



# **KENDAL COAL FIRED POWER STATION: ENVIRONMENTAL IMPACT ASSESSMENT**

## **TOWN PLANNING IMPLICATIONS**

Prepared for Ninham Shand Consulting Services  
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IMPACT ASSESSMENT**

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September 2006

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## **1.0 INTRODUCTION**

The appointment of Seaton Thomson and Associates is to provide specialist spatial and land use planning input into the process for the proposed coal-fired power station and its associated infrastructure in the Witbank geographical area. This is based on two alternative sites for the power station, ie Sites X and Y, that have been selected from an intensive site screening process.

The elements of the spatial analysis will include the following

- A review of baseline planning information for the area, including relevant Spatial Development Frameworks and Integrated Development Plans.
- Evaluation of the implications of the proposed coal fired power station and associated infrastructure within the context of the above-mentioned planning documents.
- Determine if there are any development proposals, policies, township applications and/ or zoning applications approved, or are in the process of being considered for approval, in the study area.
- Determine if there any other land use proposals or land claims for the alternative sites and their immediate surroundings.
- Assess the implications that the proposed coal fired power station and associated infrastructure may have for the above-mentioned development/ land use policies, plans, applications, proposals and approvals.
- Provide recommendations with respect to any land use/ planning processes that need to be undertaken as a consequence of existing zoning or town planning schemes.
- Assessment of which of the identified alternative sites would be preferable from a planning perspective.

## **2.0 INTEGRATED DEVELOPMENT PLANNING**

The two selected alternative sites for the power station, ie Site X and Site Y, have been identified to be located in the Delmas Local Municipal Area (Nkangala District of Mpumalanga Province) and the Kungwini Local Municipal area (Metsweding District, Gauteng Province) respectively. Site X is wholly located in Delmas, whilst Site Y is largely in Kungwini, with only its most eastern extreme located in Delmas. As such, an assessment of all relevant IDPs requires to be undertaken.

## 2.1 Introduction

Prior to 1994 Local Government was mainly concerned with service provision and the implementation of regulations. However, with the introduction of the new Constitution, new legislation and policy frameworks, the role of local government expanded to become developmental in its approach and activities. Integrated planning, therefore, is considered to be a participatory approach to integrate economic, sector, spatial, social, institutional, environmental and fiscal strategies, in order to support the optimal allocation of scarce resources between sectors and geographical areas and across the population, in a manner that provides sustainable growth, equity and the empowerment of the poor and marginalized.

The objectives of Integrated Development Plans are, therefore, to identify, prioritise, budget for and implement the provision of services, amenities and social amenities to the municipal area, in order to rationally grow the social, economic, environmental and institutional components of the area.

## 2.2 Nkangala District Municipality IDP

The Delmas Local Municipality is one of the 6 local municipalities in the Nkangala District Municipality within the Mpumalanga Province. Delmas forms the south western most municipal area of Nkangala with the Gauteng Provincial boundary forming the western boundary and northern boundaries. The Emalahleni Local Municipality is located to the east. **Refer Plan 1: Location of Site X and Y.**

The Nkangala District Municipality Integrated Development Plan 2006/2007-2010/211 is aligned with the Mpumalanga Provincial Government Provincial Growth and Development Strategy (PGDS), which is was compiled in 2003 and serves as guideline to provincial departments and local government initiatives. The PGDS is, therefore, a guiding principle when government departments and municipalities lay out their budget allocations in the light of key growth and development priorities at the beginning of each budgeting cycle. The issues and programmes emanating from IDPs are, therefore, compatible with the priority areas of the PGDS.

All of the Delmas LM south of the N4, where the two alternative sites are located, is classified as “mining and agricultural” land uses, with agriculture considered the most important employment category. The IDP notes the importance of agricultural activities and tourism development for the district and the need to focus on support for emerging farmers and commercial farms. The strategies in the IDP aim to identify specific areas for development of large-scale agricultural ventures (urban and rural), providing appropriate infrastructure and creating extraordinary measures to assist new

agricultural investors. Additionally, it incorporates marketing infrastructure where transport facilities and trading areas should be provided.

The Nkangala IDP is generally focused on activities associated with the urban areas of the District and there are no specific plans, budgets, or action plans that earmarked for the proposed alternative sites of the power station.

### 2.3 Delmas IDP

Delmas Local Municipality Integrated Development Plan 2006/7 identifies five local development priorities:

1. infrastructure development, rehabilitation, maintenance and service delivery;
2. development planning and local economic development;
3. municipal transformation and institutional development;
4. municipal financial viability and financial management; and
5. municipal governance.

Amongst other Strategic Focus Areas identified in the IDP, are those for Land Use, which is specifically aimed at identifying and acquiring suitable land for development, updating and improving land management policies; and facilitating land acquisition for redistribution.

This is associated with a further Strategic Focus Area related to Economic Growth, which aims to promote the marketing of Delmas; promote investors and investments; improve the payment for municipal services; and promote and support SMME's and BEE's.

The Delmas IDP is generally focused on a broad range of social, economic and institutional objectives associated with general upliftment, development and growth of the area and there are no specific plans, budgets, or action plans that are earmarked for the alternative power station sites.

### 2.4 Kungwini Local Municipal IDP 2005/2006

The objectives of the Kungwini IDP 2005/6 primarily target the gaps and problem areas identified in the earlier IDPs and also aims to provide for alignment and consistency with the Metsweding District IDP.

Amongst the numerous priority areas and key focus objectives of the IDP is that of encouraging development in the area and making available job opportunities. These are set out in the IDP objectives for this sector as follows

“... ”

1. The IDP highlights the fact that local government can do little to create jobs in the local economy. It can, however, facilitate and provide a climate conducive to employment creation within the private sector.....
2. The municipality needs to constructively involve the private sector in the IDP process with a view to leverage all opportunities for job creation and economic growth. It should also fast track the process of developing an LED strategy.
3. Kungwini is part of Gauteng, therefore it is important to participate in the broader economy.....
4. Kungwini should develop innovative strategies with a view to maximize potential for development.....”

This is further endorsed in the IDP with a second objective of fighting poverty and creating sustainable communities.

The IDP recognises that Kungwini is primarily a rural area with a significant but somewhat underdeveloped agricultural base. Proposals include support for this economic enterprise, as well as skills training and promotion related to the industry. There are, however, no specific plans, budgets, or action plans related to activities on agricultural land specifically, no for the sites are earmarked for the alternative power station sites.

## 2.5 Discussion

The purpose and objective of Integrated Development Plans is for various levels of government to strategically plan for development and its implementation in their areas of jurisdiction, particularly in respect of government arenas of responsibilities. These relate primarily to service infrastructure and the provision of amenities for social, cultural, education and health purposes

As such, relevant Integrated Development Plans covering the districts and local municipalities deal, in general, with urban areas, where the need for services, infrastructure and social / community facilities and amenities is most required. Although recognition of the rural/ agricultural/ mining areas is made, no provision in terms of budgeting, action plans or strategies have been made in the IDPs. Rather, such activities specifically target identified problem areas where important and necessary capital expenditure is required, ie the urban areas and settlements.

The mining (coal reserve areas) and agricultural activities are, nonetheless, considered important in view of their contribution to

and association with the local economies of both the local municipalities and the larger district, both financially and in terms of employment. Spatially, the sites are still recognised as commercial farming and mining areas, relatively distant from the more targeted urban areas and settlements.

### 3.0 SPATIAL DEVELOPMENT FRAMEWORKS

The two selected alternative sites for the power station, ie Site X and Site Y, have been identified to be located in the Delmas Local Municipal Area (Nkangala District of Mpumalanga Province) and the Kungwini Local Municipal area (Metsweding District, Gauteng Province) respectively. Site X is wholly located in Delmas, whilst Site Y is largely in Kungwini, with only its most eastern extreme located in Delmas. As such, an assessment of all relevant Spatial Development Frameworks requires to be undertaken.

#### 3.1 Nkangala District SDF

The Nkangala SDF, which is reflected on **Plan 1**. The SDF notes the area is allocated for commercial agriculture and mining, in line with the current activities in the area.

#### 3.2 Delmas SDF

The purpose of the Delmas Spatial Development Framework (SDF) is to provide guidelines and to integrate planning regarding the future development of the area (rural, mining and urban).

Furthermore, it is intended that the SDF will

- Guide the development of an effective urban structure (residential, employment and transportation).
- Guide decision-making regarding allowable land uses in certain areas as well as investment in infrastructure.
- Guide the budgeting process.
- Create an attractive environment for investment (residential, industrial, etc.)
- Ensure the maintenance of a stable and attractive urban and rural environment.

Delmas Municipal area is comprised of

- Developed Urban Areas
- Agricultural Holding Areas: Primarily extensive residential with numerous non-conforming land uses
- Informal Settlements as well as the Brakfontein “residential” area (mine).
- Agricultural / Farming operations.

- Mining Component.

From a spatial point of view the problems experienced in Delmas manifest themselves as follow:-

- Dispersed and fragmented towns (Botleng Proper in relation to Delmas, and Botleng Extensions 3 and 4 in relation to Delmas and Botleng Proper).
- Employment opportunities in:-
  - Delmas Central Business District (CBD) and adjacent "Industrial" area,
  - Commercial/Business development - Rietkol area.
  - At the mines throughout the area.
- Informal settlements present in the area and influx of people due to farm evictions.

The consultants were advised that the plan for the Delmas SDF does not provide coverage of the rural agricultural areas, which include the proposed sites.

The Vision Statement for Delmas, objectives and strategies were formulated to guide the spatial development of the area, which aims to achieve the following

- Provision of land for housing for the different socio-economic groups in appropriate locations.
- Provision of land for employment in close relation to low-cost residential areas as well as close to economic growth areas.
- Provision of affordable bulk infrastructure.
- Promotion of economic development opportunities via a detailed marketing strategy.
- Promote environmentally friendly development practices and conserve certain areas. (Pans and Bronkhorst Spruit)

The area of the two alternative sites fall within areas designated for mining and agriculture, which are not covered by the SDF for Delmas. No other proposals are reflected, as spatial initiatives are generally focused on urban areas where there is pressure for change.

### 3.3 Metswedjng SDF

The Metswedjng Spatial Development Framework 2006 provides for the wider spatial planning of the wider district, incorporating the Kungwini Local Municipality. This has relevance for spatial planning in the area, as there is currently no SDF for Kungwini Local Municipality.

The SDF notes that the area within which the alternative sites are located has been earmarked as part of the agricultural land holdings and open space areas of the District. These agricultural lands are considered important and of high production potential. Production of the land has important contributions to make to the local economy and to employment opportunities. This is especially important to rural settlement communities. There are, however, no rural settlements within the vicinity of or in close proximity to the sites. Agricultural lands are also seen to form part of “green corridors” and part of the District Open Space System (DOSS).

In the SDF, large extents of the District have been classified for Rural and Conservation Development Zones. Land use proposals envisage the continuation of these activities, with every endeavour to protect the known high potential agricultural soils. Small rural settlements are recognised and acknowledged, but intensification of their size and extent is not supported. No specific spatial proposals have been made for the area containing part of Site Y.

### 3.4 Discussion

The purpose and objective of Spatial Development Frameworks is to provide the various levels of government with spatial components of their areas of authority, within which the IDPs are to be implemented. Priority has been placed on areas under pressure for and needing to be changed, particularly urban nodes and settlements.

As such, relevant Spatial Development Frameworks covering the districts and local municipalities deal, in general, with spatial expansion, rationalization and planning in urban areas, where the need for housing, business, services, infrastructure and social / community facilities and amenities is most required. Although recognition of the rural/ agricultural/ mining areas is made, no spatial proposals are noted.

The mining (coal reserve areas) and agricultural activities are, nonetheless, considered important in view of their contribution to and association with the local economies of both the local municipalities and the larger district, both financially and in terms of employment. Spatially, the sites are still recognised as commercial farming and mining areas, relatively distant from the more targeted urban areas and settlements.

## **4.0 LAND USE PLANNING POLICIES AND APPLICATIONS**

Discussions with the relevant authorities in respect of any development proposals, policies or envisaged activities in the area of the two identified sites X and Y indicated that the areas are considered commercial farming areas and are envisaged to remain as such. Furthermore, as the

areas also contain important coal reserves, these areas are not envisaged for any development in the foreseeable future. The remoteness of the sites from any existing or future urban areas also means there are no plans for changing the land use, implementing any capital projects (services, etc) in the near future. Additionally, there are no applications currently lodged with the authorities for any forms of development, township establishment or subdivision of Agricultural land.

Discussions also indicated that there are no known land claims in the area of the two sites.

## **5.0 ASSESSMENT OF DEVELOPMENT PROPOSAL**

Integrated Development Planning and Spatial Development Frameworks prepared for the areas of concern primarily focus on the urban areas and settlements. These have been identified as areas with priority needs in terms of services and social amenities, where there is pressure for growth and expansion and where capital investments are most required.

The IDPs and SDF's for the study area, incorporating alternative sites X and Y, indicate that these areas are currently classified for use for "mining and agricultural" purposes. Proposals for the future use of these areas are generally not addressed in any specific detail nor in spatial terms. This is primarily due to the remoteness of these rural agricultural areas and the lack of priority needs or any pressure for development. Alternatively, the sites have been identified to remain for "mining and agricultural" uses, in accordance with current conditions.

It is, however, recognised that the rural agricultural areas are important, due to the high potential agricultural quality of the soils and the importance that agricultural activities make to the local economies of the area and to employment opportunities. These rural agricultural areas are also seen as open space/ conservation areas that surround the urban nodes and settlements, and their retention is considered vital to the health and welfare of the area.

Therefore, the area within which alternative Sites X and Y are located, is not restricted or limited by any specific or designated future priority land use proposals or strategies contained in either the IDPs or SDFs. In fact, the activity has the potential to meet and accommodate some of the broader objectives of these planning frameworks, which include the importance of growing the local economies of the area.

On a negative note, the proposal will result in the loss of existing agricultural land, commercial farms and the open space/ conservation areas of the relevant local municipal areas. Loss of agricultural land and active farming practices will also result in the loss of a number of existing employment opportunities. However, the operation of the power station may be seen to compensate certain of these losses, as it will create

employment opportunities and contribute to both the local and wider economies.

## **6.0 REQUIRED PLANNING PROCESSES**

The establishment of a major industry on either Site X or Y will result in a change of land use and activity from the current Agricultural zoning and use on the land. In terms of required and standard land use planning practises, the future use of the land will need to be zoned in accordance with the relevant Council's Town Planning Scheme. This would involve an application to the relevant Local Council, to obtain a rezoning that accommodates the needs and components of the power station.

Where a Town Planning Scheme has not yet been promulgated, application for the land use rights in terms of a rezoning, must be made to the relevant Provincial authority, in respect of either Mpumalanga or Gauteng, depending within which province the selected site is located.

At the present time, a draft Town Planning Scheme is in preparation for the Delmas Local Municipality. It can be assumed that by the time a rezoning needs to be undertaken for the site, a promulgated Town Planning Scheme will be in operation for Delmas. Under these conditions, application will then need to be made to the Delmas Local Municipality.

Kungwini is subject to the same situation and at the present time, application for rezoning would need to be made to the Provincial authorities, ie Gauteng Department of Planning and Local Government.

## **7.0 CONCLUSION**

An assessment of the land use policies and frameworks for the proposed two alternative sites X and Y has indicated that these areas are not priority urban development areas, nor earmarked for any conservation or tourist type uses. The areas are remote from existing urban areas and settlements and are regarded as agricultural and mining areas, primarily due to the presence of existing farming activities and the coal reserves.

The areas are also not subject to any current applications for development, subdivision or township establishment. In fact, research through the relevant authorities and all documentation reveals little about these areas.

As such, it is apparent that there are no current planning or policies that restrict or inhibit the use of either of the two sites for the proposed power station development.

## REFERENCES

1. The Nkangala District Municipality Integrated Development Plan 2006/2007-2010/211, March 2006
2. Emalaheni Spatial Development Framework, Plan Associates, March 2005
3. Delmas Local Municipality Integrated Development Plan 2006/7 Financial Year
4. Delmas Spatial Development Framework, Terraplan Associates, February 2002
5. Metsweding Spatial Development Framework, Mamphela Development Planners, 2006

# NKANGALA DISTRICT MUNICIPALITY

## SPATIAL DEVELOPMENT FRAMEWORK

- Nkangala District Municipality
- N4 Maputo Corridor
- Witbank / Middelburg Development Corridor
- Moloto Activity Spine
- Towns and Settlements
- 1st - 2nd - 3rd Order Centre
- Tourism Belt
- Proposed Tourism / Cultural Nodes
- Extensive Agriculture
- Subsistence Farming and Residential
- Mining and Agriculture
- Mining
- Power Stations
- Dams and Rivers
- Proposed Tourism (Cultural Node)
- Freeway
- Main Roads
- Secondary Roads
- Railway Lines



## LOCATION OF SITES X AND Y

