



PURPOSE OF THIS DOCUMENT:

- **This Background Information Document (BID) provides you, as an Interested and Affected Party (I&AP), an overview of the proposed project.**
- **The BID invites you, as an I&AP, to participate in the required Public Participation Process.**
- **The BID provides you, as an I&AP with an opportunity to contribute and participate in the formulation of the Scoping and EIA Reports.**
- **The BID also provides you, as an I&AP an opportunity to provide the project team with your comments, concerns and objections to the proposed project.**

BACKGROUND INFORMATION DOCUMENT

Project Introduction:

This Background Information Document (BID) serves to inform all Interested and Affected Parties (I&APs) that Environmental Impact Management Services (Pty) Ltd (EIMS) has been appointed by Eskom Holdings SOC Ltd (the applicant, hereafter referred to as Eskom) to assist in preparing and submitting the Scoping and Environmental Impact Assessment Reports and undertaking a Public Participation Process (PPP), in support of an Integrated Environmental Authorisation (EA), Waste Management Licence (WML) and a Water Use Licence (WUL) Application. You have been identified as a potential Interested and Affected Party (I&AP) for this proposed project.

Aim of the Background Information Document (BID):

The aim of the BID is to:

- Provide an overview of the Environmental Authorisation/Licensing Applications as well as the public participation processes which will be undertaken for the proposed Arnot Project;
- The Integrated EIA process shall be undertaken in terms of Chapter 6 of the EIA Regulations, 2014 (GNR 982) promulgated under the National Environmental Management Act (Act 107 of 1998 – NEMA) as amended. A full EIA process will be followed which involves a Scoping phase which is the ‘feasibility’ and largely desk-top assessment stage of the project, followed by more detailed assessments in the Environmental Impact Report (EIR) phase;
- Allow I&APs the opportunity to obtain a broad understanding of the proposed project and to request or share information; and
- Provide details on how I&AP’s can register their interest with and submit comments on the project. It is important to note that only registered I&AP’s will receive further communication regarding the project for the duration of the EIA process (i.e. invitation to review and comment on the Scoping and EIA Reports).

LOCATION, SCALE, AND EXTENT OF THE PROPOSED PROJECT:

The proposed application area is within close proximity to the existing Arnot Power Station, situated approximately 50km east of Middelburg in Mpumalanga. The Arnot new ash disposal facility is currently proposed to be within a 5km radius of the power station. In this regard, the new facility will be situated within the Steve Tshwete Municipality within the Nkangala District Municipality in Mpumalanga Province, South Africa. Please refer to locality map at the end of this BID.

PROJECT DESCRIPTION:

The coal-fired power generation process produces large quantities of ash, which is disposed of in ash dumps and dams. Eskom uses coal of a low grade which produces a larger mass of ash during combustion. The higher-grade coal in South Africa predominantly serves the export market. Eskom uses either wet or dry methods of ash disposal. Both utilise effluent water or wastewater, which is the end product of the cascading water re-use process. Wet ash disposal, utilized at the Arnot site, entails the hydraulic conveyance of ash, while dry ash disposal entails the conveyance of partially moistened ash on conveyer belts. The proposed facility will be a wet ashing facility.

The aim of this proposed project is to provide Arnot Power Station with the additional capacity to dispose all of the ash it produces as part of its operation from 2026 until the end of station life in 2032. The project will deliver a wet ashing facility of up to 120ha in size with required liners and the required slurry system pipework and pumping systems and supporting infrastructure.

This includes the building of:

- Access roads for operations and maintenance;
- Construction of the New Ash Disposal Facility including its lining;
- Drainage channels for clean and dirty water;
- Ash Water Return Dams;
- Pipelines for transportation of wet ash and water to and from the ash disposal facility;
- Pumping capacity; and
- Sanitation services and offices.

A proposed infrastructure layout map will be included in the EIA report once the conceptual design work is completed.

Proposed Site

The New Ash Disposal Facility is required to be located at a suitable position which should take into consideration the following aspects:

- The pumping constraints of the current ash plant;
- The location of the current Ash Water Return high level dams;
- Be the least cost solution within the constraints of the environmental law and regulations; and
- Be located within a 5km radius from the Arnot power station

A site selection study was completed, and the results of this assessment are included in Section 2 of the Environmental Scoping Report currently available for public review and comment. Several suitable sites were identified as alternatives for assessment in the EIA.

LISTED ACTIVITIES APPLICATION:

The proposed project must be authorized in terms of a number pieces of South African environmental legislation, namely:

- The National Environmental Management Act (NEMA, Act No. 107 of 1998);
- The National Environmental Management Waste Act (NEMWA, Act No. 59 of 2008); and
- The National Water Act (NWA, Act No. 36 of 1998).

The following listed activities, in accordance with the above pieces of legislation, are currently anticipated to be triggered by the proposed Arnot Project. The applicability of each of these listed activities (or the requirement for any additional listed activities) will be assessed during the initial Authority consultation process as well as during the scoping phase.

- NEMA GNR 983: Activities 9, 10, 12, 13, 14, 19, 24, 25, 27, 34 and 56;
- NEMA GNR 984: Activities 7, 15 and 16;
- NEMA GNR 985: Activity: 2, 4, 10, 14 and 18;
- NEMWA GNR 921: Category B7 and B11;
- NWA: Section 21 (a), (b), (c), (d), (f), (g), (h), (i), and (j) water uses.

The applicability of each of these listed activities (or the requirement for any additional listed activities) will be assessed during the initial Authority consultation process as well as during the scoping phase. Further other environmental permitting requirements may be identified during the process- this public consultation process serves as an integrated process as required for all the relevant permits, authorisations, and licenses.

TYPICAL IMPACTS ASSOCIATED WITH THESE ACTIVITIES:

Potential impacts resulting from the wash plant and associated infrastructure as well as any amendments to the existing licences may include inter alia:

- Impacts on biodiversity;
- Impacts on groundwater resources;
- Impacts on soils and geology;
- Impacts on hydrology/ surface water and wetlands;
- Impacts on air quality; and
- Visual impacts.

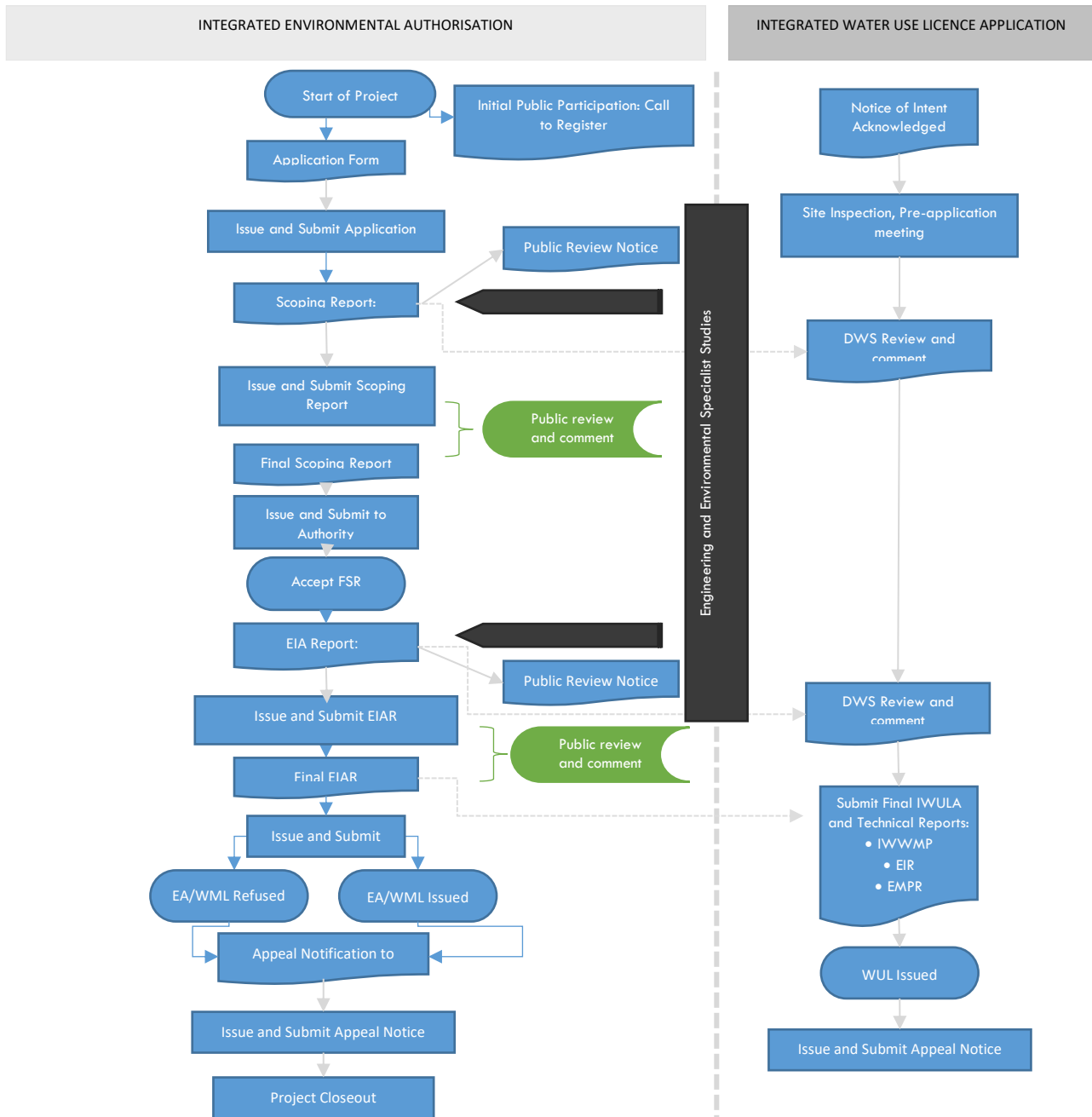
The above-mentioned impacts should not be construed as the only impacts that will be identified during the course of the EIA. Based on public consultation, specialist input and further detailed assessments, additional impacts will likely be identified and assessed.

All potential impacts will be identified and assessed following an impact assessment methodology guided by the requirements of the NEMA EIA Regulations (2014). The broad approach to the significance rating methodology is to determine the environmental risk (ER) by considering the consequence (C) of each impact (comprising Nature, Extent, Duration, Magnitude, and Reversibility) and relate this to the probability/likelihood (P) of the impact occurring. This determines the environmental risk. In addition, other factors including cumulative impacts, public concern, and potential for irreplaceable loss of resources, are used to determine a prioritisation factor (PF) which is applied to the ER to determine the overall significance (S).

Furthermore, based on the identified impacts and their ratings, mitigation and management measures are recommended for the applicant and these are included in an Environmental Management Programme (EMPr) towards ensuring that any negative impacts that cannot be avoided are minimised and managed in a manner that is not detrimental to the environment, and positive impacts maximised.

Specialist studies will be undertaken to guide the assessment of the potential impacts, namely: Hydrogeology, Agricultural Potential, Air Quality, Visual and Heritage and Palaeontology. Classification. Any additional specialist studies required by the Competent Authority will be undertaken if necessary and relevant existing specialist studies will be utilised to inform the study.

INTEGRATED EIA PROCESS



HOW TO GET INVOLVED :

Should you feel that you may be interested in or affected by this project, it is essential that you register as an Interested and Affected Party (I&AP) in which case you will be kept informed regarding the project and afforded an opportunity to participate in the process. **Please note that only registered I&APs will be included in future correspondence regarding the project and associated updates.**

You may register an I&AP in any of the following ways:

1. Complete the attached I&AP registration form and questionnaire and return it to EIMS via email, fax or letter; and
2. Via telephone call addressed to the contact person stipulated at the end of this document.

I&APs are invited to submit any comments, queries or concerns regarding the project within the stipulated timeframes provided. Comments may be submitted by registered I&APs in any of the following ways:

3. Complete the attached I&AP registration form questionnaire and return it to EIMS via email, fax or letter; and
4. Submit written comments in a format of your choosing to EIMS via email, fax or letter.

It is important to note that the EIA process is guided by legally stipulated timeframes and as such, in order to ensure your continued and valuable involvement in the project, we request that your registration requests and any preliminary comments are submitted to EIMS (contact details provided below) by **no later than 13 August 2018.**

Furthermore, please be informed that the Environmental Scoping Report will be available until the **13 August 2018** for review and comment at the Reitkuil Public Library, the Arnot Power Station Main gate as well as on the EIMS website (<http://www.eims.co.za/public-participation>)

Environmental Impact Management Services (Pty) Ltd

Contact Person: Miss Cheyenne Muthukarapan

EIMS Reference Number: 1140

Postal Address: P.O. Box 2083, Pinegowrie, 2123

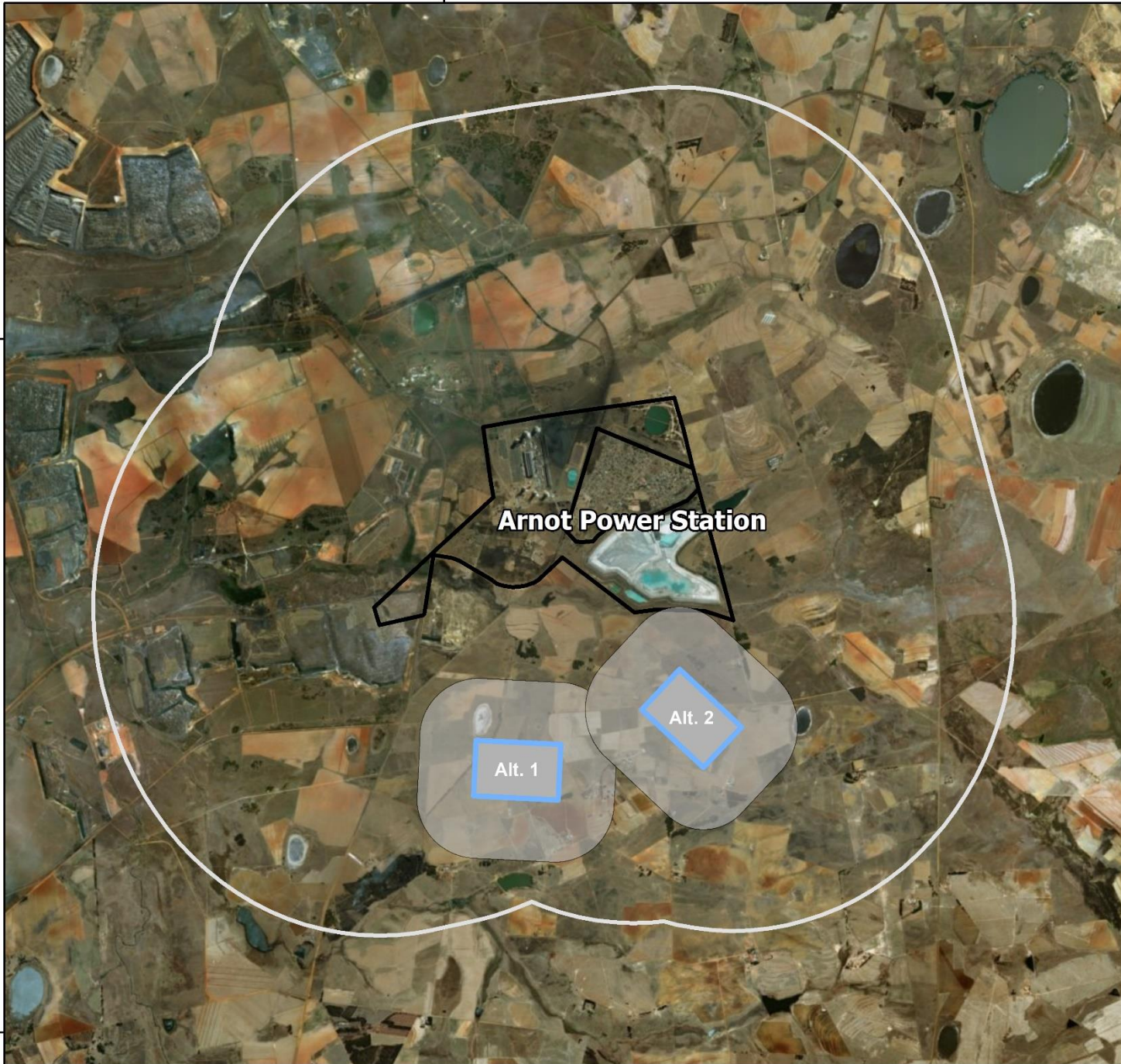
Telephone: (011) 789 7170 / Fax: (011) 787 3059

E-mail: arnot@eims.co.za

77846.4106

-2868867.7033

-2879987.1906

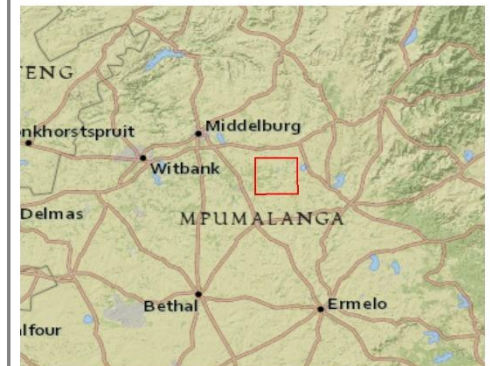


Alternatives for assessment in scoping

1140 Arnot Ash Disposal Facility

Legend

-  Study Area
-  Arnot Power Station
-  120ha_1km Buffer
-  Screened Alternatives:~120ha Sites



0 1.5 3 Km

Scale: 1:59 801



Coordinate System: LO29 TM WGS84

Projection: Transverse Mercator

Datum: WGS 1984

False Easting: 0.0000

False Northing: 0.0000

Central Meridian: 29.0000

Scale Factor: 1.0000

Latitude Of Origin: 0.0000

Units: Meter

Name: 1140 Alternatives_scoping_assess_PH

Date: 2018/04/05

EIMS Ref: 1140

Compiled: PH

Reviewed: BK

Approved: LW

