1. Description of Activity
The project entails the construction and operation of a primary aluminium smelter comprising of a single potline of 336 cells located in two potrooms. Approximately 500 000 tons of aluminium metal will be produced annually using the alumina reduction electrolysis process.

The smelter will be operated with new generation smelting technology (AP50), developed by Aluminium Pechiney and will consist of three major process components namely:
- A single potline with 336 pots (electrolytic cells);
- A carbon plant and rodding shop for the production of carbon anode blocks; and
- A casthouse for the casting of aluminium ingots;

Other facilities associated with the aluminium smelter include:
- An electrical substation on the site to provide power to the smelter;
- Facilities for materials handling and storage including storage silos for the storage of raw materials (alumina and petroleum coke);
- Loading and unloading equipment at the port.
- A conveyor that will be used for the transport of alumina and petroleum coke from the harbour to the smelter.

The total area of the site that will be occupied by Aluminium Pechiney is 120ha. 50 ha of the 120ha will consist of buildings and other hardened surfaces such as roads, parking and other paved areas. The different components and their location in relation to each other within the smelter site are depicted in figure 1.
Figure 1: The different components of the smelter and their location in relation to each other

THE POTLINE

The potline will consist of 2 elongated potrooms measuring 1200m x 30m parallel to each other. Each room will house 168 pots aligned sequentially in two groups of 84 pots, electrically connected to each other. As mentioned the potline will have a total of 336 pots. Each one of the pots represents a large electrolytic cell (based on pre-baked anode cell technology) lined with conducting carbon blocks and insulating bricks (these make up the cathodes). The pot is supported by a steel-reinforced structure that includes the anode system, cathode shell, a hooding system and an alumina supply hopper.

The cathode assembly is contained within a rigid shell containing carbon blocks and sealed steel bars that conduct the current. Insulation is provided by layers of refractory bricks. Carbon anodes are used to conduct electricity into the pots. There are 24 anode assemblies on each pot, 12 on each side. The anode blocks are consumed during the smelting process.

An electric current (DC) is passed sequentially (in series) through the line of electrically connected pots. Inside the pot the alumina is automatically fed at several points on the axis of the pot and dissolves in a molten bath of sodium aluminium fluoride (cryolite). The direct current causes the alumina to separate into aluminium and oxygen through the process of electrolysis while the heat generated maintains the molten bath at approximately 950°C. The aluminium is tapped periodically by vacuum suction.
Two Gas Treatment Centres (GTC’s) are associated with the potline. These are positioned between the potrooms and receive emissions from the pots. The GTC’s are dry scrubbing units that have the primary role of recycling near the total of fluoride and dust captured from the pots. The emissions are treated in the GTC to extract the fluoride using alumina as a dry scrubbing agent. The fluorinated alumina is then redirected into the pots.

THE CARBON PLANT AND RODDING SHOP

The anodes used to conduct electricity into the smelting pots are gradually consumed during the smelting process and are replaced on a rotating schedule. Anodes are manufactured on site in a carbon plant by means of a three-stage process:

- **Paste Plant** – Green (unbaked) anodes are produced by crushing petroleum coke and recycled anode butts (the remainder of the mostly consumed anodes), mixing it with liquid pitch to form an anode paste and compacting the paste into anode blocks.
- **Anode Baking Furnace** – The anodes are baked at approximately 1100°C in an oil-fired furnace for several weeks in order to give them mechanical and conductivity properties.
- **Roddng House** – After baking, the anodes are attached to rods by means of cast iron in the rodding house and then transferred to the storage facility from where it will be transported to the potline when needed.

Associated with the paste plant is a Pitch Fume Treatment Centre (PFTC). This is a dry scrubbing unit that treats poly-aromatic hydrocarbon (PAH) containing tar and dust emissions from the paste plant. Particulate coke is used as the scrubbing agent and this enriched coke is recycled into the paste plant.

Associated with the baking furnace is a Fume Treatment Centre (FTC) that extracts and recycles fluoride, PAH containing tar and dust emissions created by the anode baking process. The FTC is a dry scrubbing unit that utilizes raw alumina as the scrubbing agent with the resultant fluoride rich alumina being recycled into the pots. This process results in destruction of PAH.

THE CASTHOUSE

The molten aluminium is extracted from the pots by a vacuum and siphoned into large ladles. The ladles are transported to the casthouse by means of specialized vehicles. At the casthouse the aluminium metal is siphoned from the ladles into holding furnaces in preparation for casting. The aluminium is then cast into ingots and bundled for shipping.

MATERIALS HANDLING AND STORAGE

In the harbour fresh alumina and petroleum coke will be unloaded by vacuum onto an enclosed conveyor system. The material will be transported to the smelter via the closed conveyor system where the alumina will be stored in sealed domes and the petroleum coke in an A-frame shed. Aluminium fluoride and liquid pitch will be transported from the harbour to the smelter by truck.
Dedicated port facilities will be established for vacuum unloading of alumina and petroleum coke. Liquid pitch will be unloaded at a dedicated unloading station and stored at the port prior to transfer to the smelter. A metal storage site will be established adjacent to the port for the interim storage of aluminium ingots prior to export loading.

**ELECTRICITY SUPPLY**

Electricity will be provided by means of 3 x 275 kV transmission lines (operated as 132 kV distribution lines) from the Grassridge substation to the smelter site. A dedicated electrical substation will be built at the smelter where the current will be converted from AC to DC prior to it being used in the smelting process.

**LISTED ACTIVITIES**

Construction and operation of the smelter will involve a number of activities listed in terms of section 21 of the Environment Conservation Act, Act 73 of 1989. Of these the primary activity associated with the operation of the smelter is activity number 9 as listed in Schedule One published in Government Notice R1182 of 5 September 1997, being the conducting of processes that are scheduled processes under the Second Schedule of the Atmospheric Pollution Prevention Act (APPA), Act 45 of 1965.

The following processes that are scheduled under the Second Schedule of APPA will be conducted as part of the normal operation of the smelter.

The primary scheduled process that will be conducted is:

- **Aluminium processes** (process 32 in the Second Schedule to APPA):
  Being processes in which (a) aluminium is produced from its oxide by means of an electrolytic furnace.

Associated scheduled processes listed in terms of APPA that will be conducted are:

- **Tar processes** (process 16 in the Schedule): Coal-tar pitch is heated to create binder for the carbon anode blocks in a process that attains temperatures of above 114°C. Pitch is also heated during transportation, handling, storage and transfer in order to keep it in a liquid state.

- **Hydrofluoric acid process** (process 21 in the Schedule) and **Fluorine processes** (process 24 in the Schedule): The smelting process results in the production and release of gaseous and particulate fluoride compounds, including both salt and acid components.

- **Gas, coke and charcoal processes** (process 34 in the Schedule): Being processes in which:
  (c) Coke is produced – the smelter requires the coking of coal tar pitch when green anodes are baked at above 1100°C.
  (d) Gases produced are subjected to purification processes.

Other activities listed in terms of section 21 of the Environment Conservation Act, Act 73 of 1989 that are associated with the construction and operation of the smelter are:

- The construction and operation of an electrical substation (listed as number 1(a));
- The transportation and storage of hazardous substances (listed as number 1(c));
- Construction of dams (listed as number 1(j)); and
- The storage of waste on site at a waste transfer site (listed as number 8).
Hazardous substances that will be transported, stored and used on site include but are not limited to the following:
- Liquid pitch
- Heavy furnace oil (HFO)
- Diesel
- Petrol

2. Location of Activity
The Aluminium Pechiney smelter will be located in Zone 5 of the Coega Industrial Development Zone and within the area identified as the metallurgical cluster. Refer to figure 2 in this regard. The site is located on the farm Swartekoppen 302 and lies due north of the existing Markman Industrial Area, east of the Coega River and west of Coega Kop between the N2 and the R334.

Figure 2: Location of the smelter site

3. Contact Details of Applicant

Name: Aluminium Pechiney
Address: Aluval, Centr’ Alp
         BP 7
         38341 VOREPPE Cedex
         France

Contact Persons: Mr. Warren Brooks
                Mr. Jean-Luc Faudou

Telephone: +33 476 578565
Fax: +33 680 599669
4. Contact Details of Consultant

Name: CSIR
Contact Person: Mr. Paul Lochner
Address: P.O. Box 320
Stellenbosch
7599
South Africa

Telephone: +27 21 8882486
Fax: +27 21 8882693

5. Details of Site Visit

The general area and site is well known to officials from this office as they participated in the assessment and review of the Coega IDZ Rezoning and Ngqura Harbour Environmental Impact Reports.

Messrs Andries Struwig and Leon Els and Ms Nosipho Jezile from DEAE&T participated in a study tour for authorities to the Aluminium Pechiney smelter at Dunkirk in France during 12 to 15 November 2002. During this visit the management and operation of an aluminium smelter were examined and verified with reference to the information and assessments contained in the Final Environmental Impact Report and the Specialist Studies undertaken as part of the EIR. Discussions also took place with the local authority in whose area of jurisdiction the Dunkirk smelter is located.

In addition Andries Struwig visited the site where the aluminium smelter will be constructed in the Coega IDZ, on 29 November 2002. On 5 December 2002 Andries Struwig again visited the site, this time in the company of Warren Brooks and Roland Pesch from Aluminium Pechiney.

6. Decision

Authorisation is granted subject to the conditions set out in Section 8.

7. Duration of Authorisation

- Construction of the aluminium smelter to commence within one calendar year of the date of issue of the Record of Decision.
- Construction to be completed within 42 months of commencement.
- Conditions relating to the operation of the project are valid for the lifetime of the project.
8. Conditions of Authorization

8.1. General conditions

8.1.1. This authorization is for the activities as specified and described in section 1 of this Record of Decision. Any other development associated with this project and listed under section 21 of the Environment Conservation Act, Act 73 of 1989, is not covered by this authorization and must therefore comply with the requirements of the Act and Government Notice R1183 of 5 September 1997.

8.1.2. This authorization is subject to compliance with all other relevant legislation notably the provisions of the following:

- 8.1.2.3. Atmospheric Pollution Prevention Act, Act 45 of 1965;
- 8.1.2.5. Sections 20, 24 and 28 of the Environment Conservation Act, Act 73 of 1989 dealing with the storage, transfer and disposal of waste.

8.1.3. All environmental standards and guidelines for development in the Coega IDZ set by the Coega Development Corporation to be adhered to as far as reasonably practicable. This may not be limited to consideration of economic factors (including the continued viability of the aluminium smelter) only.

8.1.4. Any changes in the project that could have significant environmental impacts and that would differ from that which were authorised by DEAE&T to be submitted to DEAE&T for approval prior to such changes being effected.

8.1.5. The applicable conditions of this authorisation to form part of all contractors and sub-contractors conditions of contract.

8.1.6. A performance based requirement with regard to environmental impact management must be included in all contracts related to any activity of this authorization.

8.1.7. Aluminium Pechiney will be held liable in the event of non-compliance by any contractor implicated in this activity.

8.1.8. Compliance/non-compliance records must be kept and shall be made available on request from the authorities.

8.1.9. A detailed overall site layout plan to be submitted to DEAE&T for approval prior to construction commencing on the site.

8.1.10. Final, detailed design and layout plans to be submitted to DEAE&T upon request. General layout plans and detailed plans for all environmental installations to be submitted to DEAE&T prior to construction of such installations.

8.1.11. Aluminium Pechiney to implement an internationally recognized Environmental Management System (EMS) for all activities related to the
operation of the aluminium smelter including certification and accreditation of such a system.

8.1.12. The EMS to incorporate the conditions contained in this Record of Decision as well as the mitigatory measures contained in the Final Environmental Impact Report.

8.1.13. The EMS to be in place before start-up of the smelter and to be certified and accredited within a specified period subsequent to start-up, which period will be agreed upon with DEAE&T. For the purposes of this condition, start-up is defined as the period commencing with the first production of aluminium ingots and ending when all 336 electrolytic cells have been commissioned. Certification is to be retained by regular external audits.

8.1.14. A basic decommissioning plan to be compiled and submitted to DEAE&T before startup.

8.1.15. The decommissioning plan to be reviewed on a 5 year cycle during the operational phase and immediately prior to actual decommissioning taking place.

8.1.16. A health risk assessment in line with the requirements of the Occupational Health & Safety Act, Act 85 of 1993, to be completed and the findings of the hazard and operability (HAZOP) study undertaken by Aluminium Pechiney to be submitted to DEAE&T prior to the commencement of construction. The findings of this study must be incorporated into the final design and construction of the smelter.

8.1.17. The public to be kept informed with regard to environmental performance during the construction and operational phases of the project. Mechanisms to facilitate communication between Aluminium Pechiney and the public to be determined in consultation with DEAE&T and the CDC. Such measures may include reporting to the Environmental Monitoring Committee set up in terms of the Records of Decision for the rezoning of the IDZ and the construction of the Port.

8.1.18. No construction village to be established on the site and construction workers originating from areas other than the Nelson Mandela Metropolitan Municipality (NMM) to be housed in facilities provided for such by the CDC.

8.1.19. Copies of all permits/licenses issued to Aluminium Pechiney that have relevance to the environment, must be provided to DEAE&T.

8.1.20. The issuing of the authorization and Record of Decision to be advertised in all the newspapers used in the public participation process. Such advertisements to state at least the following:

8.1.20.1. That an authorization has been issued to Aluminium Pechiney to proceed with the construction and operation of an aluminium smelter in the Coega Industrial Development Zone;

8.1.20.2. That any appeals against the issuing of the authorization must be lodged with the MEC for Economic Affairs, Environment & Tourism at the address stipulated in section 10 of this Record of Decision within 45 days of date of signature of the authorization; and

8.1.20.3. Where copies of the authorization and Record of Decision can be viewed/obtained.
8.1.21. All registered Interested and Affected Parties to be informed that an authorization and Record of Decision has been issued and such notification to stipulate the information as set out in points 8.1.20.2 and 8.1.20.3.

8.1.22. A post construction environmental audit to be carried out and the report submitted to DEAE&T. This audit to, as a minimum, consider adherence to the relevant conditions contained in this Record of Decision and the stipulations of the Construction Environmental Management Plan.

8.1.23. Background monitoring of all environmental aspects identified in the various conditions pertaining to monitoring in this Record of Decision to commence within 3 months of the authorisation being issued.

8.1.24. DEAE&T reserves the right to impose additional conditions or requirements on the applicant in respect of impacts identified during the EIA process, or withdraw this authorisation, in the event that such impacts exceed its significance as predicted in the consultant’s Environmental Impact Report (EIR) and supporting documentation.

8.1.25. In the event of any dispute concerning the significance of a particular impact, the opinion of DEAE&T in respect of its significance will prevail.

8.1.26. Any recommendations contained in the final EIR and not implicitly covered under the conditions contained in this Record of Decision, are regarded as conditions in terms of this Record of Decision.

8.1.27. Any upgrading of the aluminium smelter is subject to a new application for authorization in terms of section 22 of the Environment Conservation Act, Act 73 of 1989. For the purposes of this condition upgrading is defined as the enlargement or expansion of the smelter, including its production capacity, but excluding regular or routine maintenance and the replacement of inefficient or old equipment, plants or machinery where such does not have a detrimental effect on the environment.

8.2. Conditions pertaining to construction

8.2.1. A detailed Environmental Management Plan relevant to the construction phase of the project to be compiled by Aluminium Pechiney and approved by DEAE&T before construction may commence.

8.2.2. An Environmental Control Officer (ECO) to be appointed by Aluminium Pechiney for the duration of the construction period. The ECO to oversee and monitor adherence to and implementation of the construction Environmental Management Plan as well as compliance with the relevant conditions contained in this Record of Decision.

8.2.3. The principle of Best Practicable Environmental Option to be applied to all technologies used/implemented during construction.

8.2.4. All preliminary work to be undertaken on the site by the CDC to be in accordance with the Environmental Management Plan/System implemented by the CDC as part of the Record of Decision issued for the rezoning of the IDZ.
8.2.5. The preliminary work referred to in point 8.2.4 to be limited to the following:
- Vegetation clearing;
- Top soil removal and storage;
- Installation of temporary storm water management facilities; and
- Temporary roads to provide access for the undertaking of the above activities.

8.2.6. Aluminium Pechiney to ensure that vegetation clearing and topsoil removal as contemplated in point 8.2.5 comply with the conditions contained in this Record of Decision.

8.2.7. The re-use of construction rubble for landscaping in accordance with condition 8.8.5 to be maximised.

8.2.8. Activities associated with the construction of the conveyor by Aluminium Pechiney, to be restricted to the footprint of the conveyor corridor as provided by Portnet and the CDC.

8.2.9. A Dust Management Plan to be compiled and implemented for the construction phase of the development and the following key issues to be included:
- 8.2.9.1. Avoidance of unnecessary removal of vegetation;
- 8.2.9.2. Routine spraying of unpaved site roads and access roads with water;
- 8.2.9.3. Limiting vehicle-entrained dust from unpaved roads through traffic control measures;
- 8.2.9.4. Re-vegetation of disturbed areas not occupied by plant infrastructure to take place as soon as possible (This must be done in accordance with the landscaping plan contemplated in section 8.8 of these conditions).

8.2.10. A Storm Water Management Plan to be designed and implemented for the construction phase of the development.

8.2.11. The Storm Water Management Plan to address the reduction of surface water run-off and resultant erosion.

8.2.12. A Waste Management Plan to be designed and implemented for the construction phase of the development.

8.2.13. A complete materials mass balance and waste inventory to be compiled as part of the Waste Management Plan contemplated in condition 8.2.11 and such to be submitted to DEAE&T and DWAF on a quarterly basis.

8.3. Conditions pertaining to materials handling

8.3.1. All storage facilities for hazardous substances to comply with the relevant SABS codes of practice for the handling and storage of hazardous substances, including adequate bunding of such facilities in order to contain possible spillages.

8.3.2. All materials handling equipment to be maintained and tested at regular intervals in order to ensure efficient and optimum operation.
8.3.3. All materials handling areas on the site to be under cover or enclosed and no external stockpiles of raw materials or by-products to be allowed on site.

8.3.4. Condition 8.3.3 does not apply to the transport of finished aluminium ingots from the casthouse to the harbour.

8.3.5. All materials handling areas to be bunded in order to contain possible spillages linked to materials handling and waste management.

8.3.6. A non-return valve to be installed on the liquid pitch pipeline between the vessel and the storage tanks to minimise the volume of possible spillage.

8.3.7. Concomitant to condition 8.3.6 a non-return valve to be installed on the pipeline/transfer system between the storage tanks and the vehicles transporting the liquid pitch to the smelter.

8.3.8. An oil spill response system to be employed in the event of a liquid pitch spill to limit the extent of the spill and contain the spill inside the port.

8.3.9. A detailed management and maintenance plan for the conveyor belt to be compiled and submitted to DEAE&T before the conveyor is commissioned. This plan must include amongst others:

8.3.9.1. Details of routine maintenance;

8.3.9.2. Actions to be taken in the event of spills occurring along the route of the conveyor belt;

8.3.10. A detailed incident detection and emergency response plan to be compiled and submitted to DEAE&T and DWAF prior to commissioning of the smelter. Such a plan must amongst others address:

8.3.10.1. A detailed site management plan and layout indicating loading areas, storage areas, all bunded areas and other measures aimed at the containment of spills.

8.3.10.2. Appropriate identification, classification, recording, clean-up and disposal of spillages;

8.3.10.3. Responsibilities for clean-up and procedures for the training of workers and contractors;

8.3.10.4. A programme for the audit of plant wide spillages.

8.4. Conditions pertaining to waste management

8.4.1. An efficient Waste Management Plan for the operational phase of the project to be designed and implemented in conjunction with the relevant authorities. Such a plan to take into account the following:

- White Paper on Integrated Pollution and Waste Management for South Africa;
- The National Waste Management Strategy documents;
- The Minimum Requirements for the Handling, Classification and Disposal of Waste and Hazardous Waste as well as the draft document covering the auditing of waste facilities, staff minimum qualifications and training requirements; and
- The draft Bill on Waste Management.
8.4.2. The Waste Management Plan must address amongst others:

8.4.2.1. The possible treatment of hazardous waste on site in order to allow recycling and/or possible disposal at a general waste disposal site (with specific reference to spent potlinings).

8.4.2.2. Minimisation of waste including recycling and re-use of waste.

8.4.2.3. Possible opportunities for recycling and re-use of waste by small, medium and micro enterprises (SMMEs).

8.4.3. The Waste Management Plan to be updated and resubmitted to the relevant authorities on an annual basis.

8.4.4. A complete materials mass balance and waste inventory for the operational phase of the project to be submitted to DEAE&T and DWAF prior to commissioning of the smelter.

8.4.5. The materials mass balance and waste inventory to be updated and resubmitted to DEAE&T and DWAF on an annual basis once the smelter is operational.

8.4.6. Aluminium Pechiney to compile and submit a detailed waste classification report before commencement of construction. Such report must:

8.4.6.1. Classify all waste generated by the smelter, including construction waste, in accordance with both the primary (SABS Code 0228) and secondary classification of waste as specified in the Minimum Requirements for the Handling, Classification and Disposal of Hazardous waste.

8.4.6.2. Indicate management endpoints such as recycling or disposal destinations of each individual waste stream.

8.4.7. Aluminium Pechiney to participate and to subscribe to the implementation of the NMMM Integrated Waste Management Plan.

8.4.8. All waste storage areas on site to be designed according to the Minimum Requirements for Waste Management and licensed in terms of section 20 of the Environment Conservation Act, Act 73 of 1989.

8.4.9. Construction of such waste storage areas may only commence once a license for such has been issued by DWAF.

8.4.10. Aluminium Pechiney to obtain clarity on the recycling, re-use or disposal of spent pot linings (SPL) and dross before the smelter is commissioned.

8.5. Conditions pertaining to emissions to the atmosphere

8.5.1. A comprehensive emissions management plan to be compiled to the satisfaction of DEAE&T and DEAT and implemented for the operational life of the smelter. Such a plan to consider:

8.5.1.1. The quantification of fugitive emissions;

8.5.1.2. The management and mitigation of emissions;

8.5.1.3. The minimisation of air pollutants through appropriate technology (including the possibility of using dry and wet scrubbing in series to remove SO₂ from the emissions)
8.5.2. A comprehensive staff training programme to be designed and implemented to ensure adherence to best practice operating procedures.

8.5.3. A monitoring programme to be designed and implemented in order to measure the operational efficiency of emission control/pollution abatement equipment. Such a plan must provide for:

8.5.3.1. The setting of targets for the operational efficiency of such equipment;

8.5.3.2. Maintenance and testing of emission control abatement equipment at specified intervals in order to ensure efficient and optimum operation.

8.5.3.3. Actions to be taken in the event of the operational efficiency falling below the target set for such.

8.5.4. The conveyor that will be transporting alumina and petroleum coke from the harbour to the smelter must be fully enclosed and appropriate dust abatement equipment must be installed at all transfer points along the route.

8.5.5. Particulate and other matter trapped in air pollution abatement equipment, such as bag filters, to be identified in the waste inventory and disposal thereof addressed in the waste management plan.

8.5.6. The petroleum coke used at the smelter must have the lowest possible sulphur content commercially available, but may not exceed 3% w/w.

8.5.7. The liquid pitch used at the smelter must have the lowest possible sulphur content commercially available, but may not exceed 0.5% w/w.

8.5.8. Heavy Furnace Oil (HFO) with the lowest possible sulphur content commercially available and that meet quality requirements must be used.

8.5.9. A chemical analysis of the HFO used at the smelter must be conducted at regular intervals and reported to DEAE&T and DEAT.

8.5.10. Gas to be used instead of HFO if and when a gas reticulation system becomes commercially available.

8.5.11. Investigate mechanisms for offsetting greenhouse gas emissions from the smelter itself, as well as from electricity generation for the smelter. Aluminium Pechiney should do the latter in conjunction with Eskom.

8.5.12. Concomitant to condition 8.4.11, Aluminium Pechiney to endeavour to reduce emission of greenhouse gases by the smelter in accordance to their membership of the Partnership for Climate Action and their action plan for reducing emission of greenhouse gases under this partnership.

8.5.13. Actions with regard to conditions 8.5.11 and 8.5.12 to be monitored with a view to continual improvement.

8.5.14. A comprehensive ambient air quality monitoring programme to be compiled to the satisfaction of DEAE&T and DEAT and implemented for the smelter by Aluminium Pechiney at least one year prior to commissioning (for baseline completion). Such a monitoring plan must:

8.5.14.1. Expand on the existing ambient air quality monitoring programme for the IDZ currently limited to SO$_2$, PM$_{10}$ and TSP.

8.5.14.2. Expand on the existing programme by the inclusion of the monitoring of gaseous and particulate fluoride;
8.5.14.3. Include the continuous monitoring of indoor fluoride as prescribed by the Department of Labour;

8.5.14.4. Include the monitoring of stack emissions of fluoride and gaseous fluorine;

8.5.14.5. Include the monitoring of fugitive emissions of fluoride;

8.5.14.6. Include the monitoring of total fluorine (gaseous and otherwise) on a continuous basis;

8.5.14.7. Include the monitoring of SO₂ on a continuous basis;

8.5.14.8. Include the monitoring of all other air pollutants associated with the operation of the smelter including PAH, PM₁₀, CO₂, CF₄ and C₂F₆;

8.5.14.9. Verify the emissions data used in the Air Quality specialist study.

8.5.14.10. Provide for the categorisation of any other plant emissions;

8.5.14.11. Indicate the frequency of monitoring intervals;

8.5.14.12. Involve key stakeholders; and

8.5.14.13. Provide for corrective measures where necessary.

8.5.15. Air and emissions monitoring equipment on the smelter site must feed back live to the smelter.

8.5.16. Monitoring data from off site monitoring stations to be used in the ambient air quality monitoring programme, to feed back live to the smelter where such an option exists.

8.5.17. If off site monitoring stations do not provide for live feed back to the smelter, Aluminium Pechiney must pursue the matter with the CDC and endeavour to incorporate such facilities into the functioning of such monitoring stations.

8.5.18. The results of the ambient air quality monitoring programme must be used for optimal production management and immediate corrective action when necessary.

8.5.19. Reporting to DEAE&T and DEAT with regard to air quality monitoring and management must:

8.5.19.1. Report on the failure of any equipment for a duration of 30 minutes or more immediately and corrective measures taken stated in a monthly report;

8.5.19.2. Include measures for notification of planned maintenance and downtime at least three days in advance.

8.5.19.3. Calculate and report fluorides and SO₂ emissions on a monthly basis;

8.5.19.4. Report on total particulate matter on a monthly basis;

8.5.19.5. Report on ambient volatile organic levels on a quarterly basis;

8.5.19.6. Reflect monitored and modelled ambient air quality results;

8.5.19.7. Report on equipment availability on a monthly basis;

8.5.19.8. Be summarised in an annual report;
8.5.20. A contingency plan to be compiled with details of steps to be taken in the event of a catastrophe and such plan to be submitted to DEAE&T and DEAT.

8.5.21. The air emission minimum standards as set out below to be maintained in terms of the various constituent emissions by the smelter:

<table>
<thead>
<tr>
<th>Pollutant (µg/m³)</th>
<th>SO₂</th>
<th>HF</th>
<th>Fp</th>
<th>TSP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Averaging period</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-hour</td>
<td>345.66</td>
<td>26.44</td>
<td>1.95</td>
<td>-</td>
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<td>24-hours</td>
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<td>2.7</td>
<td>0.18</td>
<td>4.97</td>
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<tr>
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<td>0.59</td>
<td>0.008</td>
<td>1.89</td>
</tr>
</tbody>
</table>

8.6. Conditions pertaining to water use and liquid waste

8.6.1. Process water (cooling water blow-down) must be treated on site for re-use in the smelter, or diverted to the foul water sewer for treatment and disposal through the municipal treatment works.

8.6.2. If process water is diverted to the foul water sewer, Aluminium Pechiney must enter into a trade effluent agreement with the Nelson Mandela Metropolitan Municipality to dispose of the daily quantity of process water to the Municipal Water Treatment Works (at Fishwater Flats).

8.6.3. Aluminium Pechiney must also seek written approval from the NMMM to substitute the cooling water blow-down with collected storm water, in the event of such storm water being more contaminated than the cooling water blow-down.

8.6.4. A Storm and Waste Water Management Plan to be compiled to the satisfaction of DEAE&T, DWAF, CDC and other relevant authorities.

8.6.5. The Storm and Waste Water Management Plan to be approved by DWAF prior to construction of any permanent storm water infrastructure.

8.6.6. The Storm and Waste Water Management Plan must be informed by a detailed study which must consider amongst others:

8.6.6.1. A comprehensive water balance;

8.6.6.2. The principles of prevent, separate, concentrate and contain;

8.6.6.3. An assessment of all appropriate management options and mitigatory measures including waste water minimisation, treatment, and contractual aspects;

8.6.6.4. Identification of sources of fluoride and other pollutants reported to contaminate storm water;

8.6.6.5. Mitigation measures of how such sources can be designed and engineered at source so that the potential for pollution is eliminated;

8.6.6.6. The option of total storm water containment, treatment and re-use on site.
8.6.6.7. Appropriate site selection (to be sited over an aquitard area of the shales underlying the site) and design plans for the interceptor pond and attenuation dam.

8.6.7. The storm water management infrastructure constructed on site must reflect the approved storm water management plan and must be fully functional prior to any process materials being brought on-site.

8.6.8. Any storm water dams/ponds that will be constructed as part of the storm water management infrastructure must be designed to contain runoff from a 1:100 year storm event, and must be registered and licensed in terms of section 21(g) of the National Water Act, Act 36 of 1998.

8.6.9. A license in terms of condition 8.6.8 will not be issued until conditions 8.6.1, 8.6.2, and 8.6.3 have been satisfactorily addressed.

8.6.10. Construction of the ponds contemplated in point 8.6.8 may only commence once licensing of such has been confirmed by DWAF.

8.6.11. The interceptor pond must be designed and constructed to trap particulates.

8.6.12. Particulate matter captured in the storm water system must be stipulated in the waste inventory and disposal thereof addressed in the Waste Management Plan.

8.6.13. The interceptor pond and attenuation dam must be lined with an appropriate impermeable material/substance to the satisfaction of DWAF and DEAE&T.

8.6.14. Subject to conditions 8.6.1 to 8.6.6, storm water not re-used on site or diverted for treatment may be released into the storm water reticulation of the CDC, provided that it complies with the quantity and quality requirements specified by the CDC Storm Water Management Plan and in terms of CDC’s water use license.

8.6.15. As a minimum, storm water leaving the Aluminium Pechiney site to conform (95 percentile) to the standard as set out in the table below.

<table>
<thead>
<tr>
<th>Constituent name</th>
<th>Unit</th>
<th>Storm water conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspended solids (TSS)</td>
<td>Mg/l</td>
<td>9.8</td>
</tr>
<tr>
<td>F</td>
<td>Mg/l</td>
<td>21.3</td>
</tr>
<tr>
<td>Al</td>
<td>µg/l</td>
<td>9000.0</td>
</tr>
<tr>
<td>CN free</td>
<td>µg/l</td>
<td>10.0</td>
</tr>
<tr>
<td>Ag</td>
<td>µg/l</td>
<td>1.0</td>
</tr>
<tr>
<td>As</td>
<td>µg/l</td>
<td>50.0</td>
</tr>
<tr>
<td>Be</td>
<td>µg/l</td>
<td>3.0</td>
</tr>
<tr>
<td>Cd</td>
<td>µg/l</td>
<td>2.5</td>
</tr>
<tr>
<td>Cr</td>
<td>µg/l</td>
<td>20.0</td>
</tr>
<tr>
<td>Cu</td>
<td>µg/l</td>
<td>35.0</td>
</tr>
<tr>
<td>Fe</td>
<td>µg/l</td>
<td>350.0</td>
</tr>
<tr>
<td>Hg</td>
<td>µg/l</td>
<td>1.0</td>
</tr>
<tr>
<td>Ni</td>
<td>µg/l</td>
<td>60.0</td>
</tr>
<tr>
<td>Pb</td>
<td>µg/l</td>
<td>5.0</td>
</tr>
<tr>
<td>Sb</td>
<td>µg/l</td>
<td>10.0</td>
</tr>
<tr>
<td>Constituent name</td>
<td>Unit</td>
<td>Storm water conc.</td>
</tr>
<tr>
<td>------------------</td>
<td>------</td>
<td>------------------</td>
</tr>
<tr>
<td>Se</td>
<td>µg/l</td>
<td>3.0</td>
</tr>
<tr>
<td>Sn</td>
<td>µg/l</td>
<td>4.0</td>
</tr>
<tr>
<td>Ti</td>
<td>µg/l</td>
<td>5.0</td>
</tr>
<tr>
<td>V</td>
<td>µg/l</td>
<td>3.0</td>
</tr>
<tr>
<td>Zn</td>
<td>µg/l</td>
<td>180.0</td>
</tr>
<tr>
<td>Total hydrocarbons</td>
<td>Mg/l</td>
<td>0.4</td>
</tr>
<tr>
<td>Phenol</td>
<td>Mg/l</td>
<td>0.02</td>
</tr>
<tr>
<td>PAH's:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naphthalene</td>
<td>µg/l</td>
<td>1</td>
</tr>
<tr>
<td>Benzo(a)Pyrene</td>
<td>µg/l</td>
<td>1</td>
</tr>
</tbody>
</table>

8.6.16. Storm water discharge to the port must not increase the need to dredge the port above the normal dredging requirements for port operations. If discharge of storm water containing waste results in the deposition and accumulation of contaminants, specific investigations into origins, discharge limits and pre-treatment will be necessary. Results of such investigations to be implemented to the satisfaction of the relevant authorities.

8.6.17. Aluminium Pechiney to adopt water conservation best practice including but not limited to the following:

8.6.17.1. Implement water saving devices for domestic water use at the smelter (e.g. dual flush toilets, automatic shut-off taps, etc.);

8.6.17.2. As a general principle, potable water should not be used for irrigation purposes and landscapes must be designed to absorb rainwater run-off rather than having to carry it off-site in storm water drains;

8.6.17.3. Indigenous vegetation to be used for landscaping to minimise watering requirements;

8.6.17.4. Cleaning methods utilised for the cleaning of vehicles, floors etc. must aim to minimise water use;

8.6.17.5. Maintenance of proper pressure within fire water systems to limit water use;

8.6.17.6. Conducting of regular audits of water systems to identify and rectify any possible water leakages; and

8.6.17.7. Implementing a system for the proper metering and measurement of water use and wastewater discharges to enable proper performance review and management.

8.6.18. Aluminium Pechiney to undertake a geo-hydrological study to verify and supplement existing groundwater information.

8.6.19. DWAF to be kept informed of events/incidents that could lead to water pollution.

8.6.20. DWAF to be involved in any mitigation/corrective measures undertaken as a result of such events/incidents.
8.6.21. A monitoring programme for water related impacts to be compiled and implemented to ensure that the predictions of the EIR are correct and such monitoring programme to be approved by DWAF before licenses/registrations required in terms of conditions 8.4.9 and 8.6.8 will be issued. Such a monitoring programme must amongst others consider:

8.6.21.1. The quality and quantity of process wastewater;
8.6.21.2. The quality and quantity of storm water;
8.6.21.3. Continued monitoring of both local surface and ground waters upstream and downstream of the smelter site.
8.6.21.4. Determination of both particulate and dissolved concentrations of contaminants with separate reporting.
8.6.21.5. Monitoring of storm water (including all the contaminants identified in condition 8.6.15) at the point where it leaves the property of Aluminium Pechiney.

8.7. **Conditions relating to ecological systems and agriculture**

8.7.1. A detailed vegetation monitoring programme to be implemented with the focus on improving the understanding of the effect of fluoride emissions on indicator species. This programme must include amongst others but not be limited to:

8.7.1.1. Extend to areas where the air quality modelling study shows a measurable difference at ground level in fluoride deposition.
8.7.1.2. Be designed in consultation with relevant stakeholders, including relevant authorities, the CDC, SANParks, the citrus industry and academic institutions.
8.7.1.3. Monitor fluoride levels in vegetation to establish the baseline condition of vegetation located both within the IDZ and more distantly.
8.7.1.4. Encompass indigenous species, citrus and vegetable crops.
8.7.1.5. Monitor potential changes in the habitat of endangered species known to occur in the IDZ.
8.7.1.6. Be designed to monitor the status of endangered species, including species that depend on specific host plants or on specific symbiotic relationships, with specific reference to possible impacts on such related to emissions from the smelter.
8.7.1.7. Be designed to improve the understanding of the effect of fluoride emissions on indicator species.

8.7.2. If monitoring shows that endangered species are being negatively affected to the degree that they are at risk of die-off, measures to be put in place to safeguard their continued existence.

8.7.3. The measures contemplated in condition 8.7.2 may include:

8.7.3.1. Determination of the status of the specific species in order to ascertain to what degree the future existence of the species is threatened; and
8.7.3.2. Relocation of such species to suitable habitats that are not under threat.

8.7.4. Fluoride levels in water resources outside the boundary of the IDZ that may be used by livestock and wild animals must be monitored in areas where the air quality modelling study shows a measurable difference at ground level.

8.7.5. Aluminium Pechiney to initiate studies to determine plant species that might be fluoride tolerant and that could be used in landscaping of the smelter site and other areas within the IDZ.

8.8. Conditions pertaining to site rehabilitation and landscaping

8.8.1. Only those areas of the site where construction and lay-down are going to take place must be cleared. The remaining areas on the site to be clearly demarcated and left intact.

8.8.2. Vegetation removed during construction to be incorporated into landscaping of the smelter site wherever possible.

8.8.3. Topsoil removed during construction to be used wherever possible in site landscaping.

8.8.4. A detailed landscaping plan to be compiled to the satisfaction of DEAE&T and landscaping of the site to take place in accordance with such an approved plan.

8.8.5. The landscaping plan to address/incorporate amongst others but not limited to the following:

8.8.5.1. Maximum use of construction rubble in landscaping and site rehabilitation;

8.8.5.2. The use of indigenous vegetation native to the general area in site landscaping and rehabilitation;

8.8.5.3. The controlled removal of all invasive alien plant species evident on the site;

8.8.5.4. The control and eradication of all invasive alien plant species that may colonize the site before such can attain the seed formation stage;

8.8.5.5. The establishment of a vegetated buffer zone of at least 100m around most, if not all, of the inner edge of the boundary of the smelter in terms of condition 8.10.5 regarding mitigation to address impacts related to noise;

8.8.5.6. The addressing of the visual impact of large paved areas by planting vegetation/trees in such areas and through the construction of low walls or screens (also see condition 8.11.4); and

8.8.5.7. The shaping of cut-and-fill slopes to allow for the re-establishment of indigenous vegetation.
8.9. **Conditions pertaining to traffic and transportation**

8.9.1. Traffic volumes to be monitored both during construction and operation.

8.9.2. On the basis of the monitoring results, Aluminium Pechiney to endeavour to get the CDC to upgrade critical intersections where necessary.

8.9.3. Incentives to be developed for the use of public transport systems by employees.

8.9.4. SMMEs to be involved in transport tender arrangements.

8.9.5. Transportation of abnormal loads and hazardous waste during peak traffic periods to be minimised.

8.9.6. The use of heavy vehicles to be restricted to the dedicated lane (if and when available) between the smelter site and the Port of Ngqura.

8.9.7. Heavy vehicles (besides those carrying the aluminium product) should be weighed before leaving the site to ensure that no overloading occurs. The trucks with ingots will carry the same load each trip and the product will be weighed before being loaded on the truck.

8.9.8. A study to be undertaken to investigate the possibility/feasibility of using rail instead of road transport between the smelter and the port.

8.9.9. If the study referred to in condition 8.9.8 proves rail transport to be feasible, planning must be amended to incorporate such in the plant layout.

8.10. **Conditions pertaining to noise**

8.10.1. Aluminium Pechiney to adhere to the noise regulations as implemented within the Nelson Mandela Metropolitan Municipal Area.

8.10.2. As a minimum, ambient noise levels emanating from the smelter must not exceed 70 dBA at the site boundary.

8.10.3. If and when noise generating industries locate adjacent to the smelter, appropriate measures must be implemented by Aluminium Pechiney in conjunction with such industries to not exceed a maximum combined noise level of 70 dBA at the site boundary.

8.10.4. Aluminium Pechiney to comply with the occupational noise regulations of the Occupational Health and safety Act, Act 85 of 1993.

8.10.5. Establish a vegetated buffer zone (non hardened surfaces) of at least 100m around most, if not all, of the inner edge of the boundary of the smelter site to reduce noise propagation from the smelter operations in conjunction with the provisions of condition 8.8.5.5.

8.10.6. Condition 8.10.5 must be incorporated into the construction Environmental Management Plan to be compiled in terms of condition 8.2.1, which must clearly demarcate the extent of the vegetated buffer zone and areas to be cleared for construction and must be finalised before vegetation clearing may commence on the site.

8.10.7. Aluminium Pechiney to comply with the measures for good practice as contained in paragraph 12.7.1 of the final EIR with regard to management of noise related impacts during construction.
8.10.8. Aluminium Pechiney to comply with the measures for good practice as contained in paragraph 12.7.3 of the final EIR with regard to management of noise related impacts during operation.

8.10.9. Aluminium Pechiney to institute a noise monitoring programme that must incorporate sound level metering at key locations during the construction and operation of the smelter.

8.10.10. The results of the noise monitoring programme must be used to determine whether low frequency noise levels are of such a magnitude that it will be necessary to disengage the motorbrakes of the trucks transporting ingots to the port and only use disc brakes.

8.11. Conditions pertaining to visual aspects

8.11.1. A dust management plan for construction as contemplated in condition 8.2.9 to be implemented.

8.11.2. The CDC guidelines with regard to attenuation of visual impact (choice of colours, type of paint etc) to be applied and appropriate architectural modelling and surface colour treatment of buildings to reduce visual impact of the smelter to be used.

8.11.3. The use of primary colours to be limited and only paint that has a non-reflective finish (mat paint) to be used.

8.11.4. Visual impact of large paved areas to be avoided by planting vegetation and through construction of low walls or screens (also refer to condition 8.8.5.6).

8.11.5. External signage to be minimised.

8.11.6. Signage that has a silhouette effect to be avoided.

8.11.7. Outdoor lighting with reflectors to be fitted to avoid light spillage and low-level lighting for parking areas to be used (also refer to the CDC guidelines with regard to lighting).

8.11.8. Cut-and-fill slopes to be shaped to allow the re-establishment of indigenous vegetation (also refer to condition 8.8.5.7).

8.11.9. The final layout plan and architectural design of the Aluminium Pechiney smelter must be reviewed to:

8.11.9.1. Ensure that visual mitigation measures have been incorporated into the final documentation for the General Contract Manager; and

8.11.9.2. Verify that the design satisfies the visual guidelines prepared by the CDC to attenuate visual impact within the IDZ.

8.12. Conditions pertaining to social aspects

8.12.1. Contract documentation for the General Construction Manager (GCM) and sub-contractors to include requirements for preferential use of: local labour, designated employees in terms of the Employment Equity Act, goods and services, and SMMEs.
8.12.2. Contract documentation for the GCM and subcontractors to include requirements for the multi-skilling of construction workers, as per CDC rules and Zone Labour Agreement.

8.12.3. A skills development and training programme to be implemented.

8.12.4. A system for public reporting on compliance of the GCM and subcontractors to the EMP for construction to be established.

8.12.5. A Corporate Social Investment programme to be developed in consultation with relevant stakeholders.

8.12.6. Linkages with existing initiatives within the NMMM to be established in order to support training and SMME development.

8.12.7. Opportunities for downstream industries and SMME development to be facilitated.


8.12.9. Aluminium Pechiney to support the community health monitoring undertaken by CDC.

8.13. Conditions pertaining to macro-economic issues

8.13.1. If defence offset investments are included in the financing of the smelter project, the value of credits claimed should be stated publicly and not exceed the actual value of the offset investment.

8.13.2. A comprehensive actuarial study to be completed within 5 years following commissioning of the smelter in order to fully understand the impacts that the project’s financial flows have on the South African economy.

8.13.3. Triple bottom-line accounting and reporting to be implemented to evaluate the financial, ecological and social performance of the Aluminium Pechiney smelter.

9. Key Factors That Led to Decision

- Although the aluminium smelter will be constructed on a so-called greenfields site, it must be viewed in the context of the planned surrounding land use. In this regard the smelter will be constructed within zone 5 of the Coega Industrial Development Zone (IDZ) being the area earmarked for the location of metallurgical industries.

- The rezoning of the Coega IDZ underwent its own Environmental Impact Assessment process that culminated in an authorization being issued by DEAT for the rezoning of the land to Special Purposes. The land parcel that will be occupied by the smelter has thus already been rezoned to allow for the establishment of heavy industry thereon. The metallurgical cluster was sited on this particular parcel of land due to its suitability from a geo-technical perspective.

- An authorization was also issued to Portnet to construct and operate a deepwater port in the mouth of the Coega River with one of its main purposes being to
service industries that locate in the IDZ. It is reasonable to assume that in time, the smelter will only be but one of a number of industries/developments located in the area.

- The Coega IDZ is associated with the Spatial Development Initiative undertaken by the South African Government and intends to unlock the economic potential of the Eastern Cape Province through job creation and empowerment of the historically disadvantaged communities by encouraging economic growth. In this regard the Coega Development Corporation (CDC) aims to attract investors to the IDZ through the provision of serviced land and world-class infrastructure.

- The proposed construction and operation of an aluminium smelter in the Coega IDZ will represent the single largest investment in the Nelson Mandela Metropolitan Area and indeed the Eastern Cape Province in recent years. The overall benefit or impact of this on the South African economy is however dependent on the source of the capital used to finance the project. On the other hand the project could be regarded as the catalyst that will kick-start the IDZ.

- To date the CDC has not managed to confirm a major investor in the form of an anchor tenant for the IDZ. The aluminium smelter will thus be an important long-term anchor tenant in the zone. In this regard establishment of the smelter might be seen as a vote of confidence in the IDZ and indeed in the country. This might induce further economic growth and development of the IDZ.

- With regard to impacts on the environment, the fact that the parcel of land in question has already been rezoned to allow for the establishment of heavy industry, presupposes that site specific impacts on the bio-physical environment has already been taken into account. In this regard it has already been accepted that vegetation/habitat losses will occur on this parcel of land due to the establishment of industries and that such losses are acceptable within the bigger context of the establishment of an IDZ.

- The Environmental Impact Assessment Process undertaken for the Aluminium Pechiney smelter has thus not focused on site-specific impacts related to vegetation and/or habitat losses. The EIA process has rather focused on process related impacts such as potential air and water pollution of the surrounding environment. In addition, other impacts associated with the physical presence of the smelter (visual, noise) as well as impacts associated with operational activities of the smelter (waste generation, transport) have been addressed and assessed.

- The main environmental concerns/issues associated with the construction and operation of the smelter are related to:
  - Air emissions and more specifically fluoride emissions;
  - Atmospheric fallout of pollutants contained in air emissions, resultant pollution of storm water and impacts on natural systems;
  - Waste generation, management and disposal of solid and liquid waste;
  - Storm water discharge to the marine environment;
  - Electricity generation and supply; and
  - Direct and indirect contribution to greenhouse gases.

- Although issues related to storm water discharge to the marine environment have been addressed in the final EIR, it is deemed that this is the responsibility of the CDC. Aluminium Pechiney will thus be expected to meet the standard set by the
CDC for storm water where it leaves the smelter site while the CDC will be responsible for the overall storm water management in the IDZ.

- Issues related to electricity generation and supply have been superficially addressed in the final EIR. The scope of such however, falls outside the boundaries of the EIR and are not the responsibility of Aluminium Pechiney.

- In general the Environmental Impact Assessment followed is deemed to be thorough and comprehensive and meets the requirements of the EIA regulations. In this regard the Final Environmental Impact Report and accompanying Specialist Reports has adequately captured the main issues. In most instances the assessment and approach to management and mitigation of these issues are adequately addressed.

- Authority review of the final EIR and Specialist Reports, as well as external review of key chapters of the EIR and the relevant specialist studies has however identified a number of issues where the approach to management and mitigation were not in keeping with the latest trends in policy and legislation. One example of such is the management of liquid waste and storm water containing waste. In this regard the specialist study and EIR proposed the co-disposal of process and storm water and did not include treatment before disposal as a management option. This is in contradiction of relevant principles contained in the National Water Act and the National Environmental Management Act, which stipulate that waste streams must be separated and that on site treatment options must be assessed/addressed.

- It is the opinion of DEAE&T that these issues have been adequately identified and addressed during the process of authority and external review and that it would thus not preclude an authorization from being issued. All of these have been captured comprehensively in the conditions contained in this Record of Decision. In addition no fatal flaws have been identified during the EIA process and review of the final EIR and Specialist Reports that would preclude an authorization from being issued.

- The public participation process followed as part of the EIA process is deemed to be thorough and comprehensive. In this regard the requirements of the EIA regulations were satisfied.

- The information at hand is deemed to be sufficient and adequate to make an informed decision. In this regard it is the opinion of DEAE&T that the negative environmental impacts associated with the project can be kept within acceptable limits if the conditions contained in this Record of Decision are implemented and adhered to (especially when seen in the context of the smelter being located in an area allocated for extensive industrial development).
10. Appeal

A written appeal against the decision may be lodged, in terms of section 35(3) of the Environment Conservation Act 73 of 1989, with the MEC for Economic Affairs, Environment and Tourism within 45 days from date of issue. The address for submission of appeals is:

Department of Economic Affairs, Environment and Tourism
Private Bag X 0054
Bisho
5605

Only appeals on environmental grounds can be considered. All appeals should be accompanied by relevant supporting documentation.

A. STRUWIG
SCIENTIST: EIM
DATE:______________________

LEON ELS
DEPUTY DIRECTOR: WESTERN REGION
DATE:______________________

ALBERT MFENYANA
CHIEF DIRECTOR: ENVIRONMENTAL AFFAIRS
DATE:______________________