Environmental Impact Assessment for the proposed Aluminium Pechiney smelter within the Coega Industrial Zone, Port Elizabeth, South Africa

SPECIALIST STUDY:

SOCIAL IMPACT

September 2002

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CSIR Report reference: ENV-S-C 2002-092(B)
SUMMARY

INTRODUCTION

Aluminium is a commodity for which there is an increasing international demand. In order to meet this demand, Aluminium Pechiney is proposing the development of an aluminium smelter in the Coega Industrial Development Zone in the Nelson Mandela Metropolitan Municipal area in the Eastern Cape Province of South Africa. Aluminium Pechiney is the fourth largest aluminium producer internationally and a world leader in the design and supply of aluminium technology. An international site selection study produced 11 potential sites for an aluminium smelter. After more detailed investigations, three preferred sites, viz. Coega in South Africa and sites in Australia and Argentina were selected. At present, engineering, planning and environmental feasibility studies are being conducted on the sites in South Africa and Australia. Due to economic instability in Argentina, no further studies are currently undertaken on the third site.

The CSIR (Environmentek) has been commissioned by Aluminium Pechiney to conduct an Environmental Impact Assessment for the proposed development as part of the feasibility study for the Coega site. ACER (Africa) was subsequently sub-contracted by the CSIR to conduct a social and socio-economic impact assessment as part of a suite of specialist studies comprising the Environmental Impact Assessment. For the purpose of the feasibility study, the proposed development is referred to as the PAS 2005 project.

TERMS OF REFERENCE

The specialist study addresses issues of social and socio-economic concern. The terms of reference are as follows:

- To identify the nature and number of new employment opportunities, including upstream and downstream opportunities (for example, additional jobs associated with increased harbour usage and other industrial potential).
- To evaluate the infrastructure requirements necessary to meet the demands of an increased labour force. This should include inter alia:
  - Housing.
  - Clinics and hospitals.
  - Domestic waste management facilities.
  - Water demand and competition for resources.
  - Transport.
- Consider employment opportunities related to the development and further downstream industrial development potential.
- Consider the implications of outsiders arriving in the Coega area in search of employment opportunities. Specific reference to the potential for increased crime in the areas should be evaluated.
- Identify benefits that might broadly accrue to the Port Elizabeth-Uitenhage-Coega community, both directly and indirectly through the proposed construction. Specific reference to current and potential social investment opportunities and projects should be considered.
- To evaluate the impact that the proposed construction may have on current and future tourism opportunities in the area.
- Identify and discuss any opportunities to maximise or reduce the positive or negative impacts identified through the above studies.
METHODOLOGY

In order to fulfil the scope of work, ACER (Africa) utilised a range of methodologies. Both qualitative and quantitative, secondary and primary research were undertaken.

Secondary research included:

- Desktop analysis and literature review. A substantial amount of recent literature is available on the Nelson Mandela Metropolitan Municipal, Coega Industrial Development Zone and Ngqura Port. This was used for desktop analyses and literature reviews.
- Continuous contacts with other specialist study personnel in order that information may be shared and integrated.

Primary research involved the collection of both qualitative and quantitative information on site or telephonically, and constituted:

- Site visits to gain an understanding of the receiving environment. Key informant interviews, both formal and informal were conducted to gain an in-depth understanding of the issues associated with the proposed project.

DESCRIPTION OF THE RECEIVING ENVIRONMENT

Early in the Environmental Impact Assessment process, the study area was defined by the CSIR as the Nelson Mandela Metropolitan Municipality. This receiving environment is described in terms of the following:

- Geographical description.
- Demographics.
- Infrastructure and services.
- Housing.
- Educational facilities.
- Land use.
- Tourism.
- SMME development.

- Corporate Social Investment.
- Development plans.

CONTEXTUAL SETTING OF THE PROPOSED DEVELOPMENT

The proposed PAS 2005 project will occur within the Coega Industrial Development Zone. This section serves to highlight the contextual setting of the proposed project in this zone. The context is unique when compared to previous smelter developments in South Africa, in the sense that it will occur within an already earmarked and demarcated Industrial Development Zone. Therefore, relevant aspects of the Coega Industrial Development Zone are discussed as well as the role of the Coega Development Corporation within the Industrial Development Zone. The Port of Ngqura, which is to serve the Industrial Development Zone, is also discussed briefly, as its construction will have some implications for the PAS 2005 project.

ALUMINIUM PECHINEY AND KEY ASPECTS OF THE DEVELOPMENT

During 2001, the Aluminium Metal Division of the Pechiney Group produced 1.14 million metric tons of aluminium internationally. It has 13 industrial facilities in seven countries and employs approximately 6 150 permanent employees.

The proposed development of the PAS 2005 smelter is Aluminium Pechiney’s first venture in South Africa, although not in Africa. If the EIA and project are approved, construction is planned to start in 2003, with the smelter being fully operational after 34 months. When fully operational the plant will have the capacity to produce 485 000 tons of aluminium per year.

At peak construction, approximately 6 030 local employees will be employed with an additional 170 expatriates. During operation, approximately 750 direct permanent personnel will be employed.
ALTERTNATIVES

The only alternative applicable to this proposed project is the ‘No-go option’. This implies that the PAS 2005 project is not constructed within the metallurgical cluster of the Coega IDZ. Impacts of this alternative are included as part of this assessment.

DESCRIPTION OF KEY ISSUES AND IMPACTS

A number of potential issues and impacts were identified during Scoping and are listed in Appendix 1. Additional issues, which are covered in the Social Impact Assessment, were identified by the consultant, based on extensive interaction with key stakeholders as well as substantial experience in industry, including the aluminium industry. All matters arising were categorised into four key issues, which were formulated as questions:

- What are the potential effects of the construction of the PAS 2005 project on the social and socio-economic environment?
- What are the potential effects of the operation of the PAS 2005 project on the social and socio-economic environment?
- What other effects may occur in relation to the development of the PAS 2005 project?
- What are the potential effects of the ‘No-go’ alternative on the social and socio-economic environment?

Potential impacts are identified and evaluated for the full life-cycle of the project, including construction, operation and decommissioning. Impacts are assessed in terms of significance before and after proposed mitigation and management actions are implemented.

Potential impacts identified with a high significance before mitigation/management can be summarised as follows:

- Construction.
  - Employment creation (positive).
  - Opportunities for local labour (positive).
  - Opportunities for SMMEs (positive).
  - Training/skills development opportunities (positive).
  - Induced migration (negative).
  - Increase in the spread of HIV/AIDS (negative).

- Operation.
  - Employment creation (positive).
  - Opportunities for SMMEs (positive).

Potential impacts identified with a high significance with mitigation/management can be summarised as follows:

- Construction.
  - Employment creation (positive).
  - Opportunities for local labour (positive).
  - Opportunities for SMMEs (positive).
  - Training/skills development opportunities (positive).
  - Increase investor confidence (positive).

- Operation.
  - Employment creation (positive).
  - Opportunities for SMMEs (positive).
  - Increased investor confidence (positive).

CONCLUDING REMARKS

The assessment of key issues shows that there are no negative impacts that can be classified as fatal or, that are of high significance to block the project, provided that the suggested mitigation measures are undertaken. The only impacts that have been analysed as having a high significance after mitigation, are positive, i.e. employment
creation (construction and operation), opportunities for local labour (construction), opportunities for SMME (construction and operation), training/skills development (construction) and increased investor confidence (construction and operation).

ACER (Africa) believes that the report accurately reflects the impacts that the proposed PAS 2005 project may have on the social and socio-economic environment and has provided sound suggestions to mitigate any anticipated negative impacts and enhance the positive. It is, however, crucial that the above suggestions are implemented in order for the project to be environmentally acceptable.
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This report is to be cited as follows:

Impacts. In: Environmental Impact Assessment for the proposed Aluminium
Pechiney smelter within the Coega Industrial Zone, Port Elizabeth, South Africa.
Specialist Studies Report. CSIR Report No. ENV-S-C 2002-092B, Stellenbosch,
South Africa.
## ACROSYMS

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<td>ABE</td>
<td>Affirmative Business Enterprise</td>
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<td>BAC</td>
<td>Business Against Crime</td>
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<td>BEE</td>
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<td>Wildlife and Environment Society of Southern Africa</td>
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<td>ZLA</td>
<td>Zone Labour Agreement</td>
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REPORT CONTRIBUTORS

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- Ms A McKenzie.
- Dr R-D Heinsohn.
1. INTRODUCTION

1.1 Background

Aluminium Pechiney (AP) is proposing the development of an aluminium smelter in the Coega Industrial Development Zone (IDZ) in the Nelson Mandela Metropolitan Municipal area (NMMM) in the Eastern Cape Province of South Africa (Figures 1, 2 and 3). AP is the fourth largest aluminium producer internationally and a world leader in the design and supply of aluminium technology.

The rationale behind the proposed development is for AP to remain competitive on the international market, where the demand for aluminium is constantly growing. An international site selection study produced 11 potential sites for an aluminium smelter. After more detailed investigations, three preferred sites, viz. Coega in South Africa and sites in Australia and Argentina were selected. At present, engineering, planning and environmental feasibility studies are being conducted on the sites in South Africa and Australia. Due to economic instability in Argentina, no further studies are to be undertaken on the third site at this stage.

The CSIR (Environmentek) was commissioned by AP to conduct an Environmental Impact Assessment (EIA) for the proposed development, as part of the feasibility study for the Coega site. ACER (Africa) was subsequently sub-contracted by the CSIR to conduct a social and socio-economic impact assessment (SIA) as part of a suite of specialist studies comprising the EIA. For the purpose of the feasibility study, the proposed development is referred to as the PAS 2005 project.

1.2 Terms of reference

In order to address issues of social and socio-economic concern, the terms of reference for the specialist study were as follows:

- Identify the nature and number of new employment opportunities, including upstream and downstream opportunities (for example, additional jobs associated with increased harbour usage and other industrial potential).
- Evaluate the infrastructure requirements necessary to meet the demands of an increased labour force. This should include *inter alia*:
  - Housing.
  - Clinics and hospitals.
  - Domestic waste management facilities.
  - Water demand and competition for resources.
  - Transport.
Figure 1: Locality map of the Nelson Mandela Metropolitan Municipal area.

Figure 2: Boundaries of the Nelson Mandela Metropolitan Municipal area.
Figure 3: Map of the Coega Industrial Development Zone, showing the location of the metallurgical cluster in which the proposed aluminium smelter would be located.

- Consider employment opportunities related to the development and further downstream industrial development potential.
- Consider the implications of outsiders arriving in the Coega area in search of employment opportunities. Specific reference to the potential for increased crime in the areas should be evaluated.
- Identify benefits that might broadly accrue to the Port Elizabeth-Uitenhage-Coega community, both directly and indirectly through the proposed project. Specific reference to current and potential social investment opportunities and projects should be considered.
- Evaluate the impact that the proposed construction may have on current and future tourism opportunities in the area.
• Identify and discuss any opportunities to maximise or reduce the positive or negative impacts identified through the above studies.

An aspect of importance to this proposed development is that of possible cumulative impacts. It can be assumed that the development of the aluminium smelter within the IDZ will not happen in isolation. Therefore, there may be one, or a number of other developments taking place simultaneously, which could increase the intensity of potential impacts. This was considered throughout the study.

1.3 Methodology

In order to fulfil the scope of work, ACERutilised a range of methodologies. Qualitative, secondary and primary research was undertaken.

Secondary research included:

• Desktop analysis and literature review.
  A substantial amount of recent literature on the NMMM, Coega IDZ and Ngqura Port was used for desktop analyses and literature reviews.
• Continuous exchange of information with other specialist study personnel.

Primary research involved the collection of both qualitative and quantitative information on site or telephonically and constituted:

• Site visits to gain an understanding of the receiving environment.
• Key informant interviews (both formal and informal) to gain an in-depth understanding of the issues associated with the proposed project. Key informants interviewed are listed in Section 10.

1.3.1 Assessment of potential impacts

A number of potential issues and impacts were identified during Scoping and are listed in Appendix 1. Additional issues, which were taken up in the SIA, were identified by the consultant, based on extensive interaction with key stakeholders as well as substantial experience in industry, including the aluminium industry.

Potential impacts were identified and evaluated for the full life-cycle of the project, including construction, operation and decommissioning. Impacts were assessed before and after proposed mitigation and management actions are implemented.

The impact assessment also considered the cumulative effects associated with this and other facilities, which are either existing or in the process of being developed within the region.
The significance of potential impacts is described as follows:

- **Low** - where the impact will not have an influence on the decision or need to be significantly accommodated in the project design.
- **Medium** - where the impact could have an influence on the environment, which will require modification of the project design or alternative mitigation.
- **High** - where the impact could have a 'no-go' implication for the project, regardless of any possible mitigation.

The assessment of impact significance is based on the following convention:

- **Nature of impact** - describes the type of effect that a proposed activity will have on the environment.
- **Extent** - indicates whether the impact will be local and limited to the immediate area of development (the site or the servitude corridor); limited to within 5 km of the development; or whether the impact may be realised regionally, nationally or even internationally.
- **Duration** - describes the lifetime of the impact as being short term (0 - 5 years), medium term (5 - 15 years), long term (>15 years but where the impacts will cease after the operation of the site), or permanent.
- **Intensity** - establishes whether the impact is destructive or innocuous and is described as low (where no environmental functions and processes are affected), medium (where the environment continues to function but in a modified manner) or high (where environmental functions and processes are altered such that they temporarily or permanently cease).
- **Probability** - considers the likelihood of the impact occurring and is described as improbable (low likelihood), probable (distinct possibility), highly probable (most likely) or definite (impact will occur regardless of prevention measures).

1.3.2 Mitigation and monitoring

Where negative impacts were identified, mitigation objectives (i.e. ways of reducing negative impacts) were set and attainable mitigation actions recommended. The purpose of mitigation and/or management actions is to reduce the negative and enhance the positive impacts of the proposed development.

1.4 Assumptions and limitations

The primary assumption underpinning the SIA is that all information received from AP, CDC, CSIR and Interested and Affected Parties (I&APs) was correct and valid at the time of the study. In this regard, ACER is confident that the social and socio-economic environment has been adequately assessed and that the findings presented in this report provide an accurate reflection of the *status quo* and future projections of the potential social issues and impacts associated with the proposed development.
1.5 Structure of the report

The report aims to identify and assess the potential social and socio-economic impacts of the proposed PAS 2005 project in the Coega IDZ and is structured as follows:

Section 1 is an introduction to the study. Section 2 provides a description of the receiving social and socio-economic environment with focus on the NMMM. Specific mention is made of relevant aspects pertaining to the Motherwell Township, which is the closest residential neighbour to the proposed project area. Other areas in close proximity area include Colchester, Cannonville, Ibhayi, Amsterdamhoek and township areas such as Zwide, KwaZakele and New Brighton. Information regarding these areas is included with the NMMM.

Section 3 provides a contextual setting to assist in understanding the relatively unique dynamics around the project, with its location within the Coega IDZ, in close proximity to the Port of Ngqura and bordering on the NMMM.

Certain key elements of the proposed development, which have relevance to this study, are outlined in Section 4.

Against the background of the preceding sections, Section 5 describes potential impacts of the proposed development, after which Section 6 provides an assessment of these impacts, based on the convention outlined in Section 1.3.1. Section 7 concludes the report and Section 8 provides a reference of information sources utilised during the study.
2. DESCRIPTION OF THE RECEIVING SOCIO-ECONOMIC ENVIRONMENT

The following section describes relevant aspects of the receiving socio-economic environment. Early in the EIA process, the study area was demarcated as the NMMM by the CSIR. This is, therefore, the main focus of the study.

2.1 Geographical description

The study area comprises the NMMM, which includes the city of Port Elizabeth, the adjacent towns of Uitenhage and Despatch as well as surrounding and outlying settlements. Its boundaries, incorporating seven local authorities, stretch from the Sundays River to the north of Uitenhage to the Van Stadens River mouth (Figure 2).

The area is included in the Fish River Spatial Development Initiative (SDI), which is one of three SDIs in the Eastern Cape. The Buffalo River SDI and Wild Coast SDI are to the north of the Fish River SDI. The vision behind the SDIs is the unlocking of economic potential in specific underdeveloped areas of South Africa.

It is in this context that the Coega Industrial Development Zone was formally designated as an IDZ by Cabinet in December 2001 (Government Gazette December 2001). It is located on the north-east coastline of Madiba Bay, approximately 20 km from the city of Port Elizabeth. The Coega (Ngqura) Port (to be constructed) is located within the IDZ. The total area of the IDZ is expected to be 12 000 ha, although the initial Core Development Area (CDA) (which is the area where initial development will be concentrated) will only cover 4 120 ha (Coastal and Environmental Services, 2000). The proposed PAS 2005 project will be located in the area of the IDZ earmarked as a metallurgical cluster.

Settlements in close proximity to the IDZ include Colchester, Cannonville, Motherwell, Ibhayi, Amsterdamhoek and the areas referred to as "Port Elizabeth rural" by the Municipal Demarcation Board in the SA Explorer Version 1 of 2000 (SA Explorer, 2000). However, Motherwell is likely to experience the most direct socio-economic impacts, as it is the closest to the IDZ and, indeed, the metallurgical cluster (Figure 3). For this reason, specific reference is made to Motherwell throughout this description of the environment.

2.2 Demographics

2.2.1 Population statistics

The population of the NMMM area was estimated to be more than 1.1 million in 1999, which makes the region home to approximately 2.5 % of the country’s population. Of the total population, 66% are african, 18% coloured, 15% white and the remaining 1% are of asian origin (Institute for Social and Systemic Change, 1999).
The population of Motherwell is 99% black, whereas Colchester is dominated by coloureds (47%) and whites (35%). This can be ascribed to the fact that the Cochester area is historically private land zoned for white people. The implication is that, with the expected influx of people looking for work in the IDZ, settlement would more readily be in Motherwell than in Colchester.

Over the years, there has been a gradual population growth in the NMMM. The increase per annum was 3.2% by 1980, 2.3% by 1991 and a much larger 4.5% by 1996. This has typically been due to an increase in the black population, as the relative contribution by other groups has decreased over the years. The white population decreased from 27% of the total in 1980 to 15% by 1996; the coloured contribution to population decreased from 24% to 18% of the total, whilst the asian community remained constant at 1% for the same period of time (Institute for Social and Systemic Change, 1999).

The housing pressure, exerted not only by the increase in population but also by apartheid-style development planning, has led to a rise in the occupation of public and open space, and the construction of informal and backyard housing (Institute for Social and Systemic Change, 1999). This phenomenon is particularly evident in the area surrounding Motherwell Township, especially to the north-north-west of the township. The reason stated by the NMMM and local councillors is that the majority of other township areas have reached a saturation point, with little vacant land available, especially for informal settlement. Therefore, there has been a rapid increase in the population of Motherwell and surrounding areas. This trend of ‘rapid urbanisation’ will continue and most probably increase as developments such as the Coega IDZ and Ngqura Port get underway (Mtanga, W. Personal Communication, 27 May 2002 & Mentz, M and Africa, D. Personal Communication, 29 May 2002).

2.2.2 Education and skills data

Figure 4 outlines the levels of education prevalent in the NMMM as reported by the 1996 Census (Stats-SA, 1996).
Of the total population of the NMMM, 10% have received no schooling. A large percentage of the population (77%) has, however, received education between Grades 0 and Matric, compared with South Africa as a whole, in which only 64.7% of the population has received similar education.

2.2.3 Employment and occupational data

Table 1 illustrates formal and informal employment per sector. Manufacturing employs the greatest amount of people (31%), followed by the Services Sector (21%) and Trade and Catering Sector (20%). Within the Manufacturing Sector, the sub-sector for motor vehicles, ships, boats and components has the largest employment contribution (32.2%), followed by the sub-sector manufacturing textiles, clothing and leather goods (24.6%), and by the sub-sector manufacturing chemical, rubber and plastic products (16.9%) (Drif-wefa, 2002).
Table 1: Formal and informal employment per sector, 2000.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Formal Employment</th>
<th>Informal Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Mining</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>34%</td>
<td>15%</td>
</tr>
<tr>
<td>Electricity</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Construction</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Trade</td>
<td>13%</td>
<td>58%</td>
</tr>
<tr>
<td>Transport</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>Financial</td>
<td>8%</td>
<td>1%</td>
</tr>
<tr>
<td>Services</td>
<td>24%</td>
<td>8%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The informal sector consists mainly of the trade sector (58%), followed by the manufacturing sector (15%). Informal employment within the trade sector includes activities such as street vending, and operating shebeens and spaza shops. Other informal activities, which can be classified under the remaining sectors, include taxi services, the production of goods, for example, clothing and shoes, brewing of beer, hairdressing and traditional healing.

A comparison of the labour market for 1994 and 2000 (Table 2) was gained from figures compiled by the Institute for Development Planning and Research (IDPR) and figures projected by Drif-wefa.

Table 2 indicates that unemployment has decreased slightly over the six years between 1994 and 2000, although it is on average still slightly higher than the national average for South Africa, which is at 33.9%. There also seems to have been a shift, albeit small, from informal to formal employment (Drif-wefa, 2002).

Table 2: Labour Market (1994 and 2000).

<table>
<thead>
<tr>
<th>Labour Market</th>
<th>% in 1994</th>
<th>% in 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment</td>
<td>39.8%</td>
<td>35.4%</td>
</tr>
<tr>
<td>Estimated employed in informal sector</td>
<td>15.9%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Formally employed</td>
<td>44.3%</td>
<td>54.3%</td>
</tr>
</tbody>
</table>
The majority of the population in Motherwell is not economically active, as almost 65% are under the age of 15. Of the 53% who are employed, their occupations are mainly unskilled and semi-skilled in nature, with a small proportion being skilled and managerial (Institute for Social and Systemic Change, 1999).

The majority of people with employment in Motherwell are employed in the private household, social services and manufacturing sectors. This is consistent with the wider Metropolitan area where manufacturing plays a large role (in comparison to construction, agriculture and mining that are not as well developed (Table 1)). There is, however, a strong likelihood that this scenario will change with the industrialisation of the IDZ, where construction would become the main source of employment for a number of years in the initial development of the CDA within the IDZ and the Port of Ngqura, followed by an increase in employment in secondary and primary industries downstream or upstream of the IDZ developments.

2.2.4 Income and expenditure patterns

Approximately 15% of the total population of the Eastern Cape resides in the NMM. However, the NMM generates more than 44% of the provinces Gross Geographical Product (GGP). Indeed, together with East London, the NMM generates more than 70% of the provincial GGP.

<table>
<thead>
<tr>
<th>Gross Domestic Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>The value added to a financial product within a specific period of time, for example, monthly, quarterly, annually etc. expressed on a national level.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Geographical Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>The value added to a financial product within a specific period of time, for example, monthly, quarterly, annually etc. within a specifically defined geographical area.</td>
</tr>
</tbody>
</table>

The GGP of the Eastern Cape is approximately 50% of the national average and the second lowest of the nine provinces. This is despite the fact that the GGP of the NMM is above the country average and second only to Gauteng.

The per capita income of the NMM was estimated at R19 500 per annum in 1998. This was significantly (approximately 50%) higher than that of East London and King Williams Town. The rural areas in the province, particularly the former Transkei, have the lowest per capita income at around 10% of the GGP of the NMM.
Migration in and out of Port Elizabeth is not well documented, although local authorities indicate that in-migration is taking place at a fairly rapid rate, especially into areas where open land is still available, such as Motherwell Township (Mtanga, W. Personal Communication, 27 May 2002). However, provincial figures do show mass migration out of the Eastern Cape, with an estimated 46% of black people living in the Western Cape born in the Eastern Cape (Institute for Social and Systemic Change, 1999).

2.3 Infrastructure and services

Currently the NMMM is in the process of developing an Integrated Development Plan (IDP), which encompasses all sectors of service delivery and infrastructure. Various departments, such as Town Planning, Water, Electricity, Health, Transport, Fire and Rescue, Housing and Parks are in the final stages of preparing their development plans for the metropolitan area.

2.3.1 Water and sanitation

The NMMM purchases water from the Department of Water Affairs and Forestry (DWAF). Water is currently supplied from the Orange River Scheme and the groundwater source of the Uitenhage Artesian System. According to the Institute for Social and Systemic Change (1999), the NMMM abstracted 66 300 million litres of water in 1997/98 and growth in water demand is expected to increase by 2.4 to 2.7% over the next 30 years.

The DWAF has made assurances to the Coega IDZ regarding water availability, indicating that DWAF can double the supply to the NMMM if necessary (although this will require increased transfer from the Orange River System).

The cost to supply water to the NMMM was estimated at R 1.26 per kilolitre (excluding administration and distribution costs). The consumer currently pays R 2.40 per kilolitre, with sewerage service charges calculated on the basis of amount of water consumed. The domestic sector is prioritised in water provision, with the free basic water principle increasing stress on water resources along with competing activities like agriculture. Stepped tariffs were introduced in July 1999, with the first 30 kilolitres being R 2.40 and the next 10 being R 3.50 and so on, up to R 9.00. The objective is to increase revenue and reduce water use, although business has a flat rate of R 2.40. There is also a policy for the supply to people who cannot afford to pay, by making subsidies available for certain quantities of water proportional to income. For people earning less than R 470 per month, the first 12 kilolitres are free (100% subsidy). For those earning above this amount but less than R 840, the subsidy is 50%. About 9 000 households qualify for a 100% subsidy and 10 000 for a 50% subsidy. (Institute for Social and Systemic Change, 1999).
The formal settlement area of Motherwell is well serviced with water, with the majority of the population having access to potable water inside their dwellings or yards. Public taps are also an important source of water. The NMMM provides flush and bucket latrine services to the residents of Motherwell, which appears to service the entire formal population.

2.3.2 Waste disposal

The City of Port Elizabeth currently disposes its general, non-hazardous waste at two solid waste disposal sites, one near Struandale industrial area and one at Arlington.

As peri-urban areas do not have the same levels of service as urban areas, the majority of the households burn refuse (Coastal and Environmental Services, 2000). The NMMM has a weekly service for the collection of solid waste for all its suburbs and townships.

2.3.3 Health and welfare

Responsibility for public health service provision in the Nelson Mandela Metropolitan Municipality is vested with the Municipality and the Provincial Administration, which does lead to co-ordination difficulties in system operation. Private clinics and medical centres also play a significant role in the provision of health services in the study area.

The public service sector has a referral system from Primary Health Care clinics to hospitals, which provide a more comprehensive service. The clinics are a municipal responsibility whilst the hospitals fall under the Provincial Administration.

To improve the situation, a restructuring process for the integration of services is under way. A Medical Services Co-ordinator for the NMMM area of jurisdiction was appointed but never assumed duties. As yet, a replacement is not in place.

2.3.3.1 Motherwell township

In Motherwell, there are five clinics (Table 3) that provide:

- Primary health care, preventive and promotive treatment.
- Curative health care, for minor ailments such as influenza.
- Pre- and post-HIV counselling services, but not testing.
- Referrals for chronic illnesses.

Note that the NU8 clinic also offers antenatal care with the NU2 clinic also operating a mobile unit to the Coega area.
Table 3: Clinics and staffing.

<table>
<thead>
<tr>
<th>Clinic</th>
<th>NU2</th>
<th>NU8</th>
<th>NU11</th>
<th>T’XOLO</th>
<th>MOBILE</th>
<th>COEGA</th>
<th>NU4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Community Health Nurses</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Health Nurses</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Enrolled Nurses</td>
<td>1</td>
<td>--</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Health Educators</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Community Health Workers</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is also a Community Health Centre in NU4 of Motherwell, which is an arm of the provincially administrated Dora Nginza Hospital from which supplies are obtained (Dora Nginza Hospital is an estimated 20 km from Motherwell). Services offered in the Health Centre include:

- Dealing with referrals from the local clinics.
- Maternity and obstetric services.
- An Out Patients Department.
- Casualty.
- Medication for chronic illnesses like diabetes.
- Voluntary HIV Counselling and Testing.

Other health services in the township are the private Prime Cure Clinic in the Motherwell Shopping Centre as well as the Lovelife youth programme in the same centre. The latter offers:

- A Health Education facility on Sexually Transmitted Infections.
- Voluntary HIV Counselling and Testing.
- Sport facilities.

According to the NMM Municipal Health Services Department, there are no private practitioners operating in the area (Mkosana, A. Personal Communication, July 2002).
2.3.3.2 Provincial Administration Services

There are three Provincial Administration Hospitals, viz. Dora Nginza Hospital, Livingstone Hospital and Port Elizabeth Provincial Hospital in the NMMM. Pertinent details are provided in Tables 4 and 5. In addition, it is important to note that the three provincial hospitals each have certain speciality units, viz. Dora Nginza - Burns Unit, Livingstone - Renal and Paediatrics Unit and Port Elizabeth Provincial Hospital - Cardiac Unit.

There are also a number of specialised hospitals, viz Empilweni Hospital for acute Tuberculosis patients, Elizabeth Donkin Psychiatric Hospital and the state subsidised SANTA for Multiple Drug Resistant Tuberculosis patients (Nit, R. Personal Communication, July 2002).

<table>
<thead>
<tr>
<th>Provincial hospital</th>
<th>Medicine</th>
<th>Surgery</th>
<th>Maternity</th>
<th>Paediatrics</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livingstone Hospital</td>
<td>174</td>
<td>264</td>
<td>128</td>
<td>218</td>
<td>784</td>
</tr>
<tr>
<td>Dora Nginza Hospital</td>
<td>56</td>
<td>72</td>
<td>44</td>
<td>75</td>
<td>247</td>
</tr>
<tr>
<td>Port Elizabeth Hospital</td>
<td>122</td>
<td>171</td>
<td>61</td>
<td>22</td>
<td>376</td>
</tr>
<tr>
<td>Total</td>
<td>352</td>
<td>507</td>
<td>233</td>
<td>315</td>
<td>1 407</td>
</tr>
</tbody>
</table>

Table 4: Beds available per ward in NMMM Provincial Hospitals.

<table>
<thead>
<tr>
<th>Provincial hospital</th>
<th>Average in-patients days per month</th>
<th>Average out-patients per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livingstone Hospital</td>
<td>17 934</td>
<td>15 000</td>
</tr>
<tr>
<td>Dora Nginza Hospital</td>
<td>3 009</td>
<td>13 860</td>
</tr>
<tr>
<td>Port Elizabeth Hospital</td>
<td>7 366</td>
<td>12 000</td>
</tr>
<tr>
<td>Total</td>
<td>28 309</td>
<td>40 860</td>
</tr>
</tbody>
</table>
2.3.3.3 Private health care centres

In the greater NMMM area there are 11 private health care centres run by independent institutions (Table 6).

<table>
<thead>
<tr>
<th>Institution</th>
<th>Health care centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Healthcare</td>
<td>Cuyler Clinic</td>
</tr>
<tr>
<td></td>
<td>Greenacres Hospital</td>
</tr>
<tr>
<td>Afrox Healthcare</td>
<td>Hunterscraig Private Hospital</td>
</tr>
<tr>
<td></td>
<td>Oasim Private Hospital</td>
</tr>
<tr>
<td></td>
<td>Westways Private Hospital</td>
</tr>
<tr>
<td></td>
<td>Mercentile Private Hospital</td>
</tr>
<tr>
<td></td>
<td>St Georges Hospital</td>
</tr>
<tr>
<td>Lifecare</td>
<td>Algoa Frailcare Centre</td>
</tr>
<tr>
<td></td>
<td>Lorraine Frailcare Centre</td>
</tr>
<tr>
<td>Port Elizabeth Technikon</td>
<td>Port Elizabeth Technikon Primary Health Service</td>
</tr>
<tr>
<td>University of Port Elizabeth</td>
<td>University of Port Elizabeth Primary Health Service</td>
</tr>
<tr>
<td>Planned Parenthood Association of South Africa</td>
<td></td>
</tr>
</tbody>
</table>

2.3.4 Community safety, fire, rescue and emergency services

2.3.4.1 Community safety

Crime has been listed as one of the major national problems, as it negatively affects economic growth, foreign investment and tourism. By 1997, crimes considered to be of high importance in the NMMM in descending order, were:

- Assault (26%).
- Burglary of residential areas (10%).
- Theft out of motor vehicles (9%).
- Fraud (4%).
- Burglary of business premises (4%).
- Rape (2%).
- Robbery with aggravating circumstances (4%).
• Theft of motor vehicles (8%).
• Murder (1%).
• Other crimes (37%).

The South African Police Service (SAPS) budget and staffing are estimated to be 20% below requirement, with a particular shortage of female police. The Department of Justice and Correctional Services also experiences constraints, with Port Elizabeth alone having a 7 000 docket backlog. Inexperience in approximately half the staff complement and poor honouring of court dates worsen the situation. The Community Policing Forum was formed as part of the National Crime Prevention Strategy to help in prioritising prevention of certain crime categories, such as crimes involving firearms, crimes involving criminal organisations, crimes against women and children, crimes involving corruption within the criminal justice system as well as crime prevention in communities (Institute for Social and Systemic Change, 1999).

The private security industry also bridges the gap that an under-resourced SAPS leaves, with approximately 150 to 200 security firms operating in the NMMM. Business Against Crime Eastern Cape (BAC), in partnership with relevant government departments and the SAPS, has had outstanding success in the Province as well as the NMMM, through pro-active crime prevention, legislative review, economic repositioning and rehabilitation of past offenders. Indeed, it is reported that the BAC installation of a closed circuit television in the Port Elizabeth CBD has resulted in a 64% decrease in crime over a period of six months.

2.3.4.2 Fire, rescue and emergency services

The Port Elizabeth Fire and Emergency Services (PEFES) caters for a populace of more than 1 million people and property worth almost R 5 billion, over 500 square kilometres. PEFES includes the Miramar Fire Station, Sidwell Fire Station, Govan Mbeki Community Fire House, Markman Operational Training Centre, South End Headquarters and Fire Station and the Motherwell Fire Station, with a R 1 million fire station planned for KwaZakhele. PEFES also has a programme of training and attaching community personnel to various fire stations.

From July 1996 to July 1997, 2 322 fire incidents were reported and 1 375 non-fire incidents including rescues (1 021), hazardous waste material spills (159) and other incidents (195) (such as removing trees, opening locked premises, etc). The period between November and March peaks as bush fires are common. PEFES is currently stretched to its limits, requiring an increase in resources and technology (Institute for Social and Systemic Change, 1999).
Uitenhage has a fully manned fire station that benefits from the regional training of fire fighters. The station is involved in community education, inspection of building plans, flammable liquid storage sites and inspection of hydrants.

2.3.5 Roads and transport

The NMMM has a developed transport system that includes road, sea, air and railway transporting facilities. The rail system, harbour and airport fall under Spoornet, National Ports Authority (NPA) and the Airports Company Limited, respectively. The road system falls under the Port Elizabeth municipality with the exception of the N2 national highway, which is the responsibility of the South African National Roads Agency (SANRA).

The NMMM aims to streamline transport services in the NMMM to accommodate growth and foster development. Input into the IDP will accordingly be provided by the Transport Authority Department. The Urban Transport Act (1977) makes provision for the establishment of a Metropolitan Transport Advisory Board, which oversees the planning and implementation of transport projects and maintenance.

2.3.5.1 Road transport

The primary road system in the NMMM is well developed with multi lane freeways, arterial- and collector-roads. The N2 bisects the town, providing a good link to industrial and other parts of the city. The arterial road system is in good condition, although it requires upgrading in some rapidly developing areas. Parking is only problematic in the CBD, although the area is still accessible (Institute for Social and Systemic Change, 1999).

The Signal Cycle Offset Optimising Technique (SCOOT) is used along the three major arterial routes. SCOOT measures real time traffic volumes to determine traffic signal settings, so as to reduce total time delays for motorists.

The lower income community is highly dependent on public transport. Minibus taxis are the most commonly used mode of transport (39.9%), while other modes of transport include private vehicles (27.5%) and buses (26.2%) (Coastal and Environmental Services, 2000).

The Algoa Bus Service is the only holder of a permit to operate scheduled bus services in the metropolitan area. The service also extends to adjacent rural areas. The service coverage is such that virtually all residential and industrial areas fall within a maximum of 750 m walking distance to the nearest bus stop (the recommended maximum being 350 m).
A number of private bus operators primarily offer hire transport, but are not subsidised unless doing contractual work for the Algoa Bus Service. The 16-seater minibus taxis carry an estimated 55% of all commuters with 2 000 taxis licensed to operate. This service directly competes with the bus service and commands a bigger market share because of flexibility of stops and journey times (despite overcrowding problems and no pre-set timetables). An oversupply of minibuses is evident, reducing the viability of the business (Institute for Social and Systemic Change, 1999).

A Transport Forum is in place with membership from the NMM, minibus taxi associations, commuter bus operators, SAPS, National Defence Force and various other institutions and organisations that use and are on reliant road transport. The Transport Forum is a non-statutory body that meets on a regular basis in an attempt to co-ordinate transport concerns and address problems regarding road transport, for example, minibus taxi operator conflicts (De Klerk, A. Personal Communication, 28 May 2002).

Historically, the transport infrastructure was designed to handle large traffic volumes to the suburban areas south and west of the city, with minimal development to accommodate public transport to the townships. This situation is being remedied by providing linkages between the N2 and New Brighton, as well as other industrial zones such as Korsten, to improve the economic opportunities of people in the townships.

Major developments are also planned to improve access to the major arterial roads (Institute for Social and Systemic Change, 1999).

The Coega area is serviced by the N2, secondary roads and gravel roads. The N2 is the major road link along the east coast and is in good condition serving an important function in the economy of the Eastern Cape region. The old Grahamstown road (R435) within the Coega area provides a linking road from the N2 to Uitenhage. The Addo road (R450) is the main access road from the Addo and Kirkwood agricultural hinterland to Port Elizabeth. This road also provides access to Motherwell Residential Township and the Markman Industrial Township.

The public transport system in the NMM area is fragmented at present, with little integration between modes. There are, however, several initiatives underway to better coordinate public transport systems in the future. These initiatives include the Current Public Transport Record (already completed), Public Transport Rationalisation (ongoing), Operating Licence Strategy and a detailed Public Transport Plan that is still to be undertaken by the Corporation, specific for the Coega IDZ area. The NMM Municipality has also recently completed an Interim Integrated Transport Plan, which address the provision of transportation services on a NMM wide basis.
With regards to the efficiency of the existing system, there is an oversupply of transport at present that results in short, if any, waiting times. Although operations are not optimally efficient, a reliable service is provided. The frequency of transport services depend on the mode and the particular route, for example, if the route is in a busy corridor such as from the Port Elizabeth CBD to Motherwell, it can be assumed that the frequency is fairly good for both bus and taxis. Outside the main corridors the frequency is poor, particularly to the higher income areas where private vehicle transport dominates. It is also important to note that in terms of frequency, due to over-supply in the taxi industry, commuters experience a good service frequency (De Klerk, A. Personal Communication, 7 August 2002).

2.3.5.2 Rail transport

The main railway line from Port Elizabeth enters the Coega IDZ on the seaward side of Markman Industrial Township, which is served from the Aloes Railway Station. The line has a maximum capacity of 54 trains per day to and from Port Elizabeth. The Coega IDZ may necessitate the extension of the Port Elizabeth line to Motherwell and Coega (Institute for Social and Systemic Change, 1999).

The public rail system caters for approximately 10% (17 000) of NMMM commuters per day. Railway stations have been upgraded following an investigation into high investment and low return from the rail service. The upgrading of the Motherwell line will improve services to Coega. The recovery rate is expected to be high, as a result of high population density in those areas, due to industrial growth and residential expansion.

2.3.5.3 Air and sea transport

The port and the airport are located close to the CBD. The town has been designed such that main freight transportation is primarily on the arterial roads, which can handle such traffic. Abnormal loads are problematic in certain areas due to vertical clearances and this requires consultation with the NMMM.

2.3.6 Electricity and power supply

The NMMM is responsible for electricity supply, which is purchased from Eskom and sold to consumers. The power is supplied to Port Elizabeth, via the De Aar Hydra substation in the Northern Cape, where two 400 KV lines bring power to the Poseidon substation near Cookhouse. From the Poseidon substation, one line supplies Border and the former Transkei by a 220 KV line, whilst the two 220 KV lines and a 400 KV line supplies the NMMM and surrounding areas. One of the 220 KV lines supplies SpoorNet, whilst the other goes to the Grassridge substation. From the Grassridge substation, power is supplied to the surrounding area and two
132 KV lines transmit power to the NMMM’s Chatty substation which supplies the NMMM.

The NMMM charges different rates for different consumers. Domestic consumers pay R 0.2089 per KWH, but no basic charge. SMMEs pay R 0.3013 cents and a basic charge of R 20.46 per month. Larger businesses pay a cheaper rate but higher basic charges. Rural consumers pay a 10% surcharge.

While Eskom is considering augmentation of its capacity, the supply from Eskom lines is considered sufficient to cater for the proposed industrial development in the IDZ, as well as an expected 2 to 4% per annum increase in the NMMM non-business sector. However, should IDZ developers have industry specific electricity needs (such as the PAS 2005 project), additional arrangements, for example, the construction of specific industry designated power lines will be negotiated with Eskom.

2.4 Housing

The NMMM is focusing on alleviating the chronic shortage of housing for low-income groups. Hampered by administrative processes, the NMMM has thus far supplied 4 350 houses, well short of the 15 347 per year required to meet demand in the 1994 to 1998 period. The delivery of houses of about 30 m$^2$ as opposed to the initial 12 m$^2$ has been attained through a capital subsidy scheme (Institute for Social and Systemic Change, 1999).

Current housing schemes to the north of Motherwell focus on housing provision for people residing in informal settlements around areas such as KwaZakele and Zwede. The NMMM plans to construct approximately 25 000 houses in the area within the next five years (Mentz, M and Africa, D. Personal Communication, 29 May 2002).

Other aspects, which are currently being reviewed to speed up delivery, are:

- Increased density with the introduction of duplex and row housing to decrease service costs.
- Introduction of micro loans to facilitate self-help.
- Delivery using emerging contractors under the supervision of local authorities.
- Introduction of alternative building materials.
- The establishment of a housing association to pursue rent-to-buy options whilst utilising the subsidy scheme.

2.5 Education facilities

The study area has approximately 275 349 learners in 387 schools being taught by 8 476 teachers. The pupil teacher ratio in primary schools is 37:1 and 27:1 in
secondary schools. Both are below the national standards of 40:1 and 35:1, respectively. Despite the favourable pupil to teacher ratio, several challenges hamper the improvement of quality of education, viz. shortage of classrooms, budgetary constraints, ineffective administration and management, shortage of resources and materials, vandalism and lack of a culture of learning and teaching (Institute for Social and Systemic Change, 1999).

Education planning is also hampered by the rapid rate of urbanisation and the movement of pupils from township to suburban schools.

Various programmes for improving rural schools and private – public partnerships involving Non Government Organisations (NGOs), Universities and business have been initiated to aid in the provision of quality education.

Facilities for higher education in the NMNM include the University of Port Elizabeth, Port Elizabeth Technikon and Technikon South Africa, offering various academic degrees and technical diplomas.

Two colleges of education exist in the metropolitan area, with a combined enrolment of over 1 000. A Nursing College also exists with just over 200 trainees.

Several institutions in the area provide small business skills training. The Department of Labour subsidises courses at the East Cape Training Centre. Some institutions offer skills training in specific fields, such as electrical contractors, building and construction contractors, seamanship and aviation apprenticeships.

2.6 Land use

2.6.1 Settlement patterns

Settlement patterns reflect typical apartheid era planning. The south and western parts of Port Elizabeth are mainly low-density white suburbs. Coloured and asian communities separate these suburbs from the black areas in the far north, with the exception of Walmer Township that is in the middle of a white area. The industrial zones border mainly on the non-white areas of the town.

The majority of the households (76.4%) in the proposed IDZ have lived in the area for at least ten years. Most dwellings are permanent structures in a reasonably liveable condition. Dwellings are constructed out of a variety of materials, for example, brick, mortar, corrugated iron, wood, clay, manure and bricks (Coastal and Environmental Services, 2000).
2.6.2 Land tenure

The majority of the land is municipal commonage with minimal, if any, communally owned land. The land may be purchased by private developers and residents. Land claims are not prevalent in the area.

2.7 Tourism

A tourist is generally defined as an individual who spends at least one night away from his/her regular place of residence. Therefore, it includes people on holiday, business or visiting family and friends. During 2000 it was estimated that a total of 1 289 750 tourists spent R 1 226 million in the NMMM. Overall, the volume of tourists increased marginally by approximately 4% from the previous year, although tourist expenditure increased by approximately 10% (Wattrus, K. Personal Communication, 29 May 2002).

There are a large number of accommodation facilities available in the NMMM, including hotels, “bed and breakfasts”, as well as self-catering accommodation. In total there are 2 873 rooms with 7 155 tourist beds available, with an occupancy rate of around 57%.

Table 7 provides a breakdown of tourist numbers per origin and purpose of visit (holiday, business, visiting friends and relatives (VFR) and other) (Wattrus, K. Personal Communication, 29 May 2002). These data indicate that, by far, the majority of tourists to the NMMM visit friends and relatives (44.7%), followed by business visitors (28.6%) and then leisure/holidaymakers.

<table>
<thead>
<tr>
<th>Purpose/Origin</th>
<th>Foreign (excl Africa)</th>
<th>Africa</th>
<th>Domestic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holiday</td>
<td>47 000</td>
<td>9 450</td>
<td>240 000</td>
<td>296 450</td>
</tr>
<tr>
<td>Business</td>
<td>8 250</td>
<td>1 650</td>
<td>360 000</td>
<td>369 900</td>
</tr>
<tr>
<td>VFR</td>
<td>13 500</td>
<td>2 700</td>
<td>600 000</td>
<td>616 200</td>
</tr>
<tr>
<td>Other</td>
<td>6 000</td>
<td>1 200</td>
<td>---</td>
<td>7 200</td>
</tr>
<tr>
<td>Total</td>
<td>74 750</td>
<td>15 000</td>
<td>1 200 000</td>
<td>1 289 750</td>
</tr>
</tbody>
</table>

Spending per tourist group is estimated as follows:

- **Foreign (including Africa)**: R 900 per day (assuming predominantly hotel accommodation is used).
- **Domestic**: Up to R 600 per day (depending on type of accommodation).
- **VFR**: R 150 per day (assuming accommodation is provided by friends or relatives).
Tourists arrive in the NMMM by road, air and rail. A breakdown of tourist number per means of arrival, is as follows:

- **Road**: 703,065 people.
- **Air**: 434,335 people.
- **Rail**: 152,350 people.

2.7.1 Tourism related development

A number of tourism related developments are currently underway. For the purpose of this study, the Addo Elephant Park expansion and the Madiba Bay Project are discussed briefly.

2.7.1.1 Addo Elephant Park expansion

South African National Parks (SANParks) is currently in the process of substantially expanding the Addo Elephant Park from the existing approximately 125,000 ha to around 372,000 ha (there is further potential to ultimately expand it to around 400,000 ha). The Park currently draws approximately 115,000 tourists annually, of which an estimated 50% are foreign tourists. Part of the expansion project is to relocate the main entrance gate from near Addo, to close to Colchester to ease tourist access from the N2 (Castley, G, and Gordon, J. Personal Communication, 29 May 2002).

2.7.1.2 Madiba Bay Project

The Madiba Bay Project is in the proposal stage at present and aims to develop a recreational/tourism initiative as a ‘must see’ attraction in Port Elizabeth. Although no definite development plans have been finalised, proposals include:

- Madiba Bay Safari World.
- Madiba Bay “Big Five”.
- Madiba Bay Agri World.
- Madiba Bay Edu World.
- Madiba Sea World (Urban-Econ, 2002).

The project is not without controversy and conservation groups, such as the Wildlife and Environment Society of Southern Africa (WESSA), have expressed concern about a number of environmental issues (WESSA, 2002).
2.8 SMME development

There is currently a strong focus on empowerment and the development of small, medium and micro enterprises (SMMEs). The Port Elizabeth Chamber of Commerce and Industry (PERCCI) and other business chambers play a significant role in such enterprises. A number of organisations and institutions are currently in existence, some of which are purely tasked with SMME development and empowerment. These are described below.

- Port Elizabeth Region Manufacturing Advisory Centre (PERMAC).
  PERMAC runs an advisory programme, providing a service to SMMEs with less than 200 employees, to increase their productivity and competitiveness. Their focus is on upgrading the capabilities of previously disadvantaged manufacturers. PERMAC also serves as a vehicle through which manufacturing SMMEs link up with other industrial development and management initiatives in the country, such as the Industrial Cluster process and the Spatial Development Initiatives (SMME Tabloid, 2002, and Jefferson, W. Personal Communication, 29 May 2002).

- Commercial Self Employment Centre (COMSEC).
  COMSEC provides business premises, administrative support and skills training to SMMEs. Approximately 70% of businesses assisted by COMSEC fall into the “high-risk” business start-up category. COMSEC provides an “incubator” environment for small businesses with the main aim of the provision of services to these businesses. It also operates “caravan satellite offices” in outlying and previously disadvantaged areas, from which advice and information is disseminated (Port Elizabeth Regional Chamber of Commerce and Industry, 2002, and Heys, E. Personal Communication, 4 June 2002).

- Black Economic Empowerment Forum (BEEF).
  BEEF was founded towards the end of 2000 with the aim of fast-tracking Black Economic Empowerment (BEE) in the NMMM. It comprises a number of senior executives and entrepreneurs from previously disadvantaged groups. The objective of BEEF is to share ideas and implement initiatives for the development of local BEE (Port Elizabeth Regional Chamber of Commerce and Industry, 2001).

2.9 Corporate Social Investment

The commercial sector of the NMMM, ranging from small businesses to large multinationals, has become increasingly involved with projects in surrounding communities. Over the past few years the local community has benefited tremendously from these Corporate Social Investment (CSI) projects. The following projects were undertaken by various industries in the NMMM during 2000 and 2001.
• Delta Foundation.
The Delta Foundation’s portfolio is divided into two major projects, viz. Housing and Land Initiatives and Education Initiatives.

  ▶ Housing and Land Initiative.
  To date, this initiative has provided 500 disadvantaged families with homes. It won the Nelson Mandela Award for the Best Community Housing Project in the Eastern Cape.

  ▶ Education Initiative
  The Siyabona Programme is involved in science and technology development within schools.

• ABSA Foundation.
The ABSA Foundation is involved in entrepreneurship programmes focussing on skills training and mentorship, including sponsorship to disadvantaged business students. However, its flagship project is focussed on educational CSI. Schools are presented with micro-science kits and teachers are involved in in-service training through workshops. Since 1998, 100 schools in the Eastern Cape, ranging from the NMMM to the former Transkei, have received kits and teacher training.

• Volkswagen Trust.
The Volkswagen Trust is involved in numerous projects.
  ▶ An Education and Training Institute, aimed at assisting small businesses and individuals to improve their technical and personnel management skills, has been created.
  ▶ Three mobile libraries have been donated to primary schools in Uitenhage.
  ▶ A dedicated Computer Centre has been established at Molly Blackburn High School in Khayelitsha.
  ▶ Funding has been provided for an Early Learning Centre in Port Elizabeth.

• Telkom.
Telkom is involved in local mathematics, technology and job creation programmes.

• Afrox Health Care Hospitals.
Afrox Health Care Hospitals have adopted three children’s homes in the NMMM area and support various SMMEs.

• South African Breweries (SAB).
SAB provides entrepreneurs and emerging businesses with support through its “Kick Start” programme, as well as “Project Noah”, which is aimed at empowering retrenched workers.
“Rally to Read”. PERCCI members, including the Delta Motor Corporation, Volkswagen SA, Ford Motor Company, Lear Corporation and Telkom, are major contributors to “Rally to Read”. This drive includes the delivery of books to remote and rural schools in the Eastern Cape, as well as the initiation of a two year teacher development programme (Port Elizabeth Regional Chamber of Commerce and Industry, 2001 & 2002).

2.10 Development plans

The NMMM is currently in the process of finalising its IDP. The IDP will include proposed and planned developments, which may impact on the economy of the NMMM. Examples include:

- Coega IDZ.
- Port of Ngqura.
- Madiba Bay Project.
- The existing airport.
- The existing Port of Port Elizabeth.

Only the first three mentioned developments are of real significance to this study. The Coega IDZ and the Port of Ngqura are discussed in Sections 3.1 and 3.3, respectively while the Madiba Bay Project has already been discussed in Section 2.7.1.2.
3. CONTEXTUAL SETTING OF THE PROPOSED DEVELOPMENT

This section provides a contextual setting for the proposed PAS 2005 project within the Coega IDZ. The context is unique when compared to previous smelter developments in South Africa, in that it will occur within an already earmarked and demarcated IDZ. Therefore, relevant aspects of the proposed smelter location, the Coega IDZ and the role of the Coega Development Corporation (CDC) within the IDZ, are discussed. The Port of Ngqura, which is to serve the IDZ, is also considered, as construction of the port has implications for the PAS 2005 project.

3.1 Coega Industrial Development Zone

The South African Government has recognised that the private sector has an important role to play in stimulating employment through new investment. However, it also recognises that there are a number of constraints inhibiting private sector investment. For this reason, the SDI programme was adopted by the Cabinet in 1995 in an attempt to improve the functioning of Government in targeted underdeveloped regions in the country. The SDI programme, therefore, serves as a special purpose vehicle to stimulate growth in designated high potential areas. To date, there are twelve SDIs established in the country, three of which, the Wild Coast SDI, Buffalo River SDI and the Fish River SDI, are located in the Eastern Cape Province (Urban-Econ, 2002).

An important element of the SDI programme is the establishment of Industrial Development Zones (IDZs), of which Coega is proposed as one. IDZs are similar to the international Free Trade Zones (FTZs) and Export Processing Zones (EPZs), designated customs-privileged areas in which industries are exempt from import duties, but where South African labour legislation and environmental controls apply. IDZs have been identified as strategic export-manufacturing platforms into African and overseas markets. The IDZs are, therefore, meant to focus on augmenting existing incentives, Government resources and institutional (public and private) effort in strategic locations in such a manner that South Africa’s competitiveness is enhanced (Urban-Econ, 2002).

The key features of IDZs are as follows:

- A focus on export-oriented manufacturing.
- A duty-free status for imported raw material/components.
- National and Local Government incentives.
- Located adjacent to a port or airport to facilitate easy import and export of goods.
- Contain world-class infrastructure and services.
- Provide the latest information technology for global communications.
- An IDZ management company to streamline administration.
The vision for the Coega IDZ is “to be the most customer-focused, competitive, efficient, innovative, environmentally and socially responsible Industrial Zone in Africa, providing realistic investment opportunities for tenants and a reasonable return for shareholders.” This vision has been used to formulate a mission statement for the Coega IDZ, which is to provide a world-class, internationally attractive and competitive industrial development zone with purpose-built infrastructure and a deep-water port.

In order to translate this vision and mission statement into an operational industrial area, the Coega Implementing Authority (CIA), which preceded the CDC, set the following key objectives:

- Establish an entity with a legal character.
- Acquire land.
- Develop purpose-built infrastructure and a port (at Ngqura).
- Identify, attract and secure tenants.
- Establish legal and environmental parameters.
- Develop a comprehensive human resources strategy.

Although the CIA has since been replaced by the CDC, the key objectives remain the same.

The proposed IDZ regulations confer certain powers on the CDC, from which the primary duties of the CDC are derived (Section 3.2).

### 3.2 Coega Development Corporation

The CDC, an entity that will have links with external stakeholders (often represented by Government bodies) and organisations located within the Core Development Area, will manage the Coega IDZ and Core Development Area. The CDC is a formal legal entity operating as a private, limited liability company. In order to safeguard national, provincial and local interests, the principal shareholders are National, Provincial and Local Government.

The primary duties of the CDC, as envisioned in the IDZ regulations (and which are consistent with the objectives), are as follows:

- Establish and operate the Zone in accordance with the terms and conditions of the IDZ operating permit.
- Develop and maintain infrastructure and other zone facilities to a standard consistent with the needs of zone enterprises and conforming to the requirements of applicable legislation.
- Maintain a staffed managerial office within the IDZ, including reception area.
- Facilitate investments within the IDZ by zone enterprises.
• Keep statistics, accounts, databases and other records of activities in the Zone and report to the Board on such activities in the manner provided by regulations.
• Provide and maintain common areas and facilities compliant with applicable legislation, including the Regulation and Rules and Procedures for the IDZ, and with the Rules and Procedures prescribed in consultation and in agreement with the Board for the operation of the IDZ (Coastal and Environmental Services, 2000).

The Coega IDZ is to be developed as an opportunity to establish a development zone. The following goals and objectives were identified by the CDC, which National Government has determined will take responsibility for the construction stage of the project, including the award of any concessions:

• To facilitate and enable the development of a world class industrial area capable of attracting a range of major industrial companies, involved in all types of raw material processing and a wide range of manufacturing, at an appropriate range and scale of development.
• To complement and not to compete with the economic regeneration of Port Elizabeth.
• To provide jobs for people in Port Elizabeth and in the Eastern Cape Region.
• To support, integrate and consolidate the development of the Markman Industrial Township.
• To protect identified environmentally sensitive areas from the impact of heavy industry and to satisfy international standards in relation to environmental pollution.
• To encourage early success as an aid to building confidence in the larger project.
• To ensure that initial phases of development do not constrain the future potential of the IDZ.
• To avoid building in constraints to future development at an early stage in the development process (Metroplan, 2001).

The CDC is currently in the process of buying the land that is to fall within the IDZ. By May 2002, the CDC held 47% of the total land area and was involved in negotiations to acquire the remainder, of which 18% will need to be expropriated. All the land required needs to be secured (not necessarily owned by the CDC) as one of the requirements to upgrade the provisional operator’s licence to a full operator’s licence by the end of 2002. Once the land is bought it will be consolidated, provided with services and then leased. The lessees will be expected to build the superstructures.

3.3 The Port Of Ngqura

In order to support the vision of an IDZ, the need for a deepwater port was identified in order to handle the size of vessels that would be importing and exporting materials to and from the IDZ. Given that bedrock constrained increasing the depth
of the existing harbour in Port Elizabeth, the mouth of the Coega estuary was identified as a suitable location to construct the deepwater port.

A number of feasibility studies have been undertaken for developing this port, including “The Subsequent Environmental Impact Report for the Proposed Port of Ngqura” (Coastal and Environmental Services, 2001). A Record of Decision authorised the development of the port subject to a number of conditions. Tenders for the construction at the Port of Ngqura have recently been awarded to various consortia.

The Port is to be developed as part of the Coega IDZ. It is to have channels and berths with sufficient depth to accommodate the largest container ships currently afloat, or likely to be employed, on routes to South Africa in the foreseeable future. Although the Port can accommodate bulk and break bulk berths, the assumption has been made in feasibility studies that the provision of these facilities should not justify building the Port. Instead, these will only be provided if demand is created for these facilities. Provision for these facilities has, therefore, only been made in the final phase (Phase 4) of construction.

Construction by NPA of a six-kilometre haul road from the quarry at Coega Kop to the beach has begun. This road will initially be used to transport rock from the quarry to the future port area, for use in the construction of the breakwater. Once the haul road is constructed it will be used as a connection to the Port of Ngqura and will include an underpass, so that large off-road trucks will be separated from the traffic on the N2 National Road, which runs through the zone.

3.4 Aluminium Pechiney within the Coega IDZ - other aspects

A number of aspects, which would generally be associated with the development of an aluminium smelter and would be the responsibility of the developer, are structured slightly differently due to the proposed smelter being located in the IDZ. Further, there are certain aspects related to the IDZ which impact on the development of the proposed smelter. Although potential impacts are described and assessed in Sections 5 and 6, it is important to understand the broader context of the proposed development.

3.4.1 Expectations regarding Coega IDZ

The concept of the COEGA IDZ has been in the public domain since 1995 (Section 3.1). Over the past seven years, the project has seen varying levels of criticism and support from various sources and has received substantial coverage in the media. Through the various reports over these seven years, certain expectations have been created among the general public. In certain instances, these expectations were highly inflated through the manner in which the project had been covered by
the media, especially in terms of employment opportunities and associated poverty alleviation.

### Implications for Aluminium Pechiney
- **Expectation Regarding Coega IDZ** -

Should the proposed PAS 2005 project go ahead, AP would be in the unenviable position of being the first external developer to initiate a venture in the IDZ. It can, therefore, be foreseen that the majority of expectations currently being held by the public regarding the IDZ will be focussed on Pechiney, although certain expectations may have no relevance to the PAS 2005 project per se.

Furthermore, certain social and socio-economic impacts, which originate/will originate from the greater IDZ or even Port of Ngqura developments, may be seen by the public as AP responsibility (although such impacts have already been addressed and dealt with in the “Coega Rezoning EIA” (Coastal and Environmental Services, 2000) and “The Subsequent Environmental Impact Report for the Proposed Port of Ngqura” (Coastal and Environmental Services, 2001).

#### 3.4.2 In-migration

Induced migration is usually, although not solely, associated with sizeable developments. However, the context in which the proposed PAS 2005 project finds itself differs slightly from the scenario where a single developer is the direct cause of induced migration. In-migration into the greater NMMM area, but more specifically the areas in close proximity to the IDZ, is already taking place at a fairly rapid rate (Section 2.2.5). The reasons for the current in-migration are three-fold:

- Poverty in the Eastern Cape in general, but specifically in rural areas, leads people to migrate to urban areas in search of better opportunities to sustain their livelihoods.
- The high expectations being held of the Coega IDZ (Section 3.4.1).
- The Port of Ngqura, which is to start shortly will provide short and long-term employment.

A further, and fourth, reason for current in-migration is the announcement of the proposed PAS 2005 project, which has been receiving wide media coverage. This induced migration is discussed in Section 5.1.9.

### Implications for Aluminium Pechiney
- **In-Migration** -

It is virtually impossible to determine the percentage of migrants coming into the NMMM due to the proposed PAS 2005 project alone. While AP cannot be expected to assume sole responsibility for the in-migration, it cannot either ignore partial responsibility. The impacts of induced migration are discussed further in Section 5.
3.4.3 CDC’s Labour and Business Management Services

The CDC adopted an integrated approach for Labour and Business Management Services (LBMS) (Coega Development Corporation, 2002). The LBMS has a number of strategic objectives:

- Ensure the optimum use of available local resources, which includes labour, goods and services.
- Facilitate buy-in and support from local stakeholders.

To reach these objectives, certain activities are seen as essential:

- Training and development of the local labour force.
- Developing the capacity of SMMEs through training.
- Achieving optimum value for money and world-class quality standards.
- Identifying and managing risks associated with community expectations and their ability to participate meaningfully in employment and business opportunities, through the use of appropriate systems, processes and procedures.

The emphasis is, therefore, strongly on the use of local labour. The CDC defines “local” for the purposes of recruitment as the NMMM for unskilled and semi skilled jobs and the rest of Eastern Cape for higher skills and then further afield if skills are not present and/or cannot be trained (Fourie, J. Personal Communication, 18 June 2002).

The LBMS includes two key components:

- Labour Management Services (LMS).
  - LMS deals with Labour Supply and Labour Demand Management, Training Management and Industrial Relations Management (Section 3.4.3.1).

- Business Management Services (BMS).
  - BMS deals with Procurement Management and SMME Development Management (Section 3.4.3.2).

- The foundation of the LBMS is the IDZ Industrial Relations Policy, IDZ Labour Agreement and Project Labour Agreements.

Industrial Relations (IR) guidelines will be developed by the CDC, in consultation with stakeholders for the IDZ. The objective is to provide guidance for all contractors within the IDZ, in order to promote a common understanding, eliminate duplication and ensure consistency in the application of labour management issues.
The guidelines will, therefore, serve as a policy document, providing principles to guide labour matters on all contracts. This includes recruitment target areas and priorities.

The IDZ IR Policy is contractually binding to all contractors and will serve as a basis for the development of the Zone Labour Agreement (ZLA) and subsequent Project Labour Agreements (PLA) (Coega Development Corporation, 2002).

- **Zone Labour Agreement.**
  A ZLA will typically include the following aspects:
  - Zone wide employment standards governing employment conditions and benefits.
  - Fixed job titles and job descriptions per industry.
  - Standardised job categories based on unit standards and outcomes.
  - Standardised Contracts of Employment.
  - No-poaching clause.
  - Standard disciplinary and grievance procedure, etc.

- **Project Labour Agreement.**
  A PLA may be developed and negotiated, between the General Construction Manager (GCM) and the respective industry employer associations and trade unions, to deal with specific issues that are not covered in the ZLA. The PLA then becomes an addendum to the ZLA and will be contractually binding on all contractors on a specific project (Coega Development Corporation, 2002).

### 3.4.3.1 Labour Management Services

The following provides a very concise outline of the LMS, as well as the implications of the System for AP as developer. More detail on certain aspects of the LMS, such as the principles on which it is based, is contained in Appendix 2.

The LMS Labour Supply Service consists of two distinct phases:

**PHASE 1 – REGISTRATION OF INTEREST**

On 4 June 2002, CDC began the first phase of the Labour Supply Service by distributing Registration of Interest (ROI) (Appendix 3) forms in the Eastern Cape, with the main focus on the NMMM. Approximately 400 000 ROI forms were distributed in the NMMM. CDC utilised two local distribution agencies that distributed forms through the mail and an elaborate “knock and drop” exercise. Forms were manually distributed across the NMMM, including formal, informal and outlying settlements. Additional forms were also placed at the various offices of the Department of Labour. Around 200 000 ROI forms were distributed across the rest of the Eastern Cape, mainly at Department of Labour offices. The reason given for
the large number of ROI forms distributed is to prevent them from obtaining value as a commodity, with the likes of labour brokers selling them.

All interested individuals submitted completed forms by mail to the CDC, together with copies of ID documents, training certificates and, if available, payslips as supporting verification. Information is captured into a database, the LBMS System.

From the LBMS System it is possible to draw a first cut skills capacity profile, per industry sector, as a basis for the random selection of individuals based on the labour requirements of a contractor (Coega Development Corporation, 2002).

**PHASE 2 — “BEST FIT” AND DETAILED REGISTRATION**

The second phase of registration starts when people are selected through an electronic “best fit” report that identifies groups of selected people for detailed registration per specific labour requirement of each contractor per job title. Randomly selected people are then called, by radio or printed media, for detailed registration. These individuals undergo job specific assessments, using relevant assessment criteria, as contained in the unit standards per standardised job criteria per industry (Coega Development Corporation, 2002). The 14 principles on which the LMS is based are outlined in Appendix 2.

The needs of a contractor (Labour Demand Services) are then “married” with the skills available on the LBMS System. Should there be an insufficient number of individuals with the required skills, capacity and experience on the database, individuals can be trained (Training Management Services) in an attempt to fill the “skills gap” (Coega Development Corporation, 2002 & Fourie, J. Personal Communication, 28 May 2002). CDC has a substantial allocation from the “Skills Development Levy Fund” through the Department of Labour to conduct such training. A Preliminary Training Provider Capacity Audit was conducted by the CDC, which included audits of various training providers to confirm the regional training capacity (Labour Demand Services and Training Demand Services are outlined in more detail in Appendix 2) (Coega Development Corporation, 2002 & Fourie, J. Personal Communication, 28 May 2002).

**3.4.3.2 Business Management Services**

BMS deals with Procurement Management and SMME Development Management.

**PROCUREMENT MANAGEMENT SERVICES**

Procurement Management Services are defined as the facilitation and management of the participation of local enterprises in goods, services and works contracts in the COEGA IDZ in a transparent, accountable, equitable and cost-effective manner.
Procurement Management in this regard utilises conventional procurement practice and procedures to achieve the social objectives of the employer.

The overall objective of the procurement management function is to optimise the use of local resources during the performance of goods, services and works contracts in the COEGA IDZ without compromising the principles of time, cost and quality when executing the contract.

**SMME DEVELOPMENT MANAGEMENT**

SMME Development Management is defined as the creation of an enabling environment that will facilitate optimum and equal access to business opportunities, whilst supporting such access with training and development programs for the development of the SMME or Affirmative Business Enterprise (ABE) business owner, his core staff and his workforce.

The objectives of SMME Development Management are as follows:

- To engage majority black-owned SMMEs in the delivery of the COEGA IDZ and Deepwater Port.
- To provide a support structure/fabric for ABES/SMMEs, in order to ensure their successful participation (time, quality and cost), whilst achieving developmental objectives such as skills transfer, optimum capital retention, etc.
- To design and implement an enterprise training and development program for the further creation of sustainable and competitive ABSs/SMMEs, for the construction and other industries/sectors in the NMMM and Eastern Cape areas.

### Implications for Aluminium Pechiney - CDC's LBMS -

All contractors will be required to make use of the LMS for recruitment purposes. No recruitment will be allowed on-site or near site, only at recruitment centres set up by the CDC. Out of the nine skills levels identified, use of local labour for recruitment of the first two levels is compulsory.

The IDZ IR policy is contractually binding and the basis for the ZLA. All developers will have to adhere to the IR policy and ZLA and implement it on their own IR and human resources activities.

It is not compulsory for contractors to make use of the BMS for procurement and SMME involvement. However, it will be to any developer’s benefit to at least investigate the merits of the system, based on individual requirements.

It is, however, important to audit skills training providers in terms of capacity and delivery, as a guard against opportunistic “fly-by-night” training institutions whose only objective is a quick financial turn-over and not quality of service and product.
3.4.4 Construction village

In terms of the rezoning of the IDZ, no residential area is to be allowed within the zone. Therefore, no developer will be allowed to construct and run its own on-site construction village. With the emphasis on the use of local labour for unskilled or skilled jobs, very few construction workers from outside the NMMM should be expected per development. In order to accommodate skilled personnel which cannot be sourced locally, CDC will take responsibility for the establishment of a construction village (not only for the proposed PAS 2005 project, but also for further IDZ developments). Land has been acquired on Wells Estate (Figure 3) and initially, 500 units, 80m² in size will be built to accommodate 2,000 people. Construction started in July 2002. It is estimated that the construction village will be able to accommodate approximately 4,000 residents at peak. The village will be built in a normal town-planning layout, with a central business and dining area and will be provided with the necessary health care services, for example, a clinic and qualified doctors. The operation of the construction village will be outsourced via tender. Although the accommodation arrangements will most probably be single sex in the respective units, the operator will determine the final configuration. Once the CDA and IDZ have been established, it can be integrated into the local Wells Estate community as part of a suburb.

Where possible, SMMEs are being used for construction. A number of SMMEs are grouped into “clusters” and function under a construction/cluster manager (Fourie, J. Personal Communication, 28 May 2002).

<table>
<thead>
<tr>
<th>Implications for Aluminium Pechiney - Construction Village -</th>
</tr>
</thead>
<tbody>
<tr>
<td>No construction village, however temporary, will be allowed on-site. Contractors are required to make use of the Wells Estate construction village. This implies that construction of the initial units needs to be completed by the first quarter 2003, to be available should the proposed PAS 2005 project commence.</td>
</tr>
<tr>
<td>However, should there be delays in the completion of the Wells Estate Village, CDC indicated that construction workers will be accommodated in the previous Joorst Park Resort (which will also provide for some of the Port of Ngqura construction needs), which presently provides 300 beds. There is also sufficient space in Joorst Park to provide another 600 beds, through temporary “park homes”, should the need arise (Fourie, J. Personal Communication, 18 June 2002).</td>
</tr>
</tbody>
</table>

3.4.5 Road networks and transport

An intensive transport study, the “Coega Development Zone and Port Integrated Transport Study”, has been conducted in order to determine the transport requirements of the two developments. The report outlines projections for the CDA and the greater IDZ, respectively. Three levels of responsibility outside of the IDZ
(national, provincial and local) have been identified, depending on the levels of jurisdiction over certain roads. The three levels are:

- **National**: South African National Roads Agency (SANRA).
- **Provincial**: Eastern Cape Departments of Transport and Public Works.
- **Local**: NMMM.

The timeframes outlined in the transport study are phased, based on the levels of demand and projected traffic volumes during the various stages of CDA and IDZ development.

At present, there is a surplus of public transport in the NMMM (De Klerk, A. Personal Communication, 28 June 2002). This may lead to conflict between transport operators when new transport demands arise, for example, due to construction of the proposed PAS 2005 project, if the process is not properly managed. The Transport Forum (Section 2.3.5.1) can provide guidance to prospective developers but, since it is not a legal body, it cannot assist with tender processes. The Department of the City Engineer is tasked with transport and assistance to developers. The CDC is in the process of developing a transport tender process, which it will co-ordinate, through which all transport requirements are to be channelled.

Through the transport tender process, transport operators will be appointed and provided with an operator’s licence, which will allow movement in and out of the IDZ, on specific pre-set routes. Within the tender process, a strong SMME requirement will be included. The process will be managed by a CDC appointed manager.

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**Implications for Aluminium Pechiney**

- **Road Networks and Transport**

AP can approach the Transport Forum for guidance but should channel any transport requirements through the CDC. Should the transport tender process not be up and running by the time construction is to start on the PAS 2005 project, the Department of the City Engineer will be able to assist with the process.

3.4.6 Informal trading

The IDZ is to be a zone with restricted and controlled access. Similar to transport operators (Section 3.4.5), only licensed traders will be allowed into the IDZ. Traders will have to go through a formal application process to obtain such a license. However, a license will allow traders to operate in specific designated areas only. Designated areas will be located at central pick-up and drop-off points for transport operators. These areas will be properly demarcated and serviced (ablutions, water supply, waste removal, etc.).
Implications for Aluminium Pechiney
- Informal Trading -

No informal trading will be permitted anywhere in the IDZ, except at designated areas and then only by licensed traders. Therefore, no informal trading should occur in close proximity to the construction site, i.e. in close proximity to the entrance or close to the fence line, as is sometimes the norm on construction sites. Although there is a pick-up and drop-off point in close proximity to the metallurgical cluster, PAS 2005 project’s on-site canteen facilities should cater for all the needs of temporary (including subcontractors) and permanent personnel. According to the CDC, the prohibition on informal trade in undesignated areas will be in place when construction on the proposed PAS 2005 project is scheduled to start.

3.4.7 Resettlement and land claims

The CDC is in the process of purchasing the land in the IDZ, which, in terms of the rezoning regulations, implies that any individual residing within the IDZ will have to settle. The Coega Rezoning EIA (Coastal and Environmental Services, 2000) makes provision for the mitigation of impacts, which occur through such actions. Currently, all resettlement (a total of 300 families) has been completed and households have been resettled on a part of Wells Estate.

The CDC has come under criticism for certain aspects of the resettlement of the Coega communities, a situation that culminated in a submission to the Human Rights Commission.

A “Forensic Audit of the Coega Resettlement Process and its Impact on Affected Parties” was conducted as part of “The Subsequent Environmental Impact Report for the Proposed Port of Ngqura” (Coastal and Environmental Services, 2001). The audit found that some positive impacts did accrue to the resettled communities (such as access to housing and to facilities such as water, sanitation and transport) but that the resettlement also had negative impacts on resettlers. The impact rating given was moderately severe. In order to address these negative impacts, a number of mitigatory recommendations were made by the audit team. If the mitigatory actions were to be meaningfully implemented, the significance rating was projected to change to low to moderate (positive) for the majority of resettled people. However, none of the resettled families were residing on the actual PAS 2005 project site before resettlement (Fourie, J. Personal Communication, 27 June 2002). There are three fairly recent graves (approximately 10 to 15 years old) located on the site. These were unknown until technicians conducting geo-technical surveys for CDC unearthed them. CDC has taken responsibility for the exhumation and reinterment of the graves. This will be done after proper consultation with local communities (resettlers and neighbours) by a formal undertaker.

According to the CDC (Fourie, J, Hartle, R and Raimondo, J. Personal Communication, 28 May 2002) there are no land claims where the proposed PAS 2005 project is to be located. Should there be any unforeseen claims in future, the responsibility will rest with the CDC to address the matter.
Implications for Aluminium Pechiney  
- Resettlement and Land Claims -

Individual developers do not have any legal responsibility in terms of resettlement of people or graves or resettled communities. The CDC as zone operator takes full responsibility for resettlement and guarantees developers liability free sites.

There are no land claims where the proposed PAS 2005 project is to be located. Should there be any unforeseen claims in future, responsibility will rest with the CDC to address the matter.

3.4.8 Tourism

The SANParks, which operates Addo Elephant Park, has expressed concern regarding the potential loss of the “wilderness experience” for tourists visiting the Park and gaining access through the new gate at Colchester. This is due to the establishment of an IDZ and port in the proximity of the national park. This concern was addressed in the Coega Rezoning EIA (Coastal and Environmental Services, 2000) and the Subsequent Port of Ngqura EIA (Coastal and Environmental Services, 2001).

Implications for Aluminium Pechiney  
- Tourism -

The potential loss of the “wilderness experience” when accessing the Addo Elephant Park will not be due solely to the PAS 2005 project, as the N2 passes by, *inter alia*, existing sewage treatment works, Carbon Black Factory and the Markman Industrial area before reaching the Park. However, since the smelter will have a number of stacks and storage silos that may impact in the visual experience from the Park itself, it is a potential impact that has been addressed in the Visual Impact Study of this EIA.

3.4.9 “Misunderstood” responsibilities

Within the described context where the development will take place, there is a risk that important issues and/or responsibilities may fall between different roleplayers. This implies that misunderstandings can occur regarding who is responsible for what, i.e. between CDC, NPA and AP. It is important to take heed of the potential risk and structure negotiations and discussions in such a manner that misunderstandings regarding responsibility for issues are avoided and to ensure that responsibility for all issues is accounted.

Implications for Aluminium Pechiney  
- Misunderstood Responsibilities -

AP should ensure that it is has clarity regarding the various levels of responsibility within the IDZ. It may also be important for AP to “monitor” progress on issues which other stakeholders are responsible for, but which have a direct bearing on AP. This should be done to prevent possible future negative repercussions for AP if responsibilities are not carried out.
4. ALUMINIUM PECHINEY AND KEY ASPECTS OF THE PROPOSED DEVELOPMENT

4.1 Aluminium Pechiney

The Pechiney Group consists of five key business areas, viz. primary aluminium, aluminium conversion, ferroalloys, speciality packaging and international trade and services. It employs in the order of 34 500 employees internationally and has 334 industrial and commercial facilities in 51 countries. Across the Group, net sales for 2001 reached in the order of 11.1 billion Euros (R 107.8 billion at an exchange of R 9.80 to the Euro).\(^1\)

AP is the fourth largest aluminium producer in the world. During 2001 1.14 million metric tonnes of aluminium were produced. The primary aluminium sector of the Group comprises 13 industrial facilities in seven countries that employs approximately 6 150 permanent employees.

The Group’s expenditure on environmental activities for 2001 totalled 19.9 million Euros (R 195.02 million). An amount of 76 million Euros (R 744.8 million) has been set aside as of December 2001 for environmental compliance and to meet any environmental protection obligations with respect to certain current and past activities.

Since 1996, the Group has implemented environmental management systems based on the internationally recognised standard ISO 14001, promoting employee awareness and training in environmental issues as well as ISO 14001 requirements.

A Scientific and Medical Council (SMC) of twelve scientists advises senior management on work and public health issues related to the manufacturing activities and products. The SMC operates independently, particularly with regard to decisions on how to publicise results of its studies.

The proposed PAS 2005 project in the Coega IDZ is one of AP’s first ventures into South Africa\(^2\). Therefore, many policies and programmes will have to be developed or existing policies and programmes adapted for the South African context. Industrial relations practices and procedures will be developed in adherence to local and national legislation (Pechiney, 2001).

4.2 Key aspects of the proposed development

As a world leader in the development of aluminium smelting technology, AP will operate the proposed aluminium smelter using the latest generation technology (AP

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1 Same exchange rate used throughout this report.
2 Apart from AP’s recent investment in ECL in Richard’s Bay. ECL provides specialised technological support to the Billiton smelters in Richard’s Bay and Mozambique, and, if developed, will also support the PAS 2005 project.
50). The new technology has significant capital and operating cost advantages and also has the potential for a higher standard of environmental performance.

The smelter will comprise a single potline containing 336 electrolysis cells as well as associated facilities such as carbon anode production, aluminium casting, materials handling and storage and port loading and unloading.

4.2.1 Project schedule

Table 8 outlines the project schedule of the proposed development. With construction commencing early in 2003, the construction plan sets a construction time of 26 months, which relates to first metal production in early 2005. Full capacity can be reached eight months from first metal and, therefore, the smelter should be fully operational 34 months after the commencement of construction. The smelter has a life expectancy of between 30 and 40 years (CSIR, 2002a).

Table 8: Project schedule of the proposed development.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred site confirmed</td>
<td>2002</td>
</tr>
<tr>
<td>EIA and approvals</td>
<td>2002</td>
</tr>
<tr>
<td>Construction</td>
<td>2003/2004</td>
</tr>
<tr>
<td>First metal</td>
<td>Early 2005</td>
</tr>
<tr>
<td>Full metal capacity</td>
<td>End 2005</td>
</tr>
</tbody>
</table>

4.2.2 General details

The following provides general details on the proposed development:

- Plant area : 80 ha.
- Number of potlines : One.
- Number of potrooms : Two.
- Length of potrooms : 1 200 meters.
- Number of electrolysis cells : 336.
- Production capacity : Approximately 485 000 tons/year.
- Alumina consumption : Approximately 931 000 tons/year.
- Petroleum coke consumption : Approximately 180 000 tons/year.
- Liquid pitch consumption : Approximately 38 000 tons/year.
- Electricity demand : Approximately 860 MW.
- Electricity supply : Three 132 kV lines.
- Water usage : Approximately 600 000 m³/year.
- Fuel oil usage : Approximately 31 780 tons/year.

(CSIR, 2002a).
4.2.3 Workforce and recruitment

During construction, a total of 6 030 South African employees will be employed at peak. An additional 170 expatriates will also be employed. The expatriates will be predominantly highly skilled AP and GCM personnel required for certain specialised activities. Table 9 provides a breakdown of employment per skills level required during construction. (Blignaut and Schoeman, 2002).

<table>
<thead>
<tr>
<th>Peak construction workforce</th>
<th>South African employees</th>
<th>Temporary expatriates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unskilled</td>
<td>2 500</td>
<td></td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>1 500</td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>2 000</td>
<td></td>
</tr>
<tr>
<td>Highly skilled</td>
<td>30</td>
<td>170</td>
</tr>
<tr>
<td>Total</td>
<td>6 030</td>
<td>170</td>
</tr>
</tbody>
</table>

Employment categories are based on the South African skills classification, which is outlined in Table 10. The large number of people falling into the Grade 8 to Matric category (Section 2.2.2, Figure 4) should provide ample catchment to source the first two labour categories.

<table>
<thead>
<tr>
<th>Skills level</th>
<th>Classification Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unskilled</td>
<td>&gt;16 yrs of age, schooling up to Grade 5 (5 years of schooling)</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>&gt;16 yrs of age, schooling between Grade 6-11</td>
</tr>
<tr>
<td>Skilled</td>
<td>Achieved Grade 12 (Matric)</td>
</tr>
<tr>
<td>Highly skilled</td>
<td>Grade 12 and tertiary education (technical diploma or university degree)</td>
</tr>
</tbody>
</table>

Exact direct employment figures for the operations phase have not been finalised, but ranges have been determined. Therefore, a total of approximately 750 employees will be employed during operations (Table 11). Of the total permanent employees, approximately 550 will be shift workers, working on a basis of around 185 per shift. Shift changes being considered will be at 06:00, 14:00 and 22:00 (Pechiney, 2002a).

During operation of the PAS 2005 smelter, the majority (if not all) of the non-core activities will be outsourced to external contractors. It is estimated that, in addition to direct employment, between 200 and 300 subcontractors will be employed for smelter operations (CSIR, 2002a).
Table 11: Direct employment during the operation phase.

<table>
<thead>
<tr>
<th>Employees</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management and staff</td>
<td>179</td>
</tr>
<tr>
<td>Operators</td>
<td>656</td>
</tr>
<tr>
<td>Total</td>
<td>750</td>
</tr>
</tbody>
</table>

(Pechiney, 2002a).

4.2.4 Transport

At the time of start of construction of the proposed smelter, the Port of Ngqura will not yet be operational. Therefore, materials and equipment will arrive at the Port of Port Elizabeth and will be delivered to site by vehicle.

Although a figure is very difficult to determine at this stage, it is estimated that around 150 trucks per day, evenly spread between 08:00 and 18:00, will deliver materials and equipment to the site (Pechiney, 2002b). During peak hours (07:00 – 08:00 and 16:30 – 17:30) an estimated 30 heavy vehicle trips will be made.

At peak construction, personnel will total 6 030 (Section 4.2). Based on certain assumptions regarding numbers of personnel using specific forms of transport, it can be calculated that of the order of 110 large buses, 200 small buses and 560 private cars will be coming and going from site between 07:00 and 08:00 and again at 16:30 to 17:30.

During operations there will be two distinct personnel groupings, viz. shift personnel and daytime personnel (Section 4.2). Shift personnel will be grouped into three shifts, therefore, the maximum number of vehicles coming in and coming out at a shift change is 184 in either direction (based on the unlikely scenario that each individual arrives and leaves in his/her own private vehicle) (Pechiney, 2002b).

With 550 shift personnel, approximately 450 people will be working during the regular daytime work period. This includes 200 to 300 people employed by subcontractors. Based on the assumption that 63% of people will arrive in minibuses of 12 passengers each and 36% will arrive in private vehicles of 1.6 people per vehicle, estimated traffic coming in to the PAS 2005 smelter during peak periods (07:00 – 08:00 and 16:30 – 17:30) will be:


The movement of raw materials and finished product between the PAS 2005 smelter and the Port of Ngqura will occur on internal IDZ roads and will not impact on local, provincial or national roads (CSIR, 2002c).
4.2.5 Product

The PAS 2005 smelter will have the capacity to produce 485 000 tons of aluminium per year (Section 4.2.2). Aluminium will be cast in ingots and transported by truck to the Port of Ngqura, from where it will be exported and traded internationally as a commodity. Initially the full production will be exported. However, AP has indicated that if there is sufficient local demand, a portion of the total product can be used locally. The development of downstream aluminium activities will have a major role to play in a decision to supply locally. However, development of downstream aluminium activities is an independent strategy and not the responsibility of AP (CSIR, 2002a).

4.2.6 Alternatives

The only alternative applicable to this development proposal which is considered in this Social Impact Assessment is the ‘No-go option’, in other words, the option not to establish the PAS 2005 project within the metallurgical cluster of the Coega IDZ. The impacts associated with this option are described under Section 5.
5. DESCRIPTION OF ISSUES AND IMPACTS

A number of potential issues and impacts (both positive and negative) were identified through the public participation component of the EIA Scoping phase and are listed in Appendix 1. Importantly, issues and impacts identified outside of the public participation process are also considered in the SIA and form part of the technical Scoping process. These additional issues were identified by the consultant based on extensive interaction with key stakeholders as well as experience in industry, including aluminium smelters.

The concerns, inputs and feedback were assessed and categorised into four key issues, which were formulated as questions:
- What are the potential effects of the construction of the PAS 2005 project on the social and socio-economic environment?
- What are the potential effects of the operation of the PAS 2005 project on the social and socio-economic environment?
- What other effects may occur in relation to the development of the PAS 2005 project?
- What are the potential effects of the ‘No-go’ alternative on the social and socio-economic environment?

5.1 What are the potential effects of the construction of the PAS 2005 project on the social and socio-economic environment?

The potential effects of the construction of the PAS 2005 project are discussed below and impacts are summarised in Table 12.

5.1.1 Employment creation

During the construction phase, 6 030 direct employment opportunities will be created during peak construction. (Section 4.2). As a result of the investment through the development and downstream economic activity, between 36 541 and 57 553 jobs will be affected, either as existing jobs that are sustained or as newly created jobs. These jobs will mainly occur in the construction and metal sectors of the country.

5.1.2 Opportunities for local labour

According to the CDC (Section 3.4.3), contractors will be required to source local labour to fill levels one and two of the skills requirement. Therefore, approximately 4 000 local job opportunities will be available at peak construction (Section 4.2). It will also be compulsory for contractors to make use of the CDC’s LMS for recruitment, which is structured to ensure equal opportunities (in terms of origin, gender, age etc.) for registered employment seekers. The LMS will give preference to qualifying applicants that are currently unemployed (Section 3.4.3).
### Table 12: Issues driven assessment of the effects of the construction of the proposed PAS 2005 project without mitigation/management.

<table>
<thead>
<tr>
<th>Nature of Impact</th>
<th>Impact type</th>
<th>Extent</th>
<th>Duration</th>
<th>Intensity</th>
<th>Probability</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment creation</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>Medium</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Opportunities for local labour</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>Medium</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Economic development</td>
<td>Positive</td>
<td>Loc/Nat</td>
<td>Short term</td>
<td>Low</td>
<td>Definite</td>
<td>***</td>
</tr>
<tr>
<td>Opportunities for SMMEs</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>Medium</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Training/skills development opportunities</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>Medium</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Increased tourism</td>
<td>Positive</td>
<td>Local/Nat</td>
<td>Short term</td>
<td>Medium</td>
<td>Probable</td>
<td>Low</td>
</tr>
<tr>
<td>Opportunities for the transport sector</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>Low</td>
<td>Definite</td>
<td>Low</td>
</tr>
<tr>
<td>Increased investor confidence</td>
<td>Positive</td>
<td>Loc/Nat/Int</td>
<td>Long term</td>
<td>Medium</td>
<td>Probable</td>
<td>Medium</td>
</tr>
<tr>
<td>Induced migration</td>
<td>Negative</td>
<td>Local</td>
<td>Short/Med</td>
<td>High</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Potential for transport operator conflict</td>
<td>Negative</td>
<td>Local</td>
<td>Short term</td>
<td>Medium</td>
<td>Probable</td>
<td>Medium</td>
</tr>
<tr>
<td>Increased pressure on infrastructure and services</td>
<td>Negative</td>
<td>Local</td>
<td>Short/Med</td>
<td>Medium</td>
<td>Definite</td>
<td>Medium</td>
</tr>
<tr>
<td>Potential health impacts</td>
<td>Negative</td>
<td>Loc/Nat</td>
<td>Short/Med</td>
<td>Medium</td>
<td>Probable</td>
<td>Medium</td>
</tr>
<tr>
<td>Potential increase in the spread of HIV/AIDS</td>
<td>Negative</td>
<td>Loc/Nat</td>
<td>Long term</td>
<td>High</td>
<td>Definite</td>
<td>High</td>
</tr>
</tbody>
</table>

Note: No high/medium/low significance rating has been ascribed as the project is still being finalised and no appropriate benchmarks were identified in the Macro-economic specialist study.
5.1.3 Economic development

According to the Macro-economic specialist study (Blignaut & Schoeman, 2002) the investment through the PAS 2005 project will contribute R 2.6 billion to GDP during construction. This is approximately 1.2% of the gross fixed investment of the national economy of the country. The sectors where the greatest benefits will accrue are metals and iron, and manufacturing. The larger portion of metal and iron produce will be sourced from outside the NMMM and, therefore, much of this benefit will accrue elsewhere in the country and not locally.

5.1.4 Opportunities for SMMEs

During the construction of the proposed smelter, a variety of potential opportunities for SMMEs may be available.

The Transport Tender Process will make provision for the formation of consortia with certain ratios of small- to large-operators (Section 5.1.8). This means that small operators, who would normally not have the capacity to compete for transport tenders of this nature, will have the opportunity to join larger operators and/or other small operators in the tendering process to improve their competitiveness and chances of securing a contract.

Further on-site activities such as fencing, landscaping, road works etc. can be managed in a similar way to the Transport Tender Process.

5.1.5 Training/skills development opportunities

The Labour Supply Services of the CDC are structured to supply personnel to contractors based on the individual needs of contractors. Should there not be adequate numbers of capable individuals on the LMS, suitable individuals can be trained at local training institutions with funding from the Skills Development Levy Fund of the Department of Labour (Section 3.4.3). Therefore, opportunities exist for the training and development of skills of local employees. The rationale behind the process is to create and further develop local skills through the development of the IDZ. This will add additional value to the process in that, following construction of the PAS 2005, individuals will have improved skills to better market themselves for future ventures. Local training/skills development centres/organisations/institutions will be used for this purpose and may, therefore, also benefit through an increase in the number of enrolled trainees.

5.1.6 Increased tourism

As indicated in Section 2.7, not only leisure tourists and/or holidaymakers are included in the definition of a tourist. Business visitors make up the second largest component of tourists to the NMMM (28.6%) (Section 2.7). A mega-project such as
the PAS 2005 is destined to spark the interest of business people from, *inter alia*, the aluminium sector and motor vehicle manufacturing sector. Since the PAS 2005 project will be the first to use AP 50 technology in an actual smelter, it can be expected that AP personnel from its operations elsewhere in the world, for example, Australia, France, Cameroon etc. will visit the site during construction. Therefore, an increase in business tourists may be expected.

During peak construction, approximately 30 highly skilled nationals and 170 expatriates will be employed on the PAS 2005 project. It is highly unlikely that these individuals will reside in the Wells Estate construction village. Therefore, a strong potential exists that additional beds will be taken up in the NMMM, predominantly in hotels.

The opportunity exists for local and emerging tour operators from surrounding areas, for example, Motherwell, to establish linkages with industrial and business tourists in order to expand the tourism experience of individuals.

5.1.7 Utilisation of surplus public transport

There is currently a surplus of public transport within the NMMM (Section 2.3.5.1). The estimated public transport demand during construction is 110 large busses and 200 minibuses (Section 4.2.4). This additional demand on the public transport sector may serve to absorb some of the surplus. There may also be opportunities for the smaller transport operators to form consortia with others through the transport tender process (Section 5.1.5).

5.1.8 Potential for transport operator conflict

As indicated in Section 5.1.7, the transport requirements during construction of the PAS 2005 project can go a long way to utilising some of the current over supply of public transport, especially minibus taxis (Section 2.5.3.1). However, as has been evident across South Africa, the minibus taxi sector is prone to conflict, especially in terms of competition over passenger catchment areas and routes. The potential, therefore, exists that conflict between rival minibus taxi operators/organisations could occur over servicing the demand of the PAS 2005 project.

5.1.9 Increased investor confidence

In the past, questions have been raised in the media and the wider public domain regarding the viability of the Coega IDZ. This could have had a negative effect on the confidence of potential investors, resulting in scepticism regarding the soundness of investment in the IDZ. The PAS 2005 project will be the first major development (with the exception of the Port of Ngqura) to be established in the Coega IDZ. AP is, therefore, widely regarded as taking on the role of anchor tenant.
The impact of the PAS 2005 as anchor tenant can manifest on two levels. Firstly, it can give other major developers (in both related and unrelated industries) the confidence to invest in the IDZ. Secondly, related secondary industries whose main input material is aluminium, such as cookware manufacturers (Section 5.1.4) may locate themselves within the IDZ in order to be as close as possible to the source of their main input. Although increased investor confidence will be greater once the PAS 2005 smelter is operational, this impact may already be felt during construction.

5.1.10 Induced migration

As part of the contextualisation of the PAS 2005 project in the Coega IDZ (Section 3.4.2) possible explanations were given for the already high rate of in-migration and urbanisation occurring in the NMMM. This phenomenon is not likely to decrease within the foreseeable future. On the contrary, with construction soon to start on the Port of Ngqura and the proposed PAS 2005 project potentially starting during the first quarter of 2003, in-migration is likely to increase. Potential impacts, which could be associated with the influx of people, are as follows:

- Increased demand for land and housing.
- Increased demand for municipal services.
- Health risks associated with inadequate sanitation facilities where informal settlement occurs.
- Increased demands on health and community services.
- Increased criminal activity associated with a swelling of the ranks of poor people in the area but also criminal opportunists intent on exploiting the situation.
- Conflict with current residents over economic and natural resources.

Since the PAS 2005 project will not occur in isolation but in the context already described, it is very difficult to quantify the contribution of the development to induced migration. The ratio of one migrant for every construction employment opportunity cannot be applied directly.

It can, however, be stated with confidence that induced migration will take place, as it indeed already is, but that the PAS 2005 will not be the sole cause of it. It is a phenomenon that cannot be prevented but can be minimised by taking certain proactive management actions such as the CDC recruitment policy, licensed informal trading etc. which, in focusing on providing opportunities to local residents, aims to minimise the attractiveness of the IDZ development to outside job-seekers.

Local councillors have indicated that they will manage settlement in neighbouring communities and will take charge of conflict situations if and where they occur.
5.1.11 Increased pressure on infrastructure and services

As the policy to use local labour will be applied as far as possible, the labour force *per se* will not be responsible for pressure on infrastructure and services. Increased pressure on infrastructure and services will occur mainly as a result of induced migration and construction activities. Induced migration may result in the same impacts as already outlined under Section 5.1.10.

- Increased demand for land and housing.
- Increased demand for municipal services (waste removal, sanitation, water supply).
- Increased demands on health and community services (clinics, hospitals etc.).
- Increased criminal activity stretching limited SAPS’ resources.

Local employees (at least 2 500 falling into the first two skills levels as well as others from the remaining skills levels if available locally) will be travelling to and from site during peak traffic hours. Construction activities, therefore, will lead to an increased number of vehicles using the road network to and from the IDZ, which can lead to increased pressure on the road system. However, based on findings from the Specialist Study on Traffic and Transportation (Lamprecht & Jones, 2002), the infrastructure currently undergoing upgrading will be able to cope with increased traffic volumes, save for one or two identified crossings that require attention.

5.1.12 Potential health impacts

Potential health risks stemming from the construction of the PAS 2005 project may be:

- Increased incidence of communicable diseases resulting from an increase in local population due to induced migration.
- Occupational health risks associated with work on a construction site.
- Increased risk of the spread of HIV/AIDS.

The potential increase in the spread of HIV/AIDS will be dealt with as a separate impact.

5.1.13 Potential increase in the spread of HIV/AIDS

Any construction or development activity, which causes migration of people, has the potential to increase the spread of diseases, in this case, one of the most important being HIV/AIDS. Induced migration as well as the movement of contractor construction workers from elsewhere in the country can potentially increase the spread of HIV/AIDS. The impacts of induced migration are not solely the responsibility of AP as discussed above, but should be approached jointly with existing and/or new institutions. Construction workers from elsewhere in the country
will reside in the Wells Estate construction camp. Construction camps are renowned for activities such as prostitution and varying levels of promiscuity. This could lead to scenarios where an infected construction worker coming into the area spreads the disease through unprotected intercourse with sex trade workers or local individuals, who, in turn, will spread it locally. Alternatively, an uninfected construction worker could become infected through unprotected intercourse and on return to his/her place of origin, spread the disease there.

5.2 What are the potential effects of the operation of the PAS 2005 project on the social and socio-economic environment?

The potential effects of the operation of the PAS 2005 project are discussed below and impacts are summarised in Table 13.

5.2.1 Employment creation

Once operational, the PAS 2005 project will create approximately 750 direct jobs. The majority of these positions require well appropriately skilled staff as they fall within the managerial and operator categories. The number of permanent jobs in relation to the total investment can be calculated as 0.036 direct permanent jobs for every R 1 million invested or, stated otherwise, every one direct permanent job required an investment of R 27 million (Blignaut & Schoeman, 2002). This does not compare favourably to a South African average of 4.5 jobs per R 1 million invested. However, as a result of the indirect and induced effect of the investment, it can be expected that between 9 814 and 16 135 new or sustained jobs will accrue. The main beneficiaries of the investment will be in the electricity sector. Electricity generation does not occur in the NMMM, but elsewhere in the country.

5.2.2 Economic development

The net impact on GDP is calculated as the value of total sales plus the indirect and induced GDP effects of the increase in demand less the import component. On this basis, the operation of the PAS 2005 project will have a R 3 919 million (0.3%) contribution to GDP (Blignaut & Schoeman, 2002).

The increase in local demand is estimated at R 846 million or 1% of the GGP of the Eastern Cape, or 5% of the GGP of Port Elizabeth. The local benefit of an increase in income is 36% or R 302 million (0.6% of the Province's remuneration with a local benefit in terms of sustained jobs of 5 833 (0.08% of the Eastern Cape Population) (Blignaut & Schoeman, 2002). Since the Macro-economic specialist study was based

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3 It is important to note that the Macro-economic specialist study (Blignaut & Schoeman, 2002) based all calculations on the assumption that 95% of the final product would be exported.
on the assumption that 95% of the final product would be exported, the increase in local demand is not in aluminium, and therefore, does not need to be offset against a decrease in demand elsewhere in South Africa, for example, Richard’s Bay.
### Table 13: Issues driven assessment of the effects of the operation of the proposed PAS 2005 project without mitigation/management.

<table>
<thead>
<tr>
<th>Nature of Impact</th>
<th>Impact type</th>
<th>Extent</th>
<th>Duration</th>
<th>Intensity</th>
<th>Probability</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment creation</td>
<td>Positive</td>
<td>Local</td>
<td>Long term</td>
<td>Medium</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Opportunities for local labour</td>
<td>Positive</td>
<td>Local</td>
<td>Long term</td>
<td>Low</td>
<td>Definite</td>
<td>Low</td>
</tr>
<tr>
<td>Economic development</td>
<td>Positive</td>
<td>Loc/Nat</td>
<td>Long term</td>
<td>Low</td>
<td>Definite</td>
<td>***</td>
</tr>
<tr>
<td>Opportunities for SMMEs</td>
<td>Positive</td>
<td>Local</td>
<td>Long term</td>
<td>Medium</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Training/skills development opportunities</td>
<td>Positive</td>
<td>Local</td>
<td>Med/Long</td>
<td>Medium</td>
<td>Definite</td>
<td>Low</td>
</tr>
<tr>
<td>Increased tourism</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>Medium</td>
<td>Probable</td>
<td>Low</td>
</tr>
<tr>
<td>Downstream industrial development potential</td>
<td>Positive</td>
<td>Local</td>
<td>Long term</td>
<td>Low</td>
<td>Definite</td>
<td>Low</td>
</tr>
<tr>
<td>Increased investor confidence</td>
<td>Positive</td>
<td>Loc/Nat/Int</td>
<td>Long term</td>
<td>Medium</td>
<td>Probable</td>
<td>Medium</td>
</tr>
<tr>
<td>Potential for transport operator conflict</td>
<td>Negative</td>
<td>Local</td>
<td>Short/Med</td>
<td>Low</td>
<td>Improbable</td>
<td>Medium</td>
</tr>
<tr>
<td>Potential health impacts</td>
<td>Negative</td>
<td>Local/Nat</td>
<td>Long term</td>
<td>Medium</td>
<td>Probable</td>
<td>Low</td>
</tr>
</tbody>
</table>

Note: No high/medium/low significance rating has been ascribed as the project is still being finalised and no appropriate benchmarks were identified in the Macro-economic specialist study.
5.2.3 SMME development

It is AP policy, and indeed also the policy of the majority of aluminium smelters elsewhere, to outsource most non-core business activities, to achieve higher levels of efficiency and cost effectiveness. Therefore, opportunities will be available for SMMEs in activities such as cleaning services, infrastructure maintenance, garden services, waste recycling etc. In terms of recycling, opportunities exist for the collection and separation of plastic, glass, paper and metal for recycling.

5.2.4 Training/skills development opportunities

Direct training and skills development opportunities are more limited during operation than construction, mainly because of a much smaller number and more specialised corp of employees. However, during the construction phase, individuals with the potential and capacity could be trained, for example, as operators, and could be identified and trained in preparation for the operations phase. This could be done through the CDC’s Training Management Services. However, this does not guarantee the appointment of all or any construction personnel for the operations phase, since appropriately skilled personnel will be required during operations.

5.2.5 Downstream industrial development potential

A variety of downstream opportunities exist around the use of aluminium. Although not the responsibility of AP per se, it makes business sense for linkages to be established, albeit over time, between AP and the various motor vehicle manufacturing industries in the NMMM and Eastern Cape. The Delta Motor Corporation and Volkswagen South Africa are both based in the NMMM (Delta in the City of Port Elizabeth and Volkswagen in Uitenhage). Although such industries will still be paying the commodity price for aluminium, transport costs or even re-smelting costs can be reduced.

Within the IDZ, and more specifically the metallurgical cluster, opportunities will exist for secondary industries, such as aluminium cookware manufacturers, to establish themselves and to source aluminium directly from the PAS 2005 smelter.

Opportunities may also exist for SMME development in terms of aluminium casting, albeit on a relatively small scale.

5.2.6 Impact on tourism

The potential loss of the “wilderness experience” by visitors to the Addo Elephant Park due to the PAS 2005 project has been identified as a potential negative impact on tourism. However, the findings of the Visual Impact Specialist Study indicated the following:
The closest vantage point in the Park from where the smelter may be visible, is approximately 16 km from the PAS 2005 project site. A distance of five to six kilometres is usually the “cut-off” point from where buildings, even those the size of an aluminium smelter, become a speck on the horizon.

The PAS 2005 project, once completed, will not be visible from vantage points in the Addo Elephant Park during the day.

At night, the red navigation lights may be visible, but over time, as more development appears in the IDZ, these will blend into the backdrop of the City of Port Elizabeth as well as lighting from the IDZ.

As indicated in Section 5.1.6, a mega-project such as the PAS 2005 may attract visitors to the NMMM in the form of interested business people from the aluminium and motor vehicle manufacturing sectors. Representatives from other multi-national aluminium concerns can also be expected to have an interest in visiting the PAS 2005 project’s smelter, due to the use of AP 50 technology, an international first. Also, AP representatives from operations elsewhere in the world, such as Australia, France, Cameroon etc., will visit the smelter to view AP 50 technology in operation. The anticipated increase in business tourists during the operations phase will impact positively on the South African tourist industry.

The opportunity exists for local and emerging tour operators from surrounding areas, for example, Motherwell, to establish linkages with industrial and business tourists in order to expand the tourism experience of individuals.

5.2.7 Increased Corporate Social Investment Opportunities

AP has indicated that approximately R 10 million annually would be spent on CSI. This figure is not final and will be defined through the compilation of a proper CSI Programme. Since the proposed PAS 2005 project is AP’s first development in South Africa, there is no CSI programme in place at present. However, AP has expressed its strong intentions to become involved with surrounding communities and existing initiatives.

5.2.8 Increased investor confidence

The effect of the PAS 2005 project as anchor tenant is expected to be greater during operation than construction. The successful implementation and operation of the smelter may serve to bolster investor confidence in the IDZ, potentially leading to an increased rate of new development in the zone. This may have a far-reaching effect through the creation of further employment opportunities and economic development of the NMMM and Eastern Cape, with resultant poverty alleviation.
5.2.9 Potential for transport operator conflict

The size of the work force during operation will be substantially smaller than during the construction phase (approximately 750 permanent direct employees) (Section 4.2.3). Given that these employees will be mainly on management, staff and operator level, it is likely that less use will be made of public transport during operation. Therefore, there will be less potential for conflict between transport operators during operation than construction.

5.2.10 Potential health impacts

Potential health risks stemming from the operation of the PAS 2005 project include:

- Potential public health risks associated with waste streams flowing from the smelter.
- Occupational health risks associated with work in a smelter.
- Potential for an increase in respiratory problems due to air emissions.

Although this impact is stereotypically associated with aluminium smelters, the “Air Quality Specialist Study” (Zunckel, et al. 2002) indicated the following:

- Health risk from exposure to SO\(_2\) emissions from the PAS 2005 project:
  No acute or chronic health effects are expected in any healthy or sensitive individual exposed to the predicted SO\(_2\) concentrations. Even if the highest concentrations of SO\(_2\) monitored at Motherwell (35.78 µg/m\(^3\) for 1 hour and 7.37 µg/m\(^3\) for 24 hours) are added to the maximum modelled concentrations for Motherwell (130.92 µg/m\(^3\) for 1 hour and 7.09 µg/m\(^3\) for 24 hours) the hazard quotients remain below one. This means that no acute adverse effects are expected in any individual, even in this absolute worst-case scenario. The significance of the potential impact of SO\(_2\) to human health is therefore low.

- Health risk from exposure to gaseous HF emissions from the smelter:
  No adverse health effects, either acute (such as irritation) or chronic (skeletal fluorosis), are expected in any individual, including sensitive individuals, as a result of gaseous HF emissions from the proposed PAS 2005 project. The significance of the potential impact of HF to human health is therefore low.

- Mixture of Chemicals:
  The latest trend worldwide is to consider the chemicals in a risk assessment as a mixture. When chemicals have the same mechanism of action, their potential doses are added (or rather, the hazard quotients are added to obtain a hazard index). The goal of the hazard index approach is to construct the plausible toxicity index that would have been calculated had the mixture itself been tested. Sulphur dioxide and hydrogen fluoride do not have the same mechanisms of
action but as they both affect the upper respiratory tract, it was decided to add their HQs.

Applying this approach to the risk assessment of the proposed PAS 2005 project makes no difference to the prediction of possible adverse effects, as the hazard indices are still below 1 (in fact all are below 0.5) indicating that acute respiratory effects as a result of SO\textsubscript{2} and HF-gas emissions from the proposed smelter remains highly unlikely (Zunckel et al, 2002).

The potential for an increase in the spread of HIV/AIDS due to operation is seen to be much less than during construction and is not discussed as a separate impact. However, specific mitigation/management actions are suggested (Section 6.1).

5.3 What other effects may occur in relation to the development of the PAS 2005 project, which not the responsibility of AP?

5.3.1 Construction camps and related issues

According to the rezoning of the Coega IDZ, no individual or group will be allowed to reside anywhere in the zone. Therefore, the CDC has assumed the responsibility of providing a construction village at Wells Estate to cater for the construction accommodation needs of potential developers. The CDC is responsible for the operation and maintenance of the construction camp and not AP as developer of the PAS 2005 project.

“Generic” implications, which are typical of construction camps, are the proliferation of pollution (litter, waste water and unsanitary ablution facilities), destruction of vegetation (indigenous wood used for fuel), theft and negative aesthetic impacts. Construction camps can also be associated with alcohol and drug abuse, the sex worker trade and, hence, STDs (notably HIV/AIDS).

5.3.2 Resettlement

The movement of people to make way for industry is always a delicate and sensitive issue. Indeed, with the resettlement of the 300 Coega families, certain allegations were made by civic and other interest groups with regard to the resettlement process and the impacts on the resettled communities. These allegations culminated in a submission to the Human Rights Commission by an external stakeholder on behalf of the Coega community. An independent “Forensic Audit of the Coega Resettlement Process and its Impact on the Affected Parties” was commissioned. Representatives of the Human Rights Commission also conducted a visit to the area but, according the CDC, no further comment or feedback has been received since the site visit.

The Forensic Audit identified a number of positive, as well as negative impacts, which occurred as a result of the resettlement and made certain recommendations.
order to mitigate the impacts. A verbatim extract of the “Conclusions and Recommendations” section of the audit report is provided in Appendix 5.

Whether or not the PAS 2005 project was a direct cause of resettlement, there is the potential that future complaints regarding the impacts of resettlement may be vented towards AP, especially with it being the first major developer and anchor tenant.

5.3.3 Impacts of electricity generation

Once fully operational, the PAS 2005 project will use 860 MVA of electricity. This is the approximate consumption of Port Elizabeth and East London combined, and raises the issue of impacts associated with electricity generation elsewhere in South Africa.

At present, Eskom has spare electricity capacity to meet the demand of the PAS 2005 project. In using current surplus, the project will have a positive impact on Eskom. However, approximately 90% of this electricity is generated through the burning of low-grade coal. Impacts of this form of electricity generation include problems associated with coal mining, *inter alia*, acid mine drainage and increased risks of respiratory diseases and cancer amongst humans. In addition, electricity generation releases large volumes of SO$_2$ and CO$_2$ into the atmosphere. Although a detailed assessment of the impacts associated with electricity generation is beyond the scope of this EIA, it remains an important strategic issue. It should, therefore, be appropriately addressed on a strategic policy level by the Department of Minerals and Energy, and, for example, as part of Eskom’s Integrated Strategic Energy Planning.

5.3.4 Increased pressure on roads and transport

The “Coega Development Zone and Port Integrated Transport Study” has been conducted to determine the transport requirements of the two developments in order to pro-actively address potential impacts such as congestion and road safety (Section 3.4.5). The transport planning component of the study has staggered the upgrade of existing roads and the construction of new roads according to the demands of the initial CDA and (later) the greater IDZ. Construction is already underway on certain sections of road in proximity to the CDA. Therefore, responsibility for managing impacts due to increased traffic volumes lies with the NMMM and the IDZ. Ideally, if all goes according to schedule, undue pressure on roads should be prevented. However, there are certain risks if delays should occur in the completion of the appropriate and applicable sections of roads along which construction traffic is to flow. This will then mean that construction traffic would have to flow along roads under construction, or on alternative routes which are not designed to handle these traffic volumes, either of which would increase the disruption to traffic flow.
5.3.5 Loss of “wilderness experience” for Addo Elephant park visitors

The potential impact on tourism to the Addo Elephant is an issue which has been raised in the Coega Rezoning EIA and the “Subsequent Environmental Impact Report for the Proposed Port of Ngqura” as well as during key stakeholder interviews as part of this study. It refers especially to the potential loss of the “wilderness experience” for tourists visiting the Park. The Visual Specialist Study as part of the current EIA found that the operational PAS 2005 project will not be visible from the Park during the day and its lights will blend into the background of lights from the City of Port Elizabeth as well as other activities in the IDZ (Section 5.2.6) at night. The concerns expressed by representatives of the SANParks are, therefore, more related to the IDZ and Port developments than to the PAS 2005 project per se. However, it remains important that developments within the IDZ as well as of the Zone in general be planned, located and constructed in such a manner that they do not become a visual intrusion for persons (tourists or otherwise) travelling along the N2 through the Zone.

5.4 What are the potential effects of the “No-go” alternative on the socio-economic environment?

When examining the potential effects of the “No-go” alternative, the context within which the proposed PAS 2005 project would occur needs to be considered (Section 3). A decision not to develop the PAS 2005 project will not stop the development of the IDZ. IDZ development will continue, which implies that other developers may come in to take the place of the PAS 2005 project in the metallurgical cluster. Therefore, the majority of impacts (positive and negative) associated with the PAS 2005 project will probably still occur although they may be postponed.

The following outlines key differences in potential impacts of the “No-go” option when compared to the development of the PAS 2005 project:

- The biggest impact of the “No-go” option is the loss of positive impacts relating to the PAS 2005 project as anchor tenant. Secondary developments in the IDZ will be slowed and international investors and developers may lose confidence in the potential of the IDZ, which could seriously hamper the zone achieving its objectives.

- Opportunities for employment creation, local labour, economic development for SMMEs, training and skills development and Social Corporate Investment can potentially still occur but with an unknown delay, especially if there should be a loss of investor confidence.

- In-migration will continue as at present, but possibly at a slightly reduced rate due to a lowering of expectations in terms of the delivery of the IDZ.
• The current public transport surplus will remain, which may lead to potential conflict between transport operators.

• Increased pressure on infrastructure and services may be less without the PAS 2005 development, but will continue due to existing in-migration, and without an increase in local revenue to finance upgrades and improvements.

• Potential health impacts associated with the PAS 2005 project will not occur, but may be replaced by other or similar impacts, should a new investor locate on the site.

• The delay in the development of a mega-project in the IDZ can give the CDC and the National Ports Authority the opportunity to develop their infrastructure further, which may alleviate some negative impacts, for example, the Port of Ngqura can be used to receive construction imports once it has been constructed, removing the impact on the road network between the Port Elizabeth harbour and the IDZ. Furthermore, improvements to road networks can be completed without the possibility of an overlap in construction time and, similarly, Wells Estate construction village can be completed without making use of Joost Park and/or park homes. However, delays in the establishment of an anchor tenant may lead to a decrease in the urgency for the construction of these components.

By implication, the “No-go” alternative would merely slow down the delivery of expected benefits from the proposed PAS 2005 project, and replace negative impacts with those arising from other incoming industrialists. By implication, therefore, emphasis should be on the minimisation of negative and the optimal enhancement of positive impacts.

5.5 Decommissioning

At this stage there is a lack of pertinent information to enable the adequate understanding and assessment of aspects related to decommissioning. Therefore, it is suggested that, at least five years prior to decommissioning, AP should, as a minimum, follow ISO 14001 decommissioning procedures developed for similar facilities elsewhere. If necessary, AP should also commission additional environmental and social investigations that have decommissioning, closure and post-closure as a focus.
6. MITIGATION OF IMPACTS

In addressing the questions relating to the key actions or areas of influence of the project, a range of related potential impacts, positive and negative, have been identified and the significance of the potential impacts has been summarised in Tables 12 and 13 (in the absence of mitigation/management actions) (Section 5.1 and 5.2). This section identifies possible mitigation/management actions that could be implemented to minimise negative impacts or enhance positive aspects. The assessment of impacts that have been subjected to mitigatory measures and management actions have been summarised in Tables 14 and 15.

6.1 What are the potential effects of the construction of the Aluminium Pechiney smelter on the socio-economic environment?

6.1.1 Employment creation and opportunities for local labour

- Maximise the use of local labour as far as possible through the use of the CDC’s Labour Management Services.
- Where the required skills do not occur locally, and where appropriate and applicable, ensure that relevant local individuals are trained through the use of the CDC’s Training Management Services.
- Ensure that contractors stipulate percentages of local labour employment, use of SMMEs and training in their contract (as stipulated in the Zone Labour Agreement and Project Labour Agreement).
- Ensure recruitment measures are aimed particularly at construction workers classified as designated employees in terms of the Employment Equity Act (black people, as defined in the Act, women and disabled people).
- Consider employment opportunities and the needs of disabled people during the planning of construction activities.

6.1.2 Economic development

- The proposed construction of the PAS 2005 project will not alter the planning or economic development trajectory of the Coega IDZ and the NMMM, but rather serve to boost the implementation of the vision of the IDZ. Where ever possible, opportunities for optimisation should be sought and implemented.
- Make use of local raw materials, goods and services as far as possible, where appropriate and applicable, during construction, through the use of the CDC’s Procurement Management Services.

6.1.3 Opportunities for SMMEs

- Ensure the use of SMMEs in contract composition, where appropriate and applicable, through contractor tender requirements.
### Table 14: Issues driven assessment of the effects of the construction of the proposed PAS 2005 project with mitigation/management.

<table>
<thead>
<tr>
<th>Nature of Impact</th>
<th>Impact type</th>
<th>Extent</th>
<th>Duration</th>
<th>Intensity</th>
<th>Probability</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment creation</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>High</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Opportunities for local labour</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>High</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Economic development</td>
<td>Positive</td>
<td>Loc/Nat</td>
<td>Short term</td>
<td>Medium</td>
<td>Definite</td>
<td>***</td>
</tr>
<tr>
<td>Opportunities for SMMEs</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>High</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Training/skills development opportunities</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>High</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Increased tourism</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>Medium</td>
<td>Probable</td>
<td>Medium</td>
</tr>
<tr>
<td>Opportunities for the transport sector</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>Medium</td>
<td>Definite</td>
<td>Medium</td>
</tr>
<tr>
<td>Increased investor confidence</td>
<td>Positive</td>
<td>Loc/Nat/Int</td>
<td>Long term</td>
<td>Medium</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Induced migration</td>
<td>Negative</td>
<td>Local</td>
<td>Short/Med</td>
<td>High</td>
<td>Definite</td>
<td>Medium</td>
</tr>
<tr>
<td>Potential for transport operator conflict</td>
<td>Negative</td>
<td>Local</td>
<td>Short term</td>
<td>Medium</td>
<td>Probable</td>
<td>Medium</td>
</tr>
<tr>
<td>Increased pressure on infrastructure and services</td>
<td>Negative</td>
<td>Local</td>
<td>Short/Med</td>
<td>Medium</td>
<td>Definite</td>
<td>Medium</td>
</tr>
<tr>
<td>Potential health impacts</td>
<td>Negative</td>
<td>Loc/Nat</td>
<td>Short/Med</td>
<td>Medium</td>
<td>Probable</td>
<td>Low</td>
</tr>
<tr>
<td>Potential increase in the spread of HIV/AIDS</td>
<td>Negative</td>
<td>Loc/Nat</td>
<td>Long term</td>
<td>High</td>
<td>Definite</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Note: No high/medium/low significance rating has been ascribed as the project is still being finalised and no appropriate benchmarks were identified in the Macro-economic specialist study.
• Establish linkages with the CDC’s SMME Development Management to determine which areas of SMME expertise are in existence and which can be used during construction
• Establish linkages with institutions involved in the development and promotion of SMMEs such as COMSEC, PERMAC and BEEF in order to benefit from existing SMME initiatives.
• Investigate the potential for downstream opportunities, for example, SMME aluminium casting through institutions such as PERMAC as part of CSI.

6.1.4 Training/skills development opportunities

• Where the required skills do not occur locally, and where appropriate and applicable, ensure that relevant local individuals are trained through the use of the CDC’s Training Management Services.
• Make multi-skilling of construction workers an important priority as employment opportunities during construction are only temporary. This refers, not necessarily to providing the skills necessary for operational jobs on the PAS 2005 project, but for application in other industries in the Coega IDZ and the NMMM.
• Ensure that regular audits of training providers are conducted by the CDC to ensure that appropriate skills and capacity are built effectively.

6.1.5 Increased tourism

• Through the Public Relations Office, send information brochures of the NMMM and surrounding tourist attraction to AP personnel or other business visitors to the PAS 2005 project to encourage them to extend their visits by a few days and to enjoy the tourism experiences of the NMMM and surrounds.

6.1.6 Opportunities for the transport sector

• Ensure that only transport operators appointed through the Transport Tender Process are used for the transport of materials and personnel.
• Ensure that transport contracts stipulate percentages of use of SMME operators.
• Where appropriate and applicable, encourage personnel to make use of contracted transport providers. This will also serve to alleviate the potential pressure on the road system by reducing the volume of private vehicles arriving and departing from the construction site.

6.1.7 Increased investor confidence

• Ensure adequate media coverage of the development, for example, regular press releases on progress of construction, SMME involvement, number of local employees etc.
6.1.8 Induced migration

- Ensure that measures designed to minimise the number of induced migrants, such as the CDC’s recruitment process and disallowing of any unlicensed informal trading, are being implemented and adhered to by contractors.
- Actively downplay (through clear, simple and persistent communication) inflated expectations of employment opportunities. Also, communicate in the same manner that recruitment will take place through the CDC’s Labour Management System only, at recruitment centres only and not on-site.
- Establish a forum with the CDC, National Port Authority, relevant departments of the NMMM as well as local leadership to formalise discussions and to ensure that support can be given if situations in certain areas become critical.
- Provide assistance to the Business Against Crime and Community Policing Forums to address the potential for increased criminal activity.
- Although CSI is not mitigation per se, it may be viewed as a form of compensation for increased pressure on infrastructure and services in the surrounding areas. Liaise with existing CSI bodies (Section 2.9) as well as PERCCI in order to coordinate efforts in providing CSI projects in areas such as health services (clinics etc.), education (provision of infrastructure and teacher training) and housing.

6.1.9 Potential for transport operator conflict

- Ensure that only transport operators appointed through the Transport Tender Process are used for the transport of materials and personnel.
- Encourage personnel to use only contracted transport operators by instituting coupon/ticket systems. (This will also increase safety as no money will be changing hands at pick-up, drop-off or en route.)

6.1.10 Potential health impacts

- Establish on-site clinic facilities to cater for at least primary health care requirements of personnel.
- Establish emergency procedures to provide emergency support (possibly in collaboration with existing health-care facilities and providers in the NMMM).
- As part of the emergency plan, liaise with specific hospitals and ambulance services regarding potential facilities and/or care.
- Compile and implement an occupational health and safety programme.
- A community environmental monitoring programme, similar to the programme currently being implemented by the Umhlatuze Metropolitan Municipality (Richards Bay) should be compiled in conjunction with the CDC and NMMM.
6.1.11 Increased pressure on infrastructure and services

- This is a responsibility of the CDC. AP should monitor CDC’s activities in this regard to ensure that matters are dealt with adequately and that there are no negative consequences for AP.

6.1.12 Potential increase in the spread of HIV/AIDS

Alucam, a Cameroonian Aluminium company partly owned by AP has since 1996 implemented an overall integrated programme on site to combat AIDS, in liaison with various local and French partners. The programme involves three main components of awareness (training and prevention), voluntary screening incentive scheme and treatment.

- Draw on the Alucam programme’s success, adapt where necessary for the South African context and implement on site.
- Establish linkages with the Section 21 company “Business Against AIDS” currently being established by PERCCI.
- Consult with other major industries in the Eastern Cape, for example, Daimler-Chrysler based near the Port of East London, regarding current HIV/AIDS programmes which they have place.

6.2 What are the potential effects of the operation of the Aluminium Pechiney smelter on the socio-economic environment?

6.2.1 Employment creation

- Maximise the use of local labour as far as possible through the use of the CDC’s Labour Management Services.
- Where the required skills do not occur locally, and where appropriate and applicable, ensure that relevant local individuals are trained through the use of the CDC’s Training Management Services. Such training should be pro-active and should already start during the construction phase in order to have trained personnel available once the PAS 2005 project becomes operational.
- Ensure recruitment measures are aimed particularly at personnel classified as designated employees in terms of the Employment Equity Act (black people, as defined in the Act, women and disabled people).
- Implement employment opportunities and the needs of disabled people that were considered during the planning of construction activities.
- Make use of local raw materials and goods and services during operation through the use of the CDC’s Procurement Management Services.
- Assist in the establishment of downstream opportunities, for example, through linkages with PERMAC.
6.2.2 Economic development

- The operation of the PAS 2005 project has the potential to contribute significantly to the GGP of the NMMM and the GDP of the country. Where-ever possible, opportunities for optimisation should be sought and implemented.

6.2.3 Opportunities and development for SMMEs

- Ensure the use of SMMEs in contract composition, where appropriate and applicable, through contractor tender requirements.
- Establish linkages with the CDC’s SMME Development Management to determine which areas of SMME expertise are in existence and which can be used during operation.
- Establish linkages with institutions involved in the development and promotion of SMMEs, such as COMSEC, PERMAC and BEEF, in order to benefit from existing SMME initiatives.
- The NMMM has an Integrated Waste Management Plan in place which includes the collection, separation and/or re-use of recyclable waste from landfills at a Material Recovery Facility. Linkages with this facility can support potential recycling SMMEs.

6.2.4 Training/skills development opportunities

- Mitigation/management actions are outlined under Section 6.2.7.
Table 15: Issues driven assessment of the effects of the operation of the proposed PAS 2005 project with mitigation/management.

<table>
<thead>
<tr>
<th>Nature of Impact</th>
<th>Impact type</th>
<th>Extent</th>
<th>Duration</th>
<th>Intensity</th>
<th>Probability</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment creation</td>
<td>Positive</td>
<td>Local</td>
<td>Long term</td>
<td>Medium</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Opportunities for local labour</td>
<td>Positive</td>
<td>Local</td>
<td>Long term</td>
<td>Low</td>
<td>Definite</td>
<td>Medium</td>
</tr>
<tr>
<td>Economic development</td>
<td>Positive</td>
<td>Loc/Nat</td>
<td>Long term</td>
<td>Low</td>
<td>Definite</td>
<td>***</td>
</tr>
<tr>
<td>Opportunities for SMMEs</td>
<td>Positive</td>
<td>Local</td>
<td>Long term</td>
<td>Medium</td>
<td>Definite</td>
<td>High</td>
</tr>
<tr>
<td>Training/skills development opportunities</td>
<td>Positive</td>
<td>Local</td>
<td>Med/Long</td>
<td>Medium</td>
<td>Definite</td>
<td>Medium</td>
</tr>
<tr>
<td>Increased tourism</td>
<td>Positive</td>
<td>Local</td>
<td>Short term</td>
<td>Medium</td>
<td>Probable</td>
<td>Medium</td>
</tr>
<tr>
<td>Downstream industrial development potential</td>
<td>Positive</td>
<td>Local</td>
<td>Long term</td>
<td>Low</td>
<td>Definite</td>
<td>Medium</td>
</tr>
<tr>
<td>Increased investor confidence</td>
<td>Positive</td>
<td>Loc/Nat/Int</td>
<td>Long term</td>
<td>Medium</td>
<td>Probable</td>
<td>High</td>
</tr>
<tr>
<td>Potential for transport operator conflict</td>
<td>Negative</td>
<td>Local</td>
<td>Short/Med</td>
<td>Low</td>
<td>Improbable</td>
<td>Medium</td>
</tr>
<tr>
<td>Potential health impacts</td>
<td>Negative</td>
<td>Local/Nat</td>
<td>Long term</td>
<td>Medium</td>
<td>Probable</td>
<td>Low</td>
</tr>
</tbody>
</table>

Note: No high/medium/low significance rating has been ascribed as the project is still being finalised and no appropriate benchmarks were identified in the Macro-economic specialist study.
6.2.5 Potential increase in tourism

- Adhere to recommendations from the Visual Impact Study with regard to smelter aesthetics.
- Invite personnel from other AP units, as well as personnel from other aluminium related multi-nationals, to visit the PAS 2005 project to view AP 50 technology in practice. This will most probably happen as a matter of course in AP's promotion of its technology.
- Through the Public Relations Office, send information brochures of the NMMM and surrounding tourist attractions to visitors to the PAS 2005 project to encourage them to extend their visits by a few days and to enjoy the tourism experiences of the NMMM and surrounds.

6.2.6 Downstream industrial development potential

- Investigate potential linkages with local aluminium users, such as the motor vehicle industry.
- Investigate downstream SMME opportunities through liaison with PERCCI, COMSEC, PERMAC and BEEF.
- Should downstream opportunities be viable, include as part of the CSI programme.

6.2.7 Increased Corporate Social Investment Opportunities

- Establish linkages with PERCCI and other bodies involved in CSI, such as the Delta Foundation, Volkswagen Trust etc. (Section 2.9) to ascertain collaborative efforts in the interests of optimisation.
- Liaise with the CDC, NPA and other developers in the Coega IDZ regarding the establishment of a Coega IDZ Trust or Foundation. This will provide the vehicle for coordinated CSI from the IDZ, adding value to the public image of the IDZ as well as of investors within.
- Even if a Trust or Foundation is established, the PAS 2005 project should compile its own CSI programme. The following provides an indication of programmes that may be included in the focus of the CSI programme. It is by no-means a comprehensive outline and the contents of the PAS 2005 project CSI programme should be determined through the linkages indicated above:
  - Education.
    - Bursary funding for previously disadvantaged students through the Faculty of Engineering at UPE.
    - Bursary funding for children of permanent employees.
    - Teacher training programmes.
    - Assistance with the provision of adequate infrastructure and resources for previously disadvantaged schools.
    - Pre-school and day-care facilities for children of employees.
  - Health care.
→ Assistance in the provision of clinic facilities in the IDZ thru the CDC.
→ Promotion of HIV/AIDS awareness. Possible involvement with the “Business Against Aids” initiative.

► Housing.
→ Employee housing subsidies.

► Crime prevention.
→ Involvement with “Business Against Crime” and the extension thereof to areas neighbouring on the IDZ.

► Life skills.
→ Sports development programmes.
→ Life skills programmes for children of employees, exposing them to situations, experiences and life skills they would not otherwise encountered.

► SMME development.
→ Possible downstream SMME opportunities.

6.2.8 Increased investor confidence

• Ensure adequate media coverage of the development, for example, regular press releases on progress of operation.
• Compile a regular smelter newsletter with distribution through an international mailing list.
• Should a Coega IDZ Trust or Foundation be established, assist in the establishment of a newsletter and contribute regular inserts.
• Invite potential investors for site visits to the PAS 2005 project, to see how an industry operates in the IDZ.

6.2.9 Potential for transport operator conflict

• Ensure that only transport operators appointed through the Transport Tender Process are used for the transport of materials and personnel.
• Encourage personnel to use only contracted transport operators by instituting coupon/ticket systems. (This will also increase safety as no money will be changing hands at pick-up, drop-off or en route).

6.2.10 Potential health impacts

• Potential health impacts can be addressed through mitigation and management actions already mentioned in Sections 6.1.12 and 6.2.7 (as well as those detailed in the Air Quality Specialist Study).
6.3 What other effects may occur in relation to the development of the PAS 2005 project, which not the responsibility of AP?

The impacts described under Section 5.3 are not taken further into assessment since responsibility for mitigation/management lies with other parties and not AP. The impacts have been dealt with in detail in the “Coega Rezoning EIA: Environmental Impact Assessment for the Rezoning of the Core Development Area from Agriculture to Special Purposes – Environmental Impact Report” (Coastal and Environmental Services, 2000), “The Subsequent Environmental Impact Report for the Proposed Port of Ngqura” (Coastal and Environmental Services, 2001) and the “Forensic Audit of the Coega Resettlement Process and its Impact on the Affected Parties” (Coastal and Environmental Services, 2002).

6.4 What are the potential effects of the ‘No-go’ alternative on the socio-economic environment?

The majority of impacts (positive and negative) associated with the PAS 2005 project in this study, will probably still occur when other investors initiate development (although they may be postponed in the short-term). In this regard, only impact that should be highlighted is the positive impact of AP as anchor tenant and the potential for increasing investor confidence.
7. MONITORING AND REVIEW PROGRAMMES

Mitigation measures outlined in Section 6 are to be taken forward into an Environmental Management Plan (EMP), where specific actions will be put to each of the measures where appropriate and applicable. Once these actions have been phrased, indicators and variables can be set as part of a monitoring and evaluation (M&E) programme. Based on the concept of sustainability, an integrated M&E approach is proposed.

7.1 The concept of sustainability

The concept of sustainability underpinning the SIA considers three inter-related dimensions of the environment, viz. social, economic and biophysical environments. For a project to be sustainable, it needs to demonstrate economic growth, social soundness and ecological integrity within a framework of good governance. All three of these dimensions of sustainability need to be taken into account when assessing a proposed project taking due cognisance that the three dimensions will seldom be in perfect balance, and are often dictated by local circumstances (Figure 5).

Key sustainability principles include:

- Development must not degrade the natural, built, social, economic and governance resources on which it is based.
- Current actions should not cause irreversible damage to natural and other resources, as this will preclude sustainable options.
- Where there is uncertainty about the impact of activities on the environment, caution should be exercised in favour of the environment.
- Land use and environmental planning need to be integrated.
- Immediate and long-term actions need to be identified and planned for, so that urgent needs can be met while still progressing towards longer term sustainable solutions.

7.2 Monitoring and evaluation framework

The following integrated M&E approach is proposed:

- Situational Analysis/SOE Report/Status Quo Report
- Evaluation
- Set Indicators
- Monitor
Gather baseline data and complete a situational analysis (data previously collected can be used for this purpose).

Determine vision (desired state).

Identify actions and activities to be measured (specific actions to achieve vision).

Set targets (these are specific measurable commitments to be achieved within a specified time frame).

Set drivers (these are agreed upon future conditions that drive future action).

The last two suggest the development of agreed upon appropriate (feasible), “measurable”, defined (preferably in units) and valid indicators to measure performance/goals and whether targets or drivers have been met.

Set up a documentation and an information-action-flow system. Implement analysis and review on a periodic basis to determine whether conditions indicate progress towards the ‘vision’. Mechanisms need to be established for regular reporting on progress and performance, with defined seats of responsibility and action teams or procedures for action.

Set targets and/or drivers for summative evaluation.

Complete the summative evaluation (focussing on issues identified during the monitoring phase).
The integrated M&E approach suggests that monitoring and evaluation are essential throughout all phases of the project life and spheres of project processes (for example, technical, social, financial and administrative). The approach also follows a corkscrew cycle, where auditing and regular reporting informs the evaluation and drivers and targets are regularly reviewed in a changing environment. In the start up phases of a project cycle, monitoring will be less intense, while the planning for monitoring will be most intense during implementation, construction and operation. At this stage, actual monitoring becomes more intense but the planning lessens as the system is already 90% in place. The evaluation of focussed issues occurs at a specific milestone or at a driver. This feeds the next loop of monitoring unless the evaluation is summative in conclusion of the project or due to other circumstances. Where applicable, remedial actions are undertaken to achieve the 'vision'.

Indicators are a cost-effective measurement tool. Criteria for selecting indicators have to be agreed upon by all stakeholders (so agreement of which measures are accurate, relevant and valid needs to be worked towards). The collection and compilation of data, to measure the present value of the indicator, must be feasible in terms of costs and constraints, and must be valid. Indicators should be measurable on a frequent basis (monitorable over time). The indicators should also be relevant to the community (i.e. understood and linked to their issues). Alternatively, a monitoring forum made up of local community members should be considered.

Thereafter, for each indicator, it is necessary to determine measurable variables (metric) as well as monitoring frequencies, inclusive of informative and summative evaluation, with remedial actions (if required).

Finally, sustainability should be the ultimate objective. For a project to be sustainable, it needs to demonstrate economic growth, social sensitivity and equity and ecological integrity. All three of these environmental dimensions need to be taken into account when decisions are made. However, it is important to note that the three dimensions are seldom in perfect balance and, therefore, decisions should be dictated by local circumstances.
8. CONCLUDING REMARKS

The assessment of key issues shows that there are no negative impacts which can be classified as fatal, or which are of high significance thereby blocking the project, provided that the suggested mitigation measures are undertaken. The only impacts that have been analysed as having a high significance after mitigation, are positive, viz. employment creation (construction and operation), opportunities for local labour (construction), opportunities for SMME (construction and operation), training/skills development (construction) and increased investor confidence (construction and operation).

ACER (Africa) believes that the report accurately reflects the impacts that the proposed PAS 2005 project may have on the social and socio-economic environment. Allied to this, ACER (Africa) has provided sound suggestions to mitigate any anticipated negative impacts and enhance the positive ones. It is, however, important that these suggestions are implemented in order for the project to be environmentally acceptable.
9. REFERENCES


10. PERSONAL COMMUNICATIONS

Africa, D. May 2002. Assistant Town Planner - City Engineer’s Administrative Unit, NMMM.


De Klerk, A. May 2002. Strategic Transport Planner – City Engineer’s Administrative Unit, NMMM.


Hartle, R. May 2002. Executive Manager Communication – Coega Development Corporation (Pty) Ltd.


Mentz, M. May 2002. Assistant Chief Town Planner - City Engineer’s Administrative Unit, NMMM.


Raimondo, J. May 2002. Executive Manager Environment – Coega Development Corporation (Pty) Ltd.

APPENDIX 1:

ISSUES RAISED DURING SCOPING
ISSUES RAISED DURING SCOPING

The following table is an excerpt from Section 6.2.5 of the Final Scoping Report (Environmental Impact Assessment: Proposed establishment of an aluminium smelter within the Coega Industrial Development Zone, Port Elizabeth, South Africa. CSIR, 2002b). A column has been added, indicating where the respective issues are addressed in the SIA.

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>RESPONSE</th>
<th>ADDRESSED IN SIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Social Impacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1.1 What will be the social impacts associated with the project</td>
<td>The socio-economic specialist study will assess both positive and negative social impacts of the project.</td>
<td>Section 5</td>
</tr>
<tr>
<td>5.1.2 The benefits of this project for the Motherwell community should be maximised.</td>
<td>This comment has been noted. The socio-economic specialist study will include recommendations for how benefits of the project could be maximised.</td>
<td>Section 5</td>
</tr>
<tr>
<td>5.2 Employment Process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2.1 How will the recruitment process work and who will be responsible for it?</td>
<td>The CDC is currently compiling a register of jobseekers. A comprehensive strategy for recruitment and placement of personnel within the zone is being developed by the CDC to manage the requirements and expectations of both investors and job-seekers. These policies will be based on agreements with organised labour, and will take account of existing South African labour legislation as well as industry-specific agreements.</td>
<td>Section 3.4.3 Appendix 2a, 2b</td>
</tr>
<tr>
<td>5.2.2 The employment process needs to ensure that the citizens of the Metro maximise the employment benefits created by this development. Preference should be given for employment to local people before national and international skills are sourced.</td>
<td>The CDC will facilitate and provide a service for itself and investors but it will not actually recruit labour for any third parties. All contractors will hire their own labour, within the guidelines given by the CDC. The socio-economic specialist study will describe the recruitment process and consider the accessibility of the recruitment process to disadvantaged communities.</td>
<td>Section 3.4.3 Appendix 2a, 2b</td>
</tr>
<tr>
<td>5.2.3 How accessible will the recruitment process be, especially to the unemployed in the Metro?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2.4 The use of employment agencies is not supported as employment agencies and labour brokers charge a percentage on salaries or wages. People must derive the full benefits from this development.</td>
<td>This comment is noted and brought to the attention of the CDC.</td>
<td>Section 3.4.3 Appendix 2a, 2b</td>
</tr>
<tr>
<td>5.3 Employment Equity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.1 It does not appear that enough effort is made to involve the so-called Coloured people in recruitment.</td>
<td>The recruitment process for the Aluminium Pechiney smelter has not yet started, as a decision has not yet been made whether or not the project will proceed. If the go-ahead is given for the project, recruitment will be jointly managed by the CDC and Aluminium Pechiney.</td>
<td>Section 3.4.3 Appendix 2a, 2b</td>
</tr>
<tr>
<td>ISSUE</td>
<td>RESPONSE</td>
<td>ADDRESSED IN SIA</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>5.3.2 There should be equitable distribution of job opportunities across areas and colour lines. The project will need to ensure that it reflects local demographics in its employment.</td>
<td>A comprehensive strategy for recruitment and placement of personnel within the zone is being developed by the CDC to manage the requirements and expectations of both investors and job-seekers. These policies will be based on agreements with organised labour, and will take account of existing South African labour legislation as well as industry-specific agreements.</td>
<td>Section 3.4.3 Appendix 2a, 2b</td>
</tr>
<tr>
<td>5.3.3 How will Uitenhage benefit from the project and how would you ensure that not only Motherwell residents benefited from job opportunities.</td>
<td>There is no general restriction on the employment of woman in an aluminium smelter. The smelter would employ all ages of people eligible, legally, to work. The project would strictly comply with national and international regulations with regards to child labour.</td>
<td>Section 3.4.3 Appendix 2a, 2b</td>
</tr>
<tr>
<td>5.3.4 Will the project employ woman, and what will be the targets for gender equity?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.5 The employment of historically disadvantaged individuals is supported.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.6 What will be the age limit for employment? There is a concern about the number of multinational companies that have been caught practicing child labour in the country.</td>
<td>The socio-economic specialist study will describe the training plan which is being developed by the CDC in conjunction with the Department of Labour and local training institutions and boards. Specific training programme would be implemented by Aluminium Pechiney for all categories of employee to meet both the technical and managerial skills required.</td>
<td>Section 3.4.3 Section 5.1.5 Section 5.2.4 Section 6.1.4 Section 6.2.4 Section 6.2.7 Appendix 2c.</td>
</tr>
<tr>
<td>5.4 Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4.1 Should the jobs be high-tech in nature, what training opportunities will there be for local historically disadvantaged individuals and does Pechiney have a programme geared towards empowerment and training of historically disadvantaged individuals?</td>
<td>The CDC is currently establishing exactly which skills are required for the various investments (including the proposed aluminium smelter), and determining the available skills base in the Eastern Cape. A training plan is being developed by CDC, in conjunction with the Department of Labour and local training institutions and boards, in order to ensure the right skills are available to investors in the zone and port.</td>
<td>Section 3.4.3 Section 5.1.5 Section 5.2.4 Section 6.1.4 Section 6.2.4 Section 6.2.7 Appendix 2c.</td>
</tr>
<tr>
<td>5.4.2 Are there enough training facilities in the Metro to meet the technical training expertise requirements of the development? How will the shortage of skills in the region be addressed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4.3 When training is provided it should reflect a bias towards institutions that have been historically disadvantaged.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISSUE</td>
<td>RESPONSE</td>
<td>ADDRESSED IN SIA</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
<td>------------------</td>
</tr>
<tr>
<td>5.4.4</td>
<td>Training should target the disadvantaged community. The Department of labour and CDC need to develop a training plan based on the skills required for the development.</td>
<td>Section 3.4.3&lt;br&gt;Section 5.1.5&lt;br&gt;Section 5.2.4&lt;br&gt;Section 6.1.4&lt;br&gt;Section 6.2.4&lt;br&gt;Section 6.2.7&lt;br&gt;Appendix 2c.</td>
</tr>
<tr>
<td>5.4.5</td>
<td>There is a need to educate taxi drivers on the government's recapitalisation programme for them to enhance their opportunities at Coega.</td>
<td>The CDC is responsible for coordinating the overall transport services for the IDZ. This comment will therefore be brought to the attention of the CDC.</td>
</tr>
<tr>
<td>5.4.6</td>
<td>There is a need to train emerging contractors on the employment process.</td>
<td>CDC is responsible for compiling a register of eligible service providers for the IDZ, including emerging contractors. This comment will therefore be brought to the attention of the CDC.</td>
</tr>
<tr>
<td>5.4.7</td>
<td>Planning is required to ensure that the Metro is ready and that it benefits from the project and from the expansion of the skills base.</td>
<td>This comment has been noted.</td>
</tr>
</tbody>
</table>

### Potential for SMME Development

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>RESPONSE</th>
<th>ADDRESSED IN SIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5.1</td>
<td>Efforts should be made to involve SMME's in the project, as this will bolster the local economy. To what extent is this planned for in the project?</td>
<td>These comments have been noted. Opportunities for supporting SMMEs will be assessed in the socio-economic specialist study and recommendations provided.</td>
</tr>
<tr>
<td>5.5.2</td>
<td>SMMEs need to be empowered and be made aware of opportunities. They are often not aware of the opportunities that are there to assist them.</td>
<td>SMMEs have the opportunity to register as service providers with the CDC.</td>
</tr>
<tr>
<td>5.5.3</td>
<td>Motherwell Community Development Forum has small businesses affiliated to it; these have to be looked after.</td>
<td></td>
</tr>
<tr>
<td>5.5.4</td>
<td>Will there be an opportunity of truck and bakkie (small pickup vehicle) owners to offer their services to Pechiney?</td>
<td>The socio-economic specialist study will describe opportunities for promotion of SMMEs as a result of the smelter project, including outsourcing of transport services.</td>
</tr>
</tbody>
</table>

### Social Investment Programme

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>RESPONSE</th>
<th>ADDRESSED IN SIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.6.1</td>
<td>Aluminium Pechiney's social investment programme will have to be needs driven and responsive. It will have to be visible and one that the recipients of the programme can relate to. Its primary objectives should be to eradicate poverty and address unemployment.</td>
<td>This comment has been noted. Aluminium Pechiney is committed to developing a corporate social responsibility/investment programme. Aluminium Pechiney's social responsibility programme would cover matters such as: partnerships in education programmes; SMME development; community foundation projects; charitable health &amp; welfare projects; &amp; biodiversity conservation. Section 5.2.7</td>
</tr>
<tr>
<td>5.6.2</td>
<td>Aluminium Pechiney should have a social responsibility to promote recycling, particularly of aluminium, in the Nelson Mandela</td>
<td>Aluminium Pechiney is committed to developing a corporate social responsibility/investment programme linked to the smelter project. They level of</td>
</tr>
<tr>
<td>ISSUE</td>
<td>RESPONSE</td>
<td>ADDRESSED IN SIA</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Metropolitan Municipality if the proposal were approved.</td>
<td>Community support for promotion of recycling aluminium products can be assessed in development of this programme. However, it must be noted that aluminium recycling is a completely different business from primary smelting, with few synergies between these activities.</td>
<td></td>
</tr>
</tbody>
</table>

5.7 Impact on Tourism

5.7.1 The Motherwell community has a lot of tourism potential and there are a number of projects that are being planned for this area, will this project not impact negatively on these initiatives?

The socio-economic specialist study will assess the potential impacts of the project on the tourism potential of the Motherwell community.

Section 3.4.8
Section 5.1.6
Section 5.2.6

5.8 In-migration

5.8.1 In-migration to the Metro is expected. What plans are there in place to manage this?

The issue of in-migration related to the establishment of the Coega IDZ was assessed in the Coega Rezoning EIA. In so far as it relates to Aluminium Pechiney, the issue of in-migration will be assessed in the socio-economic specialist study.

Section 3.4.2
Section 5.1.9

5.9 Construction Village

5.9.1 Will there be a construction village at Coega or will workers have to commute? How will the construction village impact on Motherwell and Wells Estate? Will people at the construction village be allowed visitors?

As far as possible local labour will be used. A construction village for the Aluminium Pechiney smelter project is, however, planned for Well's Estate to house that component of the workforce that cannot be sourced locally. More detail on issues related to the construction village will be supplied in the socio-economic specialist study.

Section 3.4.4
Appendix 2:
CDC Labour and Business Management Services

APPENDIX 2a
- Principles of the Labour Management Services -

APPENDIX 2b
- Labour Demand Services -

APPENDIX 2c
- Training Demand Services -
Appendix 2a, 2b and 2c contain excerpts from the CDC’s Labour and Business Management Services. The respective sections were directly extracted from LBMS document provided to Aluminium Pechiney on 4 June 2002. The sections are included in these appendices as a reference for Section 3.4.3.
APPENDIX 2a
CDC Labour and Business Management Services

- Principles of the Labour Management Services -
2.1.2.3 Principles

- The Labour Supply process shall form part of an overall Labour Management and Business System being established to ensure a coherent and consistent system for the supply and demand of labour in the COEGA IDZ.
- The process of registration, screening and developing candidates shall be governed by current legislation.
- The process shall provide equal and fair opportunity for all individuals currently unemployed in the region (NMMM) to be involved in the development of the COEGA IDZ through training, assessment and employment by contractors.
- The skills, knowledge and experience of candidates shall be developed where not currently in place. This shall be guided by the National Qualifications Framework and the requirements of the South African Qualifications Authority and the relevant Sector Education and Training Authority (SETA).
- Priority shall be given to unemployed individuals residing in the region (NMMM). The specific percentages of labour to be employed as well as percentage targets for other selection priorities such as gender, age, disability, experience, training and employment shall be set through the Labour Consultative Forum.
- Emphasis shall be placed on redressing the past inequalities.
- Provide open communications to all stakeholders and individuals without compromising the integrity of the process.
- Provide a credible and legitimate process that shall be open to rigorous scrutiny and audit.
- The following objectives are outlined as part of the implementation plan:
  - To develop a labour supply process that integrates with the labour demand process within the Labour and Business Management System.
  - To manage and control the call for Registration of Individual Interest in a manner that meets with the Client’s labour management objectives and requirements.
  - To establish an IT system for the data capturing and information processing for the duration of the labour management process.
  - To establish labour supply infrastructure and resources for the data capture centre.
- To establish and maintain a filing and storage facility that aligns with the data base system, and tracks and records all details of individuals employed in the COEGA IDZ and Deepwater Port (Coega Development Corporation, 2002).
APPENDIX 2b

CDC Labour and Business Management Services

- Labour Demand Services -
2.2 Labour Demand Services

2.2.1 Definition, Scope and Objectives

2.2.1.1 Definition

Labour Demand Services means those services and processes that are related to the determination of the labour requirements of the contractors per job title, per specific job description on a particular contract. This definition further includes the consolidation of the labour requirements of all contractors working in the COEGA IDZ and Deepwater Port so that the skills gap analyses are compiled taking cognisance of labour/skills requirements for the entire zone.

2.2.1.2 Scope

Labour Demand Services comprises of two parallel processes – the one being the estimation of the labour requirements, per job title (as per the ZLA/PLA per contract by the LBMS Consultant using prior experience (this may take place as early as the preliminary design phase) whilst the other entails the obligation of each tenderer to submit his labour requirements through the use of the standard ‘labour requirement sheet’ as part of the tender requirements.

LBMS Consultant Estimations

The LBMS Consultant uses prior experience to make educated estimations based on the design documentation and the tender/contract requirements. (There is a direct link between the LBMS Consultant team responsible for the SMME Development and the Technical and Planning team of the CDC. The focus of this link is further explained in the section on the SMME services but for the purposes of this section it suffices to point out that this link is critical in that it informs the LBMS Consultant as to the level of competence and numbers of labour required prior to the RFT process. This step further enhances the Training Management function as extended time periods are required for the training and development of those skills not available from the catchment area (specific reference is made here to skills levels 2 and 3 and further advanced).

This first process advises the onset of the second phase of the labour supply process where the skills gap analysis is done using the LBMS Consultants estimations and the ‘best-fit’ report from the LBMS System. This process results in the ‘electronic Zama-Zama’ or ‘best fit’ reports being drawn from the LBMS System as the onset for the Training Management Services Phase. It is important to note that the ‘best fit’ or ‘ZAMA-ZAMA’ selection process is in fact a random selection process that adheres to specific selection priorities as agreed upon through a protracted process of negotiations and discussions with established structures. (The selection priorities cover issues such as locality, gender, age, experience versus no experience, training versus no training and specific targets for the recruitment of
disabled people where feasible. These selection priorities are embedded in the SQL query and ensure that the priorities as identified can be met).

**Contractors’ Tender/Contractual Obligations**

Due to the nature of the construction and engineering industry, it is standard that the contractors calculate their labour requirements based on their historic labour productivity and the requirements are normally presented in the format of a man-hour histogram for the duration of the contract. On the COEGA IDZ, as has become best practice elsewhere, each contractor has the contractual obligation to submit their labour requirements to the detailed level as set out in the IR Policy/ZLA/PLA.

Contractors are further obligated to submit updated labour requirements at contract award, during the ‘kick-off’ meeting on site and then thereafter as and when the requirements already submitted, have changed. Contractors are further obliged to submit requests for labour at least 7 to 14 days prior to the mobilisation date for such labour as confirmation of the requirements.

The Labour Coordinator of the LBMS Consultant then makes the necessary arrangements to ensure that each contractor is informed, in writing of the date, time and venue at which the contractor has to select and collect successful applicants from.

The two processes described above gives the best indication of labour requirements as well as ensure that the Training Management process is planned in a pro-active fashion with ample time to ensure that the labour requirements of the contractors are met on time.

**2.2.1.3 Objectives**

- Accurate, job title specific labour requirements per contractor, contract and project.
- Consolidated Labour requirements per project and for the IDZ overall.
- Integration of the Labour supply and labour demand processes to provide accurate Skills Gap Analysis on a rolling horizon.
- Provision of the right labour, having right skills, competencies, physical attributes and attitude to all contractors in the COEGA IDZ (Coega Development Corporation, 2002).
APPENDIX 2c
CDC Labour and Business Management Services
- Training Demand Services -
2.3 Training Management Services

2.3.1 Definition, Scope and Objectives

2.3.1.1 Definition

Training Management Services is defined as the management system, processes and procedures relating to the overall Human Resource provision for the construction and maintenance of the COEGA IDZ and Deepwater Port. The Training Management Services thus include all the activities related to the labour forecasts per Job Title, per contract and project, the consolidation thereof amongst all projects and contracts, scheduling of training and assessment activities, procurement of training providers, management and moderation of the training implementation, certification of all trainees, facilitation of contractor selection, placement, take-on, induction, mobilisation, de-mobilisation and log book provision of all labour for all contractors.

2.3.1.2 Scope

The provision of training management services can be split into the following main sections:

- Skills Gap Analysis
- Training scheduling and programming
- Training Provider Procurement
- Training Implementation
- Training moderation
- Contractor labour selection
- Labour mobilisation and de-mobilisation

The skills gap analysis is done using information of the LBMS System on the one hand (availability and levels of skills per job title, description, skills and competency level and category – all depicted in the wage schedule within the IR Policy and ZLA) and the consolidated requirements of all contractors at a particular point in time. The skills gap analysis provide the LBMS Consultant with the total estimated labour requirements per contract, per project on a rolling horizon for all the job titles depicted in the IR Policy and ZLA.

At the completion of the skills gap analysis, the procurement of training providers commence in tandem with the scheduling and programming of the training provision. A preliminary Training Program for the PECHINEY Smelter is attached (to the LBMS) as an example.

The schedules forms part of the RFTs for training providers and is used as the baseline from where the training providers will plan and schedule their own
activities. It must be noted that the LBMS System incorporates the entire training administration system and that all training implementation, tracking of moderation and final assessments is done from a central control point by the LBMS Consultant.

Following the skills gap analysis the LBMS System is used to provide a ‘best fit’ list of candidate labour taking due cognisance of the natural rates of attrition as well as ensuring that the contractual obligations of the training providers and contractors will be satisfied in the assurance that there will always be slightly more labour available for each selection than that required by them.

Training Implementation follows the award of the Training Provider Contracts and takes place in the training venues of the successful training providers such as at the existing facilities of the East Cape Training Centre. The LBMS Consultant follows the standard approach to the procurement of Training Providers that is followed for the award of contracts in the construction industry. This process allows for competitive tendering and ensures that the best value for money is achieved for the client.

Each training provider, on award of a contract has to select their own trainees, using the screening procedures relevant to the specific job titles as per the Zone Labour Agreement. The LBMS Consultant does independent assessment and moderation at the training venues and retains the responsibility at all times for the provision of labour to the contractors, to the required standards, on time so that the contractors on site could do their own selection of labour as and when required.

Following the selection of the labour, the mobilisation of the labour is done with assistance from the LBMS Consultant in the form of central provision of take-on forms, central induction in safety and other zone specific matters and badging. The contractor will be tracked for compliance on all critical matters with specific focus on adherence to negotiated labour agreements and structures.

2.3.2.3 Objectives

- Consistent application of quality standards in the provision of training.
- Optimum use of money in the planning, scheduling and implementation of training initiatives.
- Introduction of program based work place skills development plans for all contractors operating in the COEGA IDZ and Deepwater Port.
- Linkage of on-site and off-site training and development with the RPL initiatives of the SETAS.
- Provision of the right labour, having the right skills and competencies, at the right time and price to contractors in the COEGA IDZ.
• Tracking, monitoring and auditing of all Training Management Services and related activities on behalf of the COEGA IDZ, investors and contractors.

• Consistent application of the Occupational Health and Safety Act during all activities under the control of the LBMS Consultant inclusive of the implementation and maintenance of consistent safety practices in training implementation and induction activities.

• Cooperation at all levels with the Department of Labour, the SAQA and relevant SETAS during the execution of Training Management activities (Coega Development Corporation, 2002).
APPENDIX 3

Job Seekers’ Registration Form
JOB SEEKERS’ REGISTRATION FORM
FOR INDIVIDUALS INTERESTED IN WORKING ON THE COEGA PROJECT

The COEGA Development Corporation (CDC) is facilitating the development of a list of individuals who are interested in applying for work with future contractors, sub-contractors, and employers operating in the IDZ and the Deepwater Port.

To be included on the list so that you might be considered by future employers, you have to register by completing the attached form and submitting it to CDC by post.

PLEASE NOTE

- This registration form is NOT FOR SALE. It is available FREE OF CHARGE to any individuals wishing to be included in the Register of Individuals.
- This registration form is not an application for work.
- You should complete this form if you would like to be considered for employment on the Coega IDZ and Deepwater Port.
- This form is only to register the interest of individuals. Inclusion of your personal details in the Register Form is not a guarantee that you will be given a job on the Coega Project.
- You must complete all the sections of this form.
- You must attach copies of your IDENTITY DOCUMENT (ID), as well as copies of certificates of any EDUCATION (schooling, college, technikon & university) and TRAINING you have successfully completed, as verification of the correctness of the information.
- Please make sure that all your details are correct as the CDC will not take responsibility for incorrect information.
- The CDC will be checking the information provided by you. Any false information provided on this form will affect your registration.
- You must POST this form to the address at the bottom of this page. ONLY posted registration forms will be accepted. DO NOT attempt to hand deliver or fax your registration form to CDC or the Department of Labour or any other organisation. Registration Forms that are hand delivered shall be destroyed.
- You only have to fill in one registration form.

TO REGISTER YOUR INTEREST

USE THE APPLICATION FORM AT THE BACK OF THIS PAGE. Make sure that all your details are correct, as CDC will not take responsibility for incorrect information.

REGISTRATION FORMS

Additional copies of this registration form will be available in the newspaper, The Department of Labour Offices, and other centres (to be advised through the newspapers and radio).

Complete the registration form, attach the copies of required documents and POST it to the address below:

JOB SEEKERS’ REGISTRATION FORM
PORT ELIZABETH
6102.
## Job Seekers' Registration Form

### Biographical Details

<table>
<thead>
<tr>
<th>ID Number</th>
<th>Surname</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>(Please attach copy of your ID document)</td>
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<table>
<thead>
<tr>
<th>First Name(s)</th>
<th>Race (for state purposes) (Please tick one)</th>
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</thead>
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<td></td>
<td>Black</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
</tr>
<tr>
<td></td>
<td>White</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Residential / Street Address</th>
<th>City / Town</th>
<th>Postal Code</th>
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<table>
<thead>
<tr>
<th>Telephone No. (code first)</th>
<th>Cell</th>
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<td>0</td>
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</table>

### Schooling and Other Education

<table>
<thead>
<tr>
<th>Last School Attended</th>
<th>Highest Std / Std Passed</th>
<th>Last Year of School</th>
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<td>2</td>
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### Working Experience

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<th>Job Title</th>
<th>From (year)</th>
<th>To (year)</th>
<th>Company Contact Number</th>
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</tbody>
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|                           |           |           |             |           |                        |

### Vocational Training Received

<table>
<thead>
<tr>
<th>Name of Training Provider</th>
<th>Courses Completed</th>
<th>From (year)</th>
<th>To (year)</th>
<th>Trainer</th>
<th>Contact Number</th>
</tr>
</thead>
<tbody>
<tr>
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|                           |                   |             |           |         |                |

|                           |                   |             |           |         |                |

### Declaration

I have read and understand the information in this form (both pages). I hereby confirm that the above information is true and correct. I understand that incomplete and incorrect or false information could result in me not being considered for this registration of interest.

Signed: ____________________________

Date: ____________________________
APPENDIX 4

Registration of Interest - Business
REGISTRATION OF INTEREST BY BUSINESSES TO SUPPLY GOODS AND SERVICES TO THE COEGA PROJECT

The COEGA Development Corporation is developing a database of businesses interested in securing commercial opportunities on the Coega Industrial Development Zone and Deepwater Port.

If you are interested in providing goods and services that might be required from time to time for the development of the Coega Industrial Development Zone and Deepwater Port, to complete this form in order to be included in the Register of Businesses.

PLEASE NOTE

1. This registration form is NOT FOR SALE. It is available FREE OF CHARGE to any business wishing to be included in the Register of Businesses.
2. You should complete this form if you are interested in participating in tender calls and requests for proposals to provide goods and services to the Coega IDZ and Deepwater Port.
3. This form is only intended to register your interest and is NOT a tender call or invitation for proposal or quotation request.
4. The information you provide about your business will be included in the COE’s Register of Businesses.
5. The COE intends to use this information as part of its procurement process.
6. Inclusion of your business’s information in the Register of Businesses should not be construed as a guarantee that your business will benefit from tender calls, requests for proposal, or any procurement methods adopted by the COE.
7. You are advised to complete all the sections of this form which are relevant to your business.
8. Failure to provide all the relevant information and/or the provision of false information could be detrimental to your business securing future commercial opportunities on the Coega Project.
9. You are required to read and acknowledge the declaration on the last page of this registration form.
10. Copies of this form are available from various business, support and employment organisations. You may also print a copy of the form from the COE’s website at http://www.coega.co.za/registration.

There are two methods of registration, namely:

INTERNET REGISTRATION

• Open http://www.coega.co.za/registration.html
• Read the information sheet
• Complete the registration form
• Submit the completed registration form electronically

MANUAL REGISTRATION

• Complete the registration form
• Fax the completed registration form to the Coega Development Corporation on (061) 599 0715 or mail it to: Coega Development Corporation, Postnet Suite 204, Private Bag 13130, Hustwood 6021.
### Business Registration Form

**Business Details**

- **Business Name**
- **Notification Company (if applicable)**
- **E-mail**
- **Registered Physical Address**
- **Domicile**
- **Dial**
  - **City (if any)**
  - **Province**
- **Registered Postal Address**
  - **City (if any)**
  - **Province**
- **Telephone/Connect**
  - **Code**
  - **Number**
- **Business/Other Details**
- **Fax Number**
  - **Code**
  - **Number**
- **Business/Other Mailing Address**
  - **Code**
  - **Number**
- **Complimentary Post box**
  - **Code**
  - **Number**
- **Complimentary Post box's Post box**
  - **Code**
  - **Number**
- **Complimentary Post box's Post box's E-mail**

### Overview of Business Operations

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>Private Company</th>
<th>Public Company</th>
<th>C Land Cooper Co-op</th>
<th>G Land/Police</th>
<th>Post office</th>
<th>To suit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Construction</td>
<td>Multi-Area</td>
<td>Branch</td>
<td>Consulting</td>
<td>Building</td>
<td>Earth Moving</td>
<td>Other</td>
</tr>
<tr>
<td>Building Contract</td>
<td>Design</td>
<td>Paving</td>
<td>Paving</td>
<td>Roofing</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>Design</td>
<td>Piping</td>
<td>Piping</td>
<td>Electrical</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Mechanical/Steel/Plumbing</td>
<td>Design</td>
<td>Consulting</td>
<td>Consulting</td>
<td>Mechanical</td>
<td>Other</td>
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<tr>
<td>Professional Services</td>
<td>Financial</td>
<td>Legal</td>
<td>Engineering</td>
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---

**Specialist Study on Social Impact**

**Aluminium Pechiney Coega EIA**
**Specialist Study on Social Impact**

**Aluminium Pechiney Coega EIA 101**

### Business History

- **Type of business:**
  - Your current business is located in [insert location].
  - The business is established in [insert date].
  - The business is registered as [insert registration type].

- **Main activity:**
  - [Insert main activity].

- **Employees:**
  - [Insert number of employees].

- **Revenue & Expenses:**
  - Revenue: [Insert revenue amount].
  - Expenses: [Insert expenses amount].

- **Participation:**
  - Participation of your business is [insert percentage]%. A summary of your business in the [insert relevant category].

- **Future Plans:**
  - [Insert future plans].

### Employee Statistics

- **Number of Employees:**
  - Total: [Insert total number of employees].
  - [Insert categories of employees].

- **Physical Condition:**
  - [Insert physical condition].

- **Operational or Technical Employees:**
  - [Insert number of operational or technical employees].

### Manufacturing

- **Main Activity:**
  - Manufacturing.

- **Location:**
  - [Insert location].

- **Employees:**
  - [Insert number of employees].

- **Operational or Technical Employees:**
  - [Insert number of operational or technical employees].

### Other

- **Business Objectives:**
  - [Insert business objectives].

- **Future Plans:**
  - [Insert future plans].
APPENDIX 5

Extract from the ‘Forensic Audit of the Coega Resettlement Process and its Impact on the Affected Parties’
The following is a verbatim extract from the ‘Forensic Audit of the Coega Resettlement Process and its Impact on the Affected Parties’ (CES 2001).

6. CONCLUSION AND RECOMMENDATIONS

The Coega resettlement process as it unfolded has resulted in some positive impacts for the resettled communities. Many of the resettled households now have access to housing and facilities (such as water, sanitation, transport) which are of a better quality than in the original communities. An Integrated Development Plan has been prepared by the NM3 for their resettlement area, which is expected to address their needs for services, hopefully in the medium term future. However, the absence of a comprehensive relocation and compensation plan prior to the commencement of the resettlement process has resulted in certain negative impacts on the resettled communities and has left those engaged in the process vulnerable to criticism.

The following negative impacts were identified:

- People with an economically weak status (a high percentage of unemployed people) have been moved from a rural area, where they had developed a survival strategy, to an urban environment. This may result in a loss of access to certain resources such as land, firewood, livestock, vegetables and social support. In the urban area, the households will incur new costs such as water and electricity charges. This change in life style, coupled with a lack of financial means to survive in an urban setting, may lead to marginalisation of the resettled people, resulting in feelings of disempowerment and in decreased physical and mental well-being. It needs to be acknowledged, however, that due to the contributions of CDC, people were relocated in Phase I Wells Estate, instead of Phase II or III, which provided them with benefits, above those of a normal RDP housing development.

- From the survey it is clear that the quality of the houses that were built for the resettled people do not meet the people’s expectations. The houses demonstrate many of the problems and characteristics associated with low cost housing.

- The controversy that has arisen around the resettlement between CDC, the Municipality and various interests groups has led to social disarticulation amongst the affected people, breaking up the Coega community and leading to various tensions within the resettled community.

- Due to the absence of a survey of the impacts on each household, it is impossible to assess the degree of impact for each of the households. As a result some families may have benefited more, and others less from the
resettlement. In order to mitigate these impacts, the following recommendations are made:

- In order to ensure that people are not worse off after the relocation, an authority approved process needs to be established with the stakeholders (resettlers, CDC and NM3), which will involve establishing their current needs and expectations. On the basis of this information an ongoing development plan should be established, which ensures that people’s quality of life is equal and or better than before the resettlement. Economic upliftment needs to be an important focus of such a plan. The implementation of the plan should be the responsibility of both the CDC and NM3.

- Continued consultation and negotiation with the relocated communities is needed.

- The controversies between the various interest groups should be resolved, without further polarising groups within the affected people.

- A plan should be set up to monitor and evaluate people’s living conditions and to address unforeseen problems. This plan must include, but not be limited to, those issues raised in this report, and should involve ongoing independent review.

(Coastal and Environmental Services, 2001).