

- 3.6 Construction must include design measures that allow surface and subsurface movement of water along the drainage lines so as not to impede natural surface and subsurface water flow, and drainage measures must promote the dissipation of storm water runoff.
- 3.7 Vegetation clearance must be limited to areas where the individual activities will occur and mitigation measures must be implemented to reduce the risk of erosion and alien species invasion.
- 3.8 The holder of the amended IEA must note that in terms of the National Forest Act (Act No.84 of 1998) protected plant species must not be cut, disturbed, damaged, destroyed and their products must not be possessed, collected, removed, transported, exported, donated, purchased or sold unless permission is granted by the relevant Competent Authority.
- 3.9 Construction areas (e.g. material lay down areas), topsoil and subsoil must be protected from contamination or pollution. Stockpiling must not take place in drainage lines or areas where it will impede surface water runoff.
- 3.10 If any soil contamination is noted at any phase of the proposed activities, the contaminated soil must be removed to a licensed waste disposal facility and the site must be rehabilitated to the satisfaction of this Department and Department of Water and Sanitation. The opportunity for the onsite remediation and re-use of contaminated soil must be investigated prior to the disposal and this Department must be informed in this regard.
- 3.11 An integrated waste management approach must be implemented that is based on waste minimization and must incorporate avoidance, reduction, recycling, treat, reuse and disposal where appropriate. Uncontaminated rubble generated on the premises can be re-used as back filling material on site. Ensure that no refuse or rubble generated on the premises is placed, dumped or deposited on the adjacent properties or public places and open space.
- 3.12 In terms of sections 28 and 30 of NEMA, and sections 19 and 20 of the National Water Act, 1998 (Act No. 36 of 1998), any costs incurred to remedy environmental damage must be borne by the person responsible for the damage. It is therefore imperative that the holder of the IEA reads through and understand the legislative requirements pertaining to the project. It is the Applicant's responsibility to take reasonable measures which include informing and educating contractors and employees about environmental risks of their work and training them to operate in an environmentally acceptable manner.
- 3.13 Construction vehicle must be serviced and maintained in the manner whereby no excessive smokes and noise production is reduced to acceptable levels, and to prevent oil leaks. Contaminated soil must be remediated on site or removed to an authorised landfill site.
- 3.14 Residents (if any) on the properties and surrounding areas must be informed if any unusually noisy activities are planned.

- 3.15 Dust suppression measures must be implemented on all exposed surface to minimize and control airborne dust.
- 3.16 Mixing of cement, concrete, paints, solvent, sealants and adhesive must be done in specified areas on concrete aprons or on protected plastic linings to contain spillage or overflow onto soil to avoid contamination of underground water and environmental damage.
- 3.17 Should any heritage remains be exposed during operation or any actions on the site, these must immediately be reported to the South African Heritage Resource Agency (SAHRA) and or North West Province Heritage Resource Agency (NWPHRA) (in accordance with the applicable legislation). Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from the South African Heritage Resource Agency (SAHRA) and or North West Province Heritage Resource Agency (NWPHRA).
- 3.18 Heritage remains include: archaeological remains (including fossil bones and fossil shells); coins; middens, indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features; rock art and rock engravings; shipwrecks; and graves or unmarked human burials. A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant authority.
- 3.19 Care must be taken to ensure that the material and excavated soil required for backfilling are free of contamination from hydrocarbons.
- 3.20 Hydraulic fluid or chemicals required during construction must be stored in a concrete lined surface with bund walls and shall be designed in such a manner that any spillage can be contained and reclaimed without any impact on the surrounding environment. Should any spills occur it should be cleaned immediately by removing spillage together with the polluted solids and dispose it in the authorised disposal site permitted of such waste. The regional office of the Department of Water and Sanitation must be notified within 24 hours of an incident that may pollute surface and underground water resources.
- 3.21 Chemical sanitation facilities or system such as toilets that do not rely on the seepage of liquids must be provided with a ratio of 1 for every 15 workers. These must be placed such that they prevent spills or leaks to the environment and must be maintained according to the operating instructions and the content thereof must be disposed of at an authorised waste water treatment works.
- 3.22 The holder of the amended IEA must ensure that any water uses listed in terms of Section 21 of National Water Act must get authorization from Department of Water and Sanitation prior to the commencement of such activities.
- 3.23 This amended IEA does not purport to absolve the holder of IEA from its common law obligations towards the owner of the surface of land affected.

- 3.24 The holder of the amended IEA must ensure that rehabilitation of the disturbed areas caused by operation at all times comply with the approved EMPr.
- 3.25 This amended IEA may be amended or withdrawn at any stage for non-compliance and provides no relief from the provisions of any other relevant statutory or contractual obligations.
- 3.26 The holder of the amended IEA must note that in terms Section 43A of the National Environmental Management: Waste Act, 2008 (Act No.59 of 2008), residue deposit and residue deposit must be deposited and managed in a prescribed manner on any site demarcated for that purpose in the Environmental Management Plan or Environmental Management Programme. No person may temporary or permanently deposits residue stockpile or residue deposit on any area or site other than on site indicated on the Environmental Management Plan or Environmental Management Programme.
- 3.27 The holder of the amended IEA must note that in terms Section 20 of the National Environmental Management: Waste Act, 2008 (Act No.59 of 2008), no person may commence, undertake or conduct a waste management activity, except in accordance, with the requirements of norms and standards determined in terms of Section 19 (3) for that activity or a waste management licence is issued in respect of that activity if licence is required.
- 3.28 An appeal under Section 43 (7) of the National Environmental Management Act, 1998 (Act 107 of 1998) (as amended) suspend an IEA or exemption or any provisions of conditions attached hereto, or any directive unless the Minister directs otherwise.
- 3.29 Should you be notified by the Minister of a suspension of the authorisation pending appeal procedure, you may not commence with the activity (ies) until such time that the Minister allows you to commence with such activity (ies) in writing.
- 3.30 The Department reserves the right to audit and/or inspect the activity (ies) without prior notification at any reasonable time and at such frequency as may be determined by the Regional Manager.
- 3.31 The waste storage site must have a firm, impermeable, chemical resistant floors and a roof to prevent direct sunlight and rain water from getting in contact with the waste.
- 3.32 The storage of hydrocarbons must have bund walls with adequate capacity to contain the maximum volume that is stored in the area. Uncontaminated storm water must be prevented from coming into contact with the waste and must be diverted away from the storage site.
- 3.33 Subject to the commencement and duration requirements of the MPRDA and NEMA for the listed mining activity is valid for the period for which the aforesaid right is granted provided that this activity must commence within 10 years. If the commencement of the proposed activity does not occur within the specified period, the EA lapses and a new application for IEA in terms of the NEMA and the EIA Regulations, 2014 should be made for the activity to be undertaken.

- 3.34 The commissioning and decommissioning of individual activity within the overall listed mining activity must take place within the phases and timeframes as set out in EMP or EMPr.
- 3.35 This amended IEA will only be effective on the event that a corresponding mining right is issued in terms of MPRDA as amended and none of the activities listed in this amended IEA may commence without a mining right.
- 3.36 The listed activities, including site preparation, must not commence within 20 (twenty) calendar days of the date of the notification of the decision being sent to the registered I&APs. In the event that an appeal is lodged with the appeal administrator, the effect of this environmental authorisation is suspended until such time as the appeal is decided.
- 3.37 Should there be any conflicting conditions between this amended IEA and other approval granted by other authorities, it is upon the holder of the amended IEA to bring it to the attention of the Department for resolution.
- 3.38 If this office at any stage of mining operation revealed that during the submission of this amendment application Heric Ferrochrom (Pty) Ltd, Heric's representative or the appointed EAP has deliberately or not deliberately exclude any important information specified on the previously approved EMPr the holder will be abide by to such exclusions.

#### **4 MANAGEMENT OF ACTIVITIES**

- 4.1 A copy of the amended IEA and EMPr must be kept at the property or on site office where the activity/lies will be undertaken. The amended IEA and EMPr must be produced to any authorised officials of the Department who request to see it and must be made available for inspection by any employee or agent of the holder of the IEA who works or undertakes work at the properties.
- 4.2 The content of the EMPr and its objectives must be made known to all contractors, subcontractors, agent and any other people working on the site, and any updates or amendments to the EMPr must be submitted to the Department for approval.
- 4.3 Regular monitoring and maintenance of storm water drainage facilities must be conducted at all times, if damaged as directed by the Department or any other relevant authority.
- 4.4 A buffer zone of 100 metres between the activities and the residential areas, cemeteries or burial grounds must be clearly demarcated and maintained.
- 4.5 The holder of the amended IEA must ensure that all non-recyclable waste are disposed of at waste management facilities licenced to handle such wastes and all recyclable waste are collected by licenced waste management facilities for recycling, reuse or treatment.

- 4.6 The holder of the amended IEA must prevent nuisance conditions or health hazards, or the potential creation of nuisance conditions or health hazards.
- 4.7 The holder of the amended IEA must ensure that all liquid wastes, whose emissions to water or land could cause pollution are diverted to sewer, after testing water quality and receiving written approval from the relevant local authority.
- 4.8 Non-compliance with any condition of this amended IEA or EMPr may result in the issuing of a directive in terms of section 28 and or a compliance notice in terms of section 31L of NEMA.
- 4.9 Only listed activities that are expressly specified in the EMPr that forms part of this amended IEA may be conducted, and additional or new activities not specified herein must be applied for by the holder and authorised by the competent authority in the form of an amendment to the aforesaid EMPr before such activities may be commenced with. This condition is also applicable in the case of the amendment, addition, substitution, correction and removal or updating of any detail in the aforesaid EMPr.
- 4.10 This amended IEA only authorizes activities specified in the EMPr /closure plan and a new authorisation must be applied for in respect of any new activity not specified as part of the EMPr.
- 4.11 Rehabilitation of the disturbed surface caused by operation at all times must comply with the approved EMPr.
- 4.12 The holder of the amended IEA must ensure that the name and contact details of the ECO is made available to the Regional Manager within 30 days of commencement. The holder of the amended IEA must also ensure that an ECO is always available on site to ensure that activities at all times comply with the issued amended IEA and approved EMPr.
- 4.13 The ECO must:
- 4.13.1 Keep and maintain a detailed incidents register (including any spillages of fuels, chemicals or any other material.
  - 4.13.2 Keep a complaint register on site indicating the complaint and how the issues were addressed, what measures were taken and what the preventative measures were implemented to avoid re-occurrence of complaints.
  - 4.13.3 Keep records relating to monitoring and auditing on site and avail them for inspection to any relevant authorised officials.
  - 4.13.4 Keep copies of all environmental reports submitted to the Department.
  - 4.13.5 Keep the records of all permits, licences and authorisations required by the operation.

- 4.13.6 Compile a monthly monitoring report and make it available to the Department if requested.
- 4.14 The duties and responsibility of the ECO should not be seen as exempting the holder of the amended IEA from the legal obligations in terms of the NEMWA and NEMA.
- 4.15 The footprint of the activities must be limited on the areas authorised for the actual construction works and operational activities and all areas outside of the footprint must be regarded as a “no go” areas.
- 4.16 Erosion and soil loss must be prevented by minimizing the construction site exposed to surface water run-off. Where necessary erosion stabilizing action such as gabions or re-vegetation must be implemented to prevent further habitat deterioration.
- 4.17 The holder of the amended IEA must ensure that all personnel who work with hazardous waste are trained to deal with these potential hazardous situations so as to minimise the risk involved. Records of training and verification of competence must be kept by the holder amended IEA.
- 4.18 In order to prevent nuisance conditions, the holder of the amended IEA must ensure that all storage skips and bins are not overfilled.

## **5 REPORTING TO THE DEPARTMENT**

### **5.1 The holder of EA must:**

- 5.5.1 Submit an Environmental Audit Report to this Department biennially and such report must be done by qualified Environmental Assessment Practitioner and the audit report must specify whether conditions of this environmental authorisation and EMPr/closure plan are adhered to;
- 5.5.2 Identify and assess any new impacts and risks as a result of undertaking the activities, if applicable;
- 5.5.3 Identify shortcomings in the EMPr/closure plan, if applicable;
- 5.5.4 Identify the need, if any, for any changes to the management, avoidance and mitigation measures provided for in the EMPr/closure plan;
- 5.5.5 If applicable, specify that the corrective action/s taken for the previous audit's non-conformities, was adequate;
- 5.5.6 Specify the name of the auditor and must be submitted by the holder to the competent authority within 30 days from the date on which the auditor finalized the audit;
- 5.2 Should any shortcomings in terms of Regulation 34 (4) be identified, the holder must submit recommendation to amend the EMPr/closure plan in order to rectify any shortcomings identified with the aforementioned audit report.

- 5.3 Any complaint received from the Interested and Affected Parties during all phases of the operation must be attended to as soon as possible and addressed to the satisfaction of all concerned parties.
- 5.4 The holder of the amended IEA must annually assess the environmental liabilities of the operation by using the master rates in line with the applicable Consumer Price Index (CPI) at the time and address the shortfall on the financial provision submitted in terms of section 24P of NEMA.
- 5.5 The holder of the amended IEA must, within 24 hours of incidents occurring, notify the Competent Authority of the occurrence or detection of any incident on the site, or incidental to the operation of the site, which has the potential to cause, or has caused pollution of the environment, health risks, nuisance conditions or water pollution.
- 5.6 The holder of the amended IEA must, within 14 days, or a shorter period of time, if specified by the Competent Authority from the occurrence or detection of any incident referred to in condition 5.5, submit an action plan, which must include a detailed time schedule, and resource allocation signed off by top management, to the satisfaction of the Competent Authority of measures taken to –
- 5.6.1 Correct the impact resulting from the incident;
  - 5.6.2 Prevent the incident from causing any further impact; and
  - 5.6.3 Prevent a recurrence of a similar incident.
- 5.7 In the event that measures have not been implemented within 21 days of the incident referred to in condition 5.6, or measures which have been implemented are inadequate, the Competent Authority may implement the necessary measures at the cost of the holder of the amended IEA.

## **6 SITE SECURITY AND ACCESS CONTROL**

- 6.1 The holder of the amended IEA must ensure effective access control on the site to reasonably prevent unauthorised entry. Signs indicating the risks involved in unauthorised entry must be displayed at each entrance.
- 6.2 Weather proof, durable and legible notices in at least three official languages applicable in the area must be displayed at each entrance to the Site. These notices must prohibit unauthorised entry and state the hours of operation, the name, address and telephone number of the holder of the amended IEA and the person responsible for the operation of the site.

## **7 EMERGENCY PREPAREDNESS PLAN**

- 7.1 The holder of the amended IEA must maintain and implement an emergency preparedness plan and review it biennially when conducting audit and after each emergency and or major accident. The plan must, amongst others, include:

- 7.1.1 Site Fire
  - 7.1.2 Spillage any hazardous substance e.g. hydrocarbons and tailings
  - 7.1.3 Natural disasters such as floods
  - 7.1.4 Industrial action
  - 7.1.5 Contact details of police, ambulances and any emergency center closer to the site.
- 7.2 The holder of amended IEA must ensure that an up to date emergency register is kept during all phases of the operation. This register must be made available upon request by the department.

## **8 INVESTIGATIONS**

- 8.1 If, in the opinion of the Competent Authority, nuisances or health risks may be or is occurring on the site, the holder of the amended IEA must initiate an investigation into the cause of the problem or suspected problem.
- 8.2 If, in the opinion of the Competent Authority, pollution may be or is occurring, the holder of the amended IEA must initiate an investigation into the cause of the problem or suspected problem. Such investigation must include the monitoring of the water quality variables, at those monitoring points and such frequency as may be specified by the Competent Authority.
- 8.3 Investigations carried out in terms of conditions 8.1 and 8.2 above must include the monitoring of the relevant environmental pollution, nuisance and health risk variables, at those monitoring points and such frequency to be determined in consultation with the Competent Authority.
- 8.4 Should the investigation carried out as per conditions 8.1 and 8.2 above reveal any unacceptable levels of pollution, the holder of the amended IEA must submit mitigation measures to the satisfaction of the Competent Authority.

## **9 COMMISSIONING AND DECOMMISSIONING**

- 9.1 The commissioning and decommissioning of individual activity within the overall listed mining activities must take place within the phases and timeframes as set out in EMPr.

## **10 SITE CLOSURE**

- 10.1 The holder of amended IEA must apply for a closure certificate in terms of Section 43 of Mineral and Petroleum Resources Development Act (Act 28 of 2002) as amended within 180 days of occurrence of lapsing, abandonment, cancellation, cessation, relinquishment and completion of development.



- 10.2 The application for closure indicated above must be submitted together with all relevant documents as indicated in Section 43 of Mineral and Petroleum Resources Development Act (Act 28 of 2002), as amended.
- 10.3 No exotic plants may be used for rehabilitation purposes only indigenous plant can be utilized for rehabilitation purposes.
- 10.4 The holder of amended IEA remains responsible for any environmental liability, pollution or ecological degradation, compliance with the conditions of amended IEA and the management and sustainable closure thereof until the Minister has issued a Closure Certificate in terms of Section 43 of Mineral and Petroleum Resources Development Act (Act 28 of 2002) as amended. Where necessary the Minister may retain certain portion of financial provision for residual, health or environmental impacts that might be known in future.

## 11 NEMA PRINCIPLES

The NEMA Principles (set out in Section 2 of NEMA, which apply to the actions of all Organs of State, serve as guidelines by reference to which any Organ of State must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between Organs of State through conflict resolution procedures; and
- the selection of the best practicable environmental option.

## 12 DISCLAIMER

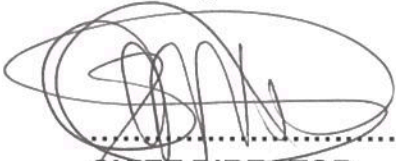
The Department of Mineral Resources in terms of the conditions of this environmental authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

### 13 RECOMMENDATIONS

In view of the above, the NEMA principles, compliance with the conditions stipulated in this amended IEA, and compliance with the EMP/closure plan, the competent authority is satisfied that the proposed listed activity/ies will not conflict with the general objectives of Integrated Environmental Management stipulated in Chapter 5 of NEMA, and that any potentially detrimental environmental impacts resulting from the listed activity/ies can be mitigated to acceptable levels. The authorisation is accordingly granted.

Your interest in the future of our environment is appreciated.

Kind Regards



.....  
**CHIEF DIRECTOR:**  
**MINERAL REGULATION: WESTERN REGIONS**  
**DEPARTMENT OF MINERAL RESOURCES**

DATE: 24/5/18 .....