	Asked whether 10% of the emissions where sulphur.	FA: 10% of the time Catbot is in the burner.

No.	Name	Comment / Question	Response / Action	
22.	RS	Asked what is causing the smell.	FA: the burning wood could be causing the smell.	
23.	НК	Asked what emission limits will be placed on the plant with the new drier.	FA: Limits will be determined by legislation. We will comply with these limits.	
24.	RS	Asked whether the dust emissions could be reduced.	FA: explained that there is technology available. It would cost R30 million in order to install a Wet Electrostation Precipitator which would reduce the amount of solid particulate.	
25.	RS	Stated that it is therefore a business decision not to install the precipitator.	Comment noted.	
26.	RS	Stated that as the project is so sensitive and there is so much public interest a copy of the Scoping Report should be made available to all I&APs.	be copied onto CD's. I&APs ma	
27.	MR	Asked if the review period can be extended.	NP: Will consider a 3 week review period.	
28.	RS	Asked what the emissions will be in m <sup>3</sup> . Asked what the mass and outflow is.	FA: Could not give an exact answer at the time but will include the figures in the scoping report.	
29.	ТМ	Stated that if the production is doubling then surely the emissions will be doubled.	FA: The emission levels will be less than 50% of current emissions, but with the increase in volume it might be the same as current.	
30.	SE	Are any measurements of the emissions taken in the area?	FA: Emissions are measured in the factory, but not outside the perimeter.	
31.	ТМ	Stated that the noise levels of the drier are very high and seem to be worse than a highway. Stated that it is sometimes necessary to wear ear plugs when sleeping. Asked whether the noise levels will double with the new drier.	decommissioned and therefore there will only be the new drier so it is not	
32.	MR	Asked what the perimeter noise levels are.	FA: Levels were measured – values not available at time – will be checked.	
33.	ТМ	Asked where the noise is coming from and if there will be an increase in the noise level. Requested specific levels to be included.	FA: It is not anticipated that the levels will increase. Different sources of noise exist. Comment noted.	


No.	No. Name Comment / Question Respon		Response / Action		
34.	НК	Asked if the noise is monitored by the Sonae or an external consultant.	FA: Both Sonae and an accredited consultant.		
35.	нк	Asked whether the plant has a legal limit regarding noise.	FA: As per the OHS Act – 85db.		
36.	НК	Requested that the current and future noise profile be addressed and the residential areas be taken into account.	Comment noted.		
37.	RS	Requested that for accuracy the meeting should also have been recorded.	Comment noted.		
38.	RS	Stated that there are many residential developments which are proposed for the area. Many of these are low cost housing initiatives. Stated that even if they are low cost houses they still deserve good air quality.	Comment noted		
39.	RS	Stated that many people in the area suffer from health problems such as sinus problems. RS handed in a bank packet with a sample of dust which he stated had been collected on his property. Stated that this was collected in one day.	Comment noted.		
40.	RS	Stated that visitors to the area complain about the dust.	Comment noted.		
41.	RS	Stated that the dust is visible in prevailing wind conditions.	Comment noted.		
42.	ТМ	Complained about the fact that WSPE was not aware of the rock art sites in the area.	Comment noted.		
43.	ТМ	Stated that the rock art sites have deteriorated due to the air pollution. These are heritage sites and are some of the best in the country and they should be protected. Stated that the Rock Art Research Institute at Wits University should be contacted in this regard.	Comment noted.		
44.	нк	Stated that it has been indicated that prevailing winds are in an east-west direction. Therefore certain areas for residential developments could not be considered due to the poor air quality.	Comment noted.		

No. Name		Comment / Question	Response / Action	
45.	НК	Stated that air quality can be improved by the Sonae Novobord plant.	Comment noted.	
46.	MR	Asked what the options are with regard to the stack heights as it seems as if the emissions are getting caught in the inversion layer.	From floor: Stack height does not solv the problem.	
47.	AR	Stated that if you come from White River the pollution plume is clearly visible.	Comment noted.	
48.	AR	Stated that it should be noted that formaldehyde is used to kill living things. Explained that formaldehyde is unsafe for workers and it does not breakdown in the environment.	Comment noted.	
49.	RS	Stated that the public has been involved in a previous EIA process for the past six years. Explained that last time Sonae stated that formaldehyde is not a problem in the process. From experience in cleaning chicken coops it is a dangerous chemical.	<ul> <li>between liquid formaldehyde and rest</li> <li>formaldehyde. The plant uses ur</li> <li>formaldehyde based resin. T</li> </ul>	
50.	RS	Stated that worker health has been looked at but what about the health of the people living in the surrounding areas.	Comment noted.	
51.	MR	Asked what alternative products there are which can be used.	FA: Alternatives exist but are not locally available.	
52.	AR	Stated that formaldehyde is freely available in most toilet cleaners therefore the issue to be noted is the concentration emitted by Sonae and whether this level can cause pollution.	FA: stated that no liquid formaldehyde is used in the process or stored on site.	
53.	MA	Asked if there is a threshold for formaldehyde.	<ul><li>FA: explained that the legal threshold is</li><li>2 parts per million but Sonae's limit is 1</li><li>part per million.</li></ul>	
54.	НК	Asked that the limits be defined in the scoping report.	Comment noted.	
55.	MA	Explained that acetone is not nearly as hazardous as formaldehyde and people treat it very seriously. The fact that the limit for formaldehyde is 1 part per million shows how dangerous formaldehyde is.	Comment noted.	
56.	RS	Stated that it may be measured in the work place	Comment noted.	

No.	Name	Comment / Question	Response / Action
		but this does not help if these pollutants are extracted and emitted on people around the factory.	
57.	RS	Stated that there is a doctor in the area who has proof that the emissions are causing health problems to people living in the surrounding areas. The doctor has been telling people to move out of the area for their health.	Comment noted.
58.	RS	Stated that the expansion is seen as an economic benefit by Sonae but it is seen as a negative economic benefit by the people living in the area. Stated that he cannot find tenants because of the pollution. In addition filters have had to be installed in the air conditioners which cost money. Sonae's pollution is having negative economic effects on the area. People do not want to work in the area because of the pollution so employers have to pay employees higher salaries.	Comment noted.
59.	RS	Stated that a lot of residential and industrial development has been planned for the area but this is not going to happen because of the pollution.	Comment noted.
60.	RS	Stated that he cannot believe that there is a solution available to the air pollution problem and Sonae are not going to use it because of financial reasons.	FA: With enough money any solution is possible. R30 million is a substantial amount, but would be considered in the future.
61.	ТМ	Asked what would be done about the roads if more trucks are to be travelling along these roads. Requested that a traffic impact study be undertaken. Stated that the doubling of traffic can cause serious traffic problems on all roads.	Comment noted. A traffic study will be considered.
62.	RS	Stated that there is a problem with 8 ton trucks on the road. Especially concerned with the timber trucks. In addition the intersections are strained beyond capacity. People are dying due to accidents often caused by timber trucks. Requested slip ways at intersections and stated	Comment noted.

No.	Name	Comment / Question	Response / Action	
		that this is not negotiable.		
63.	RS	Explained that trucks slow down traffic. Stated that Nelspruit and White River should be regarded as one economic unit. Lots of people commute and an accident affects the entire R40 and N4. This causes traffic congestion. A baseline traffic study must be undertaken especially with regards to heavy vehicles.	Comment noted.	
64. TM Stated that trucks which transport logs to the plant use back roads in order to avoid the traffic officers. Stated that as a tax payer she is unhappy with the trucks degrading the roads.		plant use back roads in order to avoid the traffic officers. Stated that as a tax payer she is	FA: explained that Sonae is ISO14001 certified therefore the trucks are inspected and weighed to ensure that they are not overweight. If trucks are found to be over loaded they are dealt with appropriately.	
65.	ТМ	Stated that logs fall off the truck and cause accidents.	Comment noted.	
66.	AR	Asked what procedures are followed if trucks are found to be over loaded and has this happened before?		
67.	RS	Stated that the environmental impact regarding the logs should not be excluded from the EIA just because this service is sub-contracted. Sonae should take ownership of all possible impacts.		
68.	SE	Stated that ISO14001 requires a cradle to grave approach therefore Sonae should take responsibility for the trucks as well.		
69.	MA	Asked whether the area where the wood is harvested from will increase if production increases. Is so the impact will increase. Asked if there are enough plantations to supply for the increase.	FA: stated that a study has been undertaken in order to identify whether sufficient timber will be available for the increased production. It was concluded that sufficient timber exits in the surrounding areas in order to supply Sonae for the increased production. Most of the increase will come from waste timber.	
70.	MA	Asked for an indication of the quantity of logs used and quantity of waste used.	FA: stated that it is approximately a 50/50 split.	

No.	Name	Comment / Question	Response / Action	
71.	MA Asked if there is enough timber for the expansion.		FA: explained that sufficient timber wil be available for the expansion.	
72.	JI	Asked if there is enough timber available for the expansion why the smaller mills have closed down.	FA: explained that the other mills require a better quality wood than Sonae.	
73.	ТМ	Asked how many people are currently employed and how much the employment will be increased by.	FA: stated that currently approximately 120 people are employed and this will increase to approximately 160.	
74.	RS	Stated that other companies employ more people.	Comment noted.	
75.	ТМ	Stated that most of the money goes out of the country.	Comment noted.	
76.	НК	Asked what other waste is produced by the plant.	FA: All process waste is recycled except for municipal waste.	
77.	MR	Asked what the increased water consumption will be.	FA: Stated that water consumption will increase to approximately 438 kl/day.	
78.	ТМ	Asked what the current consumption is.	FA: Varies depending on the product being produced.	
79.	MR	Asked where the increased water supply will be obtained from.	FA: stated that it is proposed to obtain the increased water supply from the Mbombela pipeline.	
80.	AR	Asked if the borehole is licensed and if so to include this in the scoping report.	AC: answered that it is. Comment noted.	
81.	1. JI Stated that Sonae did not contribute to the establishment of the pipeline so how can they		FA: stated that Sonae is undertaking negotiations with the Mbombela Municipality with this regard.	

No.	Name	Comment / Question	Response / Action		
84.	RS	Stated that Sonae has stated that there is no waste water then why are there artificial wetlands.	FA: they are for the treatment of surface water and storm water.		
85.	MR	Asked whether water quality is monitored.	FA: stated that water quality is monitored.		
86.	НК	Asked what happens to the ash. Saw some at the brick works and it was stated that it comes from Sonae. Has it been assessed whether or not the ash is hazardous?	FA: stated that the ash is not sold or used for brick works.		
87.	AR	Stated that if the water which is used in the boiler is contaminated then it will leave a contaminated waste when it evaporates.	Comment noted.		
88.	НК	Requested that a specialist study be undertaken for all waste especially air quality.	Comment noted.		
89.	ТМ	Requested that a specialist study regarding the rock art sites be undertaken. Contact the WITS Rock Art Institute.	Comment noted.		
90.	MA	<ul> <li>Asked if Sonae installed the R30 million cleaning device what would it take out of the emissions.</li> <li>Asked if it would take out chemicals, specifically formaldehyde.</li> <li>Asked if it would not be better to have concentrated waste to deal with rather than emit it in the air.</li> </ul>	Most chemicals would be removed but they would still be present as a concentrated sludge.		
91.	RS	Asked where the formaldehyde levels are measured.	FA: Throughout the plant.		
92.	RS	Stated that dust emitted needs to be tested because not only is it emitted into the atmosphere but it is also in the solid waste which then becomes aerated. This should be included in the air quality study. Not only should a model be undertaken but collections and measurements should also be taken. Does not believe that the emissions from one day are within the acceptable limits.	Comment noted.		
93.	RS	Stated that an on-going assessment must be undertaken in the future.	Comment noted.		

No.	Name	Comment / Question	Response / Action
94.	ТМ	Stated that a noise assessment must also be undertaken.	Comment noted.
95.	AR	Stated that in the EMP more stringent fallout tests need to be discussed. In addition road maintenance and continuous monitoring needs to be included in the EMP. Stated that people have a problem with the emissions therefore there needs to be transparency in the procedures.	Comment noted.
96.	НК	Requested that a full EIA be undertaken. Stated	NP stated that it will be up to DALA to

		that there are serious concerns which need to be addressed and specialist studies need to be undertaken.	decide whether a full EIA will need to be undertaken.
97.	AR	Stated that people are currently unhappy so despite future developments air quality should be addressed.	Comment noted.
98.	MR	Asked what happens to the sewage.	FA: it is treated at the municipal sewage works.
99.	НК	Need to address if sewage / effluent increases will be handled with the expansion.	Floor: It will be insignificant.
100.	RS	Asked whether the health and safety and pollution standards followed by Sonae are the same as those in Europe or if there are double standards.	FA: stated that the relevant legislation and standards of the country are adhered to. In addition the plant is ISO14001 certified.
101.	RS	Stated that the accusation could be made that South Africa is a nice place to work because the standards are lower than most European countries so international companies come here to make the most of it.	Comment noted.
102.	НК	Stated that many chemicals do not have set standards in South Africa therefore international standards should be adhered to.	
103.	RS	Asked how much Sonae pays for water supply, rates and taxes and the site. Asked what Sonae's contribution to the municipality is.	FA: stated that this information can be included in the scoping report. Currently Sonae is on Farm land which is zoned as industrial 2 but the rates and taxes paid are those of industrial.
104.	MR	Stated that it was not possible for the factory to	FA: It is zoned industrial 2.

No.	Name	Comment / Question	Response / Action
		be located on agricultural land if it is an industrial process. Asked whether zoning will be changed.	
105.	RS	Stated that severe water shortages have been experienced in the area. Assumes that Sonae has never had this problem so would like to know how much Sonae pays for water.	Comment noted.
106.	RS	Asked if any water shortages have been experienced by Sonae.	RP: Yes.
107.	JI	Asked whether the consultants still thought that a scoping report would be sufficient to obtain approval from the authorities.	NP explained that this decision lies with DALA.
108.	RS	Stated that this cannot be just left to DALA to decide. These issues are long standing and have not been addressed. Stated that existing problems need to be dealt with before the expansion can be considered.	Comment noted.
109.	AR	Asked whether any environmental audits are undertaken.	FA: stated that regular environmental audits are undertaken.
110.	RS	Stated that ISO14001 audits may investigate the site but does not take into consideration the surrounding areas where it really affects the environment and the community.	Comment noted.
111.	MR	Asked that the scoping report look at possible alternatives.	Comment noted.
112.	RS	Stated that Rocky Drift will need more copies of the scoping report because they are directly affected.	Comment noted.

### 15 CLOSURE

NP once again thanked everybody for attending the meeting. NP explained that if there were any interested and affected parties which should be included in the public participation process these names should be forwarded to the project team so that they can be contacted.

The meeting ended at 19:35.