

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
1	.	.	<b>APPOINTMENTS AND DUTIES</b>	.
1.1	.	.	<b>Matlapeng Housing Company (Matlapeng) Management</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Non-compliance with the EMP due to a lack of understanding and delegation of responsibilities.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Define organisational and administrative arrangements for EMP implementation. Adequate management and mitigation of environmental impacts.	.
.	.	.	<b>Mitigation Measures:</b>	.
1.1.1	.	1	Authorisation of the activity is subject to the conditions contained in the environmental authorisation, which are binding to the holder of the Authorisation.	Ongoing
1.1.2	.	2	Matlapeng is responsible for ensuring compliance with the conditions by any person acting on their behalf, including but not limited to an agent, sub-contractor, employee or service provider.	During construction
1.1.3	.	3	Only the authorised activities may be carried out on the property.	During construction
1.1.4	.	4	Any changes to, or deviations from, the project description must be approved, in writing, by the Department of Environment and Nature Conservation (DENC) (previously known as Department of Tourism, Environment and Conservation - DTEC) before such changes or deviations may be effected.	As required
1.1.5	.	6	A copy of the authorisation must be kept at the site office where the development will be undertaken. The authorisation must be produced to any authorised official of the DENC who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works on the property.	During construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
1.1.6	.	7	Where any of Matlapeng's contact details change, including the name of the responsible person, the DENC must be notified as soon as the new details become available.	As required
1.1.7	.	8	Matlapeng to notify the DENC, in writing, within 7 days if a condition of the authorisation is not adhered to. Any notification must be accompanied by reasons for the non-compliance.	As required
1.1.8	.	9	Non-compliance with a condition may result in criminal prosecution or other actions provided for in the National Environmental Management Act (NEMA).	As required
1.1.9	.	10	Environmental authorisation is subject to the approval by the relevant local authorities.	Prior to construction
1.1.10	.	11	Construction activities may not commence without the necessary permits/licenses/approvals and/or service agreements from or with the relevant regulatory authorities.	Prior to construction
1.1.11	.	14	The applicable conditions of the environmental authorisation must form part of all contractors' and sub-contractors' conditions of contract. A performance-based requirement with regard to environmental impact management must be included in all contracts related to any aspect of the environmental authorisation.	During construction
1.1.12	.	18	Department officials to be given access to the property for the purpose of assessing and/or monitoring compliance with the conditions contained in the environmental authorisation. Where the activities are located on a third party's property Matlapeng to be responsible to arrange access for the officials.	As required

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
1.1.13	.	19	The DENC may add to, change and/or amend any of the conditions set out in the environmental authorisation if, in the opinion of the DENC, the addition, change or amendment is environmentally justified. In the event that such impacts exceed its significance as predicted in the environmental impact assessment (EIA) and supporting documentation (including the application for amendment of authorisation submitted to the DENC on 12 November 2009) the authorisation may be withdrawn after proper procedures were followed.	As required
1.1.14	.	20	In the event of any dispute concerning the significance of a particular impact, the opinion of the DENC in respect of its significance will prevail.	As required
1.1.15	.	21	The Department of Environmental Affairs (DEA) (previously known as the Department of Environmental Affairs and Tourism - DEAT) and any National or Provincial department, local authorities or committees appointed in terms of the conditions of this application or any other public authority or organisation will not be held responsible for any damages or losses suffered by the applicant in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance with the conditions of approval as set out in the authorisation or any other subsequent document emanating from the conditions of approval.	During construction
1.1.16	.	22	The applicant to be responsible for all costs necessary to comply with the conditions as set out in the authorisation unless otherwise specified.	During construction
1.1.17	.	23	The applicant must apply the principle of best practicable environmental option for all technologies used/implemented during construction.	During construction
1.1.18	.	13, 31	One week's (7 days) written notice must be given to the DENC prior to the commencement of the activity. Commencement for the purpose of this condition includes site preparation. The notice must make clear reference to the site location details and the authorisation reference number. The notice must also include a date on which it is anticipated that the activity will commence and also proof that all interested and affected parties were notified of the authorisation.	Prior to construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
1.1.19	.	64	Should the activities ever cease or become redundant the applicant to undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administrated by any relevant and competent authority at the time.	As required
1.1.20	.	.	All recommendations and mitigation measures outlined in the EIA report, dated June 2008, are binding and must be strictly implemented and adhered to.	During construction
1.1.21	.	.	En environmental management plan (EMP) which fulfils the requirements of the EA must be compiled and submitted to the Department for approval prior to construction. It must contain but not be limited to, the following:	Prior to construction
1.1.22	.	.	All the information specified in regulation 34 of the regulations and must be adhered to.	
1.1.23	.	.	A storm water management plan.	
1.1.24	.	.	Procedures for the regular inspection and maintenance of the development area to ensure that environmental degradation is prevented and possible impacts arising from the operation are mitigated.	
1.1.25	.	.	Provision for plant search and rescue of protected and endangered species which should be done prior to any construction activities.	
1.1.26	.	.	A plan on how the sewage from the development will be properly treated should the current Kathu Waste Water Treatment Works run out of capacity.	
1.1.27	.	.	The activity must comply with Municipal by-laws.	During construction
1.1.28	.	28	The applicant must appoint an Environmental Control Officer (ECO) with necessary knowledge on the operation and environmental problems related to the operation of such activities that will have the responsibility of implementing the approved EMP.	Prior to construction
1.1.29	.	.	Should the developer be requested to submit an audit report, it will be his/her responsibility to appoint an independent auditor at his or her own expenses and submit an audit report within the specified timeframes.	During construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
1.1.30	.	29	The holder of the authorisation must submit an environmental audit report to the DENC on request and it must be compiled by an independent Auditor to avoid biasedness.	As requested
1.1.31	.	.	It is the authorisation holder's responsibility to ensure that ongoing management and monitoring of the impacts of the activity on the environment throughout the life cycle of the activity is put into practice.	During and at the end of construction
1.1.32	.	15	Matlapeng to carry out regular environmental audits to monitor compliance with conditions set out in the environmental authorisation.	During construction
1.2	.	.	<b>Environmental Control Officer (ECO) Environmental Officer (EO) according to DWA Record of Recommendation</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Non-compliance with the EMP due to a lack of understanding and delegation of responsibilities.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Define organisational and administrative arrangements for EMP implementation. Adequate management and mitigation of environmental impacts.	.
.	.	.	<b>Mitigation Measures:</b>	.
1.2.1	4	.	The ECO to monitor the contractors' compliance with the environmental authorisation conditions on a weekly basis. Any deviances must be rectified immediately.	During construction
1.3	.	.	<b>Contractors</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Non-compliance with the EMP due to a lack of understanding and delegation of responsibilities.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Define organisational and administrative arrangements for EMP implementation. Adequate management and mitigation of environmental impacts.	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
.	.	.	<b>Mitigation Measures:</b>	.
1.3.1	.	.	The contractor must ensure that drip trays are always available to collect any fluid that may result from accidental spillage, overflow and or servicing. All equipment's that leak must be repaired immediately and/or removed from site when necessary.	During construction
1.3.2	.	.	It is the contractor's responsibility that all staff/employees are familiar with all the emergency procedures. The contractor must also ensure that emergency numbers are visible and available and always updated.	Prior to and during construction
<b>2</b>	.	.	<b>TRAINING, AWARENESS AND COMPETENCE</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Environmental impacts resulting from an insufficient understanding of risks associated with work conditions and job description, resulting in insufficient "duty of care".	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Ensure adequate knowledge and understanding of EMP stipulations, policies and procedures. Understanding the interface between the work environment and environmental protection.	.
.	.	.	<b>Mitigation Measures:</b>	.
2.1	.	1.9.3	All construction workers, suppliers and service providers entering the construction site to attend and undergo environmental awareness induction training session covering key environmental issues pertaining to the construction site and surroundings with regard to protection of the natural environment, the conditions of the environmental authorisation, the requirements of the EMP and the rights of landowners on whose properties construction takes place.	Upon appointment and before entering the construction site
2.2	2.1.7	.	The contractor shall ensure that any delivery drivers are informed of all procedures and restrictions (including no-go areas) required to comply with the specifications.	Upon appointment and before entering the construction site

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
2.3	2.1.7	.	The contractor shall ensure that these delivery drivers are supervised during off-loading by someone with an adequate understanding of the requirements of the specifications.	During deliveries
<b>3</b>	.	.	<b>COMPLAINTS REGISTER AND MANAGEMENT</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Complaints by third parties.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Adequately assess root cause of incidents in order to develop and implement appropriate corrective actions and prevent incidents from recurring.	.
.	.	.	<b>Mitigation Measures:</b>	.
3.1	.	17	Any complaints must be brought to the attention of the Department within 24 hours after receiving the complaint. A complaints register must be kept up to date for inspection by the Department.	As required
3.2	.	.	Any complaints from the public during construction of this project must be attended to by the holder of the Authorisation as soon as possible to the satisfaction of the parties concerned.	As required
3.3	2.2.8	.	The contractor to keep a complaints register on site in the site book. The register to contain all contact details of the person who made the complaint and information regarding the complaint itself as well as the information given to the complainant. The contractor to notify the ECO of any complaints received.	During construction
3.4	2.2.8	.	If so required by the project specifications, the contractor to erect and maintain information boards in the position, quantity, design and dimensions agreed between the project manager, contractor and the ECO. Such boards to include contact details for complaints by members of the public in accordance with details decided upon and provided by the ECO to the contractor.	Prior to and during construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
3.5	2.4.3	.	Care must be taken not to damage infrastructure, equipment, pipelines etc. as this could lead to major claims. The position of all pipelines and infrastructure must be obtained from the landowners and noted.	Prior to and during construction
4	.	.	<b>MONITORING AND AUDITING</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Continued environmental degradation due to a lack of information about environmental performance. Lack of communication may result in delays in adequately addressing pertinent environmental issues. Legal non-compliance.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Provide information and ensure early detection of the impact of the construction activities upon the receiving environment. Recognise environmental changes in order to enable analysis of their cause. Maintain accurate records and transparent communication with regulatory bodies. Keeping regulatory body up to date with the development.	.
.	.	.	<b>Mitigation Measures:</b>	.
4.1	.	.	A copy of the environmental authorisation and an EMP must always be available on site so as to monitor compliance with the conditions outlined in both documents. These documents must be used as on-site reference.	Ongoing
4.2	.	.	In the event of non-compliance by employees and contractors during construction of the project, the applicant will be held liable.	During construction



EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
4.3	.	30	Non-compliances to the conditions of the environmental authorisation must be reported to the DENC within 48 hours.	Throughout construction
4.4	.	16	Records relating to the compliance/non-compliance with the conditions of the environmental authorisation and contracts must be kept in good order. Such records must be made available to the DENC within 7 days of receipt of a written request by the DENC for such records.	As required
<b>5</b>	.	.	<b>ENVIRONMENTAL RISKS AND EMERGENCIES</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Significant environmental degradation due to emergency / catastrophic events. Impacts upon health and safety of staff and project affected communities.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Ensure control measures are developed and implemented to ensure efficient and effective response to emergency incidents / events.	.
.	.	.	<b>Mitigation Measures:</b>	.
5.1	2.2.6	48, 51	Relevant Occupational Health and Safety standards should be observed at all times.	During construction
5.2	.	.	The safety of the participants must be ensured by appointing a supervisor on site to oversee the proper use and operation of equipment.	
5.3	.	49.1	The safety of the participants must be ensured by involving a qualified engineer in the design and construction of the proposed residential development.	Prior to and during construction
5.4	.	49.2	The safety of the participants must be ensured by having regular safety inspections and ensuring participants are equipped with the necessary safety equipment.	During construction
5.5	.	50	The construction process must ensure that the necessary safety signage and personal protective clothing is in place.	Prior to and during construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
5.6	.	61	There must be procedures in place for the regular inspection and maintenance of the proposed residential development and access road to ensure that environmental degradation is prevented and possible measures are put in place so that impacts arising from operation are mitigated.	During construction
5.7	.	.	Electrical installation must only be done by qualified personnel	Prior to and during construction
5.8	2.2.6	.	Telephone numbers of all emergency services, including the local fire fighting service, to be posted conspicuously in the contractor's office near a telephone and at any security post.	During construction
5.9	2.2.6	.	No unauthorised firearms and hazardous equipment are permitted on site.	During construction
5.10	2.1.7	.	All laydown areas outside of the construction camp shall be subject to the PM and the ECO's approval in such a way as not to cause nuisance or environmental damage.	Prior to and during construction
5.11	2.1.7	.	All building materials are to be prepared at the batching plant to enable the effects of cement and other substances and the resulting effluent to be more easily managed.	Prior to and during construction
5.12	2.2.2	.	The Contractor shall take all the necessary precautions against the spreading of disease, especially under livestock. A record shall be kept of all drugs administered and the dates when this was done. This can then be used as evidence in court should any claims be instituted against the PM or the Contractor.	During construction
5.13	2.2.2	.	The workforce shall also be sensitized to the effects of sexually transmitted diseases, especially AIDS.	Prior to and during construction
<b>6</b>	.	.	<b>WATER USE AND CONSUMPTION</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Depletion of natural water resources.	.
.	.	.	<b>Goals and Objectives:</b>	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
.	.	.	Optimisation of natural resource consumption and conservation.	.
.	.	.	<b>Mitigation Measures:</b>	.
6.1	2.1.20	.	The layout plans must take the existing abstraction and monitoring boreholes into account.	Prior to construction
6.2	2.1.20	.	No facilities must be erected within a radius of 100 m from any boreholes.	Prior to and during construction
6.3	2.1.20	.	The long term monitoring of the boreholes and water levels is essential and must be done on a weekly (minimum monthly) basis in the future. Ideally automatic monitoring apparatus should be installed.	During and at the end of construction
6.4	2.1.21	.	Cleaning, sterilisation and flushing of pipelines to not impair surrounding environmental quality. Any contaminated water from such activities to be contained until it complies with the standards contained in the National Water Act or other relevant Acts, as well as those laid down by the local authority or else it will be removed from the site and disposed off at an approved waste disposal facility.	During and at the end of construction
6.5	2.1.17	.	The contractor will take all possible measures to minimise water use on site and this will include monitoring of pipes for leaks, closing taps when not in use, efficient use of water for washing of plant, recycling water as much as possible etc.	Ongoing
<b>7</b>	.	.	<b>SOIL</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Soil disturbance, loss of nutrients, loss of topsoil cover, loss of in situ structure and physical / chemical properties, soil compaction and erosion. Local soils associated with thin topsoil layer. Deficiency of topsoil at Sishen Mine.	.
.	.	.	<b>Goals and Objectives:</b>	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
.	.	.	Optimise availability and viability of soil as growth medium to enable sustainable vegetation cover after rehabilitation. Maximise topsoil availability for rehabilitation of construction areas and disturbed areas at Sishen Mine.	.
.	.	.	<b>Mitigation Measures:</b>	.
7.1	.	.	Topsoil removed during excavations must be kept separate from other material. Topsoil must be placed above other material during construction.	During construction
7.2	2.1.1	.	Only minimal and selective disturbance of the sites will be allowed. No stripping may take place at the areas involved.	During construction
7.3	2.1.3	.	Any area where the topsoil will be impacted by construction activities to have the topsoil stripped with all organic matter and stockpiled for subsequent use in rehabilitation after the area has been cleared of vegetation.	During construction
7.4	2.1.3	.	Topsoil to be treated with care, will not be buried or in any other way be rendered unsuitable for further use. Precaution to be taken to prevent unnecessary handling and compaction.	During construction
<b>8</b>	.	.	<b>STORMWATER, EROSION AND SEDIMENTATION</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Degradation of Gamagara River water quality and habitats. Loss of growth medium.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Adhere to applicable effluent discharge standards. Minimise impacts on downstream Gamagara River ecosystems. Limit the loss of growth medium (soil) and prevent sedimentation of downstream drainage systems.	.
.	.	.	<b>Mitigation Measures:</b>	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
8.1.	2.1.8	.	Any stockpiling of gravel, cut, fill or any other material including soil to only be allowed in degraded areas or areas below the future cover of buildings and tar or paved parking surfaces. The contractor to indicate the proposed areas for such operations and method of undertaking such operations in a Method Statement to be submitted to the ECO for approval before any such activity begins.	Prior to and during construction
8.2.	2.1.8	.	The contractor to ensure that the stockpiled material does not blow or wash away or mix with each other. If the material is in danger of being washed or blown away, the contractor to cover it with a suitable material such as hessian, netting or plastic.	Prior to and during construction
8.3	2.1.18	.	The Contractor shall take reasonable measures to control the erosive effects of storm water runoff particularly where excavation and construction activities form temporary channels.	Prior to and during construction
8.4	2.1.18	.	Suitable energy breaking devices, diversions and retention ponds, if necessary, shall be employed to ensure that storm water runoff from the site is dissipated and prevent the surface water from being concentrated in streams and from scouring the slopes, banks or other areas.	Prior to and during construction
8.5	2.1.18	.	An earth deflection berm should be used on sections of pipelines that exceed a slope of 1:3 if these occur on site. A Method Statement in this regard shall be submitted before any such work commences.	Prior to and during construction
8.6	2.1.18	.	Where erosion and/or sedimentation, whether on or off the site, occurs despite the Contractor complying with the foregoing, rectification shall be carried out in accordance with details specified by the ECO. Where erosion and/or sedimentation occurs due to the fault of the Contractor, rectification shall be carried out to the reasonable requirements of the ECO	During construction
<b>9</b>	.	.	<b>HERITAGE RESOURCES</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
.	.	.	Damage or loss of cultural, historical sites, artefacts or graves if such sites are unearthed during site operations.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Implement measures to avoid disturbance or loss of important heritage sites and artefacts.	.
.	.	.	<b>Mitigation Measures:</b>	.
9.1	.	42	Should any archaeological artefacts, graves or protected and endangered biota that were not mentioned by specialist be found on site, the operation must be suspended and construction should only continue after consultation with the South African Heritage Resource Agency.	During construction
9.2	2.4.1	.	No artefacts to be removed from sites under any circumstances. All sites to be carefully studied to ensure there are no damage to archaeological remains, where and if applicable.	As required
9.3	2.4.1	.	Any destruction of a site can only be allowed once a permit is obtained and the site has been mapped and noted. The permit must be obtained from a National Museum. Should any sites be found, the McGregor Museum in Kimberley should be contacted immediately.	As required
9.4	2.4.2	.	All monuments and historical sites to be treated with the utmost respect. No destruction of any site to be allowed. Interference with graves is strictly prohibited.	Ongoing
<b>10</b>	.	.	<b>DUST</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Fugitive dust emissions due to low rainfall figures, material composition and particle sizes, and impacts due to location of residences.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Develop and implement appropriate dust control measures according to the risk profile of the project.	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
.	.	.	<b>Mitigation Measures:</b>	.
10.1	.	52	The access roads to the construction site must be watered regularly to mitigate the dust impacts.	During construction
10.2	.	.	Proper measures must be taken to suppress dust.	During construction
10.3	2.1.16	.	The contractor to take all reasonable measures to minimize the generation of dust as a result of construction activities to the satisfaction of the ECO and local authority.	During construction
10.4	2.1.16	.	Appropriate dust suppression measures to be used when dust generation is avoidable and the method of stabilisation to be determined in consultation with the project manager and the ECO.	During construction
10.5	2.1.16	.	If dust complaints are envisaged the following standards should not be exceeded: In residential areas the dust deposition from construction activities shall not exceed 650mg/day/m <sup>2</sup> . For agricultural areas the dust deposition shall not exceed levels that may affect the yield of crops or the health of livestock.	As required
10.6	2.1.16	.	The quality of water used for dust suppression must be monitored.	During construction
11	.	.	<b>BIODIVERSITY</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Destruction of natural habitats due to site clearing, earthworks, and movement of vehicles through the veld.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Prevent the alternation of natural ecological systems and processes. Minimise impacts on protected tree species, drainage channels, the Gamagara River, pans, rocky outcrops and other areas identified as sensitive.	.
.	.	.	<b>Mitigation Measures:</b>	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
11.1	.	35	Removal of vegetation should be limited to development areas to avoid disturbance of the surrounding environment.	During construction
11.2	2.3.2	37	It is recommended that no threatened or protected species should be destroyed. Fauna and flora (including protected or endemic species) relocation or destruction should only be done if there is authorisation by the Department of Agriculture, Forestry and Fisheries (DAFF) and directorate of the DENC.	During construction
11.3	2.3.2	38	Large <i>Acacia erioloba</i> and <i>Acacia haematoxylon</i> trees taller than 6 meters should not be removed at all, they must be marked and GPS recorded, and information made available to the DENC and also the DAFF. Where it is impossible to maintain the trees a permit should be obtained from the DAFF.	During construction
11.4	.	39	Each and every erf should be designed to accommodate the types of trees mentioned in the above condition.	Prior to construction
11.5	2.3.2	40	Should protected trees and other vegetation be destructed, relocated and/or disturbed, permits must be obtained from the DAFF and the DENC.	During construction
11.6	2.3.2	.	Collection of firewood from protected trees during construction and operational phases is a criminal offence and must not be allowed.	During construction
11.7	.	.	Protected trees must not be disturbed and an area around them (root feeding zone) should remain intact.	Ongoing
11.8	2.1.15	.	Areas of special importance will be decided upon by the project manager, contractor and the ECO and demarcated as "no go" areas on the site plan and will be fenced off. Access to such areas should be approved by the ECO.	Prior to construction



EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
11.9	2.3.1	.	The contractor to allow small species to escape the terrain to the undisturbed adjacent land before and during the construction phase.	Prior to and during construction
11.10	2.3.1	.	The workers may under no circumstances interfere with breeding bird species, if any, during the construction process. This includes the moving of livestock where they interfere with construction activities.	Prior to and during construction
11.11	2.3.4	.	The landscaping of all areas needs to be formalised taking account of the special vegetation elements of the site.	Prior to and during construction
11.12	2.3.5	.	A method statement to be submitted detailing the methods to be used for vegetation clearing.	Prior to construction
11.13	2.3.5	.	All cleared areas to be stabilised as soon as possible.	As required
11.14	2.3.5	.	The burning of cleared vegetation is prohibited.	Ongoing
11.15	2.3.5	.	The burying of cleared vegetation or use as part of backfill or landscaping is prohibited unless written approval is obtained from the ECO. Cleared vegetation may be used for mulch or slope stabilisation of the site.	As required
<b>12</b>	.	.	<b>ALIEN AND INVASIVE SPECIES</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Disruption of ecological synergy.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Prevent the alteration of natural ecological systems and processes.	.
.	.	.	<b>Mitigation Measures:</b>	.
12.1	.	65	No alien or invasive species must be introduced during rehabilitation.	At the end of construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
12.2	2.3.3	.	Herbicide use to only be allowed with the approval of the PM. The application to be according to set specifications and under supervision of a qualified technician. The possibility of leaching into the surrounding environment to be properly investigated and only environmentally friendly herbicides to be used.	Prior to and during construction
<b>13</b>	.	.	<b>FIRES</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Fire damage to grazing land, natural habitats and residences due to activities such as grinding and track maintenance.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Preserve grazing land and natural habitats. Protect private property.	.
.	.	.	<b>Mitigation Measures:</b>	.
13.1	.	.	The contractor must take all necessary precautionary measures to ensure that no fires are caused as a result of construction activities.	During construction
13.2	2.1.11	.	No open fires to be allowed on site under any circumstances.	During construction
13.3	2.1.11	.	No smoking to be permitted in those areas where it is a fire hazard. Such areas include the workshop and fuel storage areas and any areas where the vegetation or other material is such as to make liable the rapid spread of an initial flame.	During construction
13.4	2.1.11	.	The contractor to have fire-fighting equipment available on all vehicles working on site, especially during winter months and in areas prone to fires.	During construction
13.5	2.1.11	.	Any fires to be reported to the ECO or the contractor immediately.	As required

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
13.6	2.1.10	.	The contractor to advise the relevant authority and/or farmers association of a fire as soon as one starts and shall not wait until he can no longer control it. The contractor shall ensure that his employees are aware of the procedures to be followed in the event of a fire.	During construction
<b>14</b>	.	.	<b>MACHINERY, EQUIPMENT, VEHICLE MOVEMENT AND ROADS</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Noise, dust, vibrations and other nuisances due to presence and use of machinery, equipment and vehicles. Public safety risks.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Minimise construction-related disturbances and public safety risks during operation and use of machinery, equipment and vehicles.	.
.	.	.	<b>Mitigation Measures:</b>	.
14.1	2.4.3	36	Access roads to be well maintained to avoid pollution.	During construction
14.2	.	43	Access roads to be restricted to the proposed area to limited the disturbance within the proposed area.	During construction
14.3	.	44	Movement of construction vehicles in sensitive areas must be avoided.	During construction
14.4	.	.	All vehicles, equipment and other assets belonging to the contractor must be removed from the property upon completion of the construction.	At the end of construction
14.5	2.1.4	.	Only existing servitude access roads as well as roads indicated on the layout plan to be used for the purpose of this project. No new roads to be constructed without the consent of the landowner and approval of the project manager. Access roads to be left in their original state.	During construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
14.6	2.1.4	.	The contractor to control the movement of all vehicles and equipment including that of his suppliers so that they remain on designated routes.	During construction
14.7	2.1.22	.	No machinery is to operate outside of the demarcated working area without the permission of the ECO.	During construction
14.8	2.4.3	.	Speed limits to be enforced on roads and al drivers to be sensitised to this effect.	During construction
14.9	.	56	Proper road signage must be strategically placed in the area of the construction site.	Prior to and during construction
14.10	.	55	All machines must be equipped with appropriate noise reduction equipment and all vehicles must be roadworthy.	Prior to construction
14.11	.	57	No vehicle or construction machinery may be extensively repaired on-site.	During construction
14.12	.	.	All the areas (e.g. stockpiling of material, machines, workshop etc.) in the construction site must be clearly defined.	Prior to construction
14.13	2.1.7	.	The PM shall indicate the permitted location of batching (including the location of cement stores and sand and aggregate stockpiles), if these are to be present on site, a site plan. A method statement indicating the layout and preparation of such facilities shall be submitted.	During construction
14.14	2.1.7	.	Cleaning of equipment and flushing of mixers shall not result in pollution of the surrounding environment.	During construction
<b>15</b>	.	.	<b>NOISE</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
.	.	.	General construction activities in close proximity to residences. Movement of vehicles and equipment. Materials handling. Use of machinery and equipment.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Develop and implement appropriate noise control measures according to risk profile of construction site and proximity of residences.	.
.	.	.	<b>Mitigation Measures:</b>	.
15.1	2.2.5	27.1	The working hours must be reduced (07h00 to 17h00) to avoid the accumulative noise impacts unless a written representation with reasons for increasing the working hours is forwarded to the DENC for scrutiny and approval.	Prior to and during construction
15.2	.	54	Noise generation during construction must be mitigated by ensuring that all regulations relating to noise generation are observed and by restricting work to normal working hours.	During construction
15.3	2.2.10	.	The contractor to limit noise levels e.g. install and maintain standard exhaust silencers on machinery.	During construction
15.4	2.2.10	.	When working in areas close to visitors or residents on the farm, or any areas within audible distance of residents, the contractor to provide and use suitable and effective silencing devices for pneumatic tools and other plant that would otherwise cause a noise level exceeding 85 dB (A) during excavations and other work.	During construction
15.5	2.2.10	.	Appropriate directional and intensity settings to be maintained on all hooters and sirens.	During construction
15.6	2.2.10	.	No amplified music to be allowed on site. The use of radios, tape recorders, CD players, television sets etc. shall not be permitted unless volume is kept sufficiently low as to avoid any intrusion on members of the public within range. The contractor shall not use amplification equipment on site unless in an emergency situation.	During construction
<b>16</b>	.	.	<b>ABLUTION FACILITIES AND SEWERAGE TREATMENT</b>	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Spread of biological contamination into the receiving environment. Health risks due to unhygienic conditions.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Define and implement control measures to ensure adequate treatment and disposal of sewage waste.	.
.	.	.	<b>Mitigation Measures:</b>	.
16.1	.	46	Chemical toilets must be made available for workers on site during construction and sewerage must be disposed on the municipal sewerage plant on a weekly basis.	During construction
16.2	.	47	The above mentioned facilities must be provided at a ratio of one facility per every ten workers.	During construction
16.3	.	.	Untreated sewage water must not be discharged into the environment	During and at the end of construction
16.4	2.2.1	.	Washing, whether of the person or of personal effects as well as acts of excretion and urination are strictly prohibited in any other place than at the facilities provided.	During construction
16.5	2.2.1	.	Toilet and ablution facilities to be maintained in a clean and sanitary condition to the satisfaction of the contractor.	During construction
16.6	2.2.1	.	Toilet facilities to be supplied by the contractor for the workers at a ratio of 1 toilet per 15 workers in areas approved by the project manager and the ECO. Toilet paper to also be provided.	During construction
16.7	2.2.1	.	Temporary/portable toilets to be secured to the ground to prevent them toppling due to wind or any other cause, to the satisfaction of the contractor.	During construction
16.8	2.2.1	.	The discharge of waste from toilets to be arranged with the operator of the facilities. Discharge into the environment and burial of waste is strictly prohibited.	During construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
16.9	2.2.1	.	The contractor to ensure that no spillage occurs when the toilets area cleaned or emptied and that the contents are removed from site.	During construction
16.10	2.2.1	.	Temporary toilets to be emptied regularly and before each weekend or any closure exceeding four days.	During construction
<b>17</b>	.	.	<b>WASTE MANAGEMENT</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Pollution or health impacts caused by inappropriately waste management practices.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Adhere to waste management principles of avoidance, minimisation, reuse, recycling, treatment and correct disposal methods. Define and implement control measures to prevent inappropriate storage, treatment and disposal of waste.	.
.	.	.	<b>Mitigation Measures:</b>	.
17.1	2.1.5, 2.2.11	32, 60	The developer should assign designated areas for all types of waste during construction period from where it must be disposed off at a waste disposal site licensed for such waste.	Prior to construction
17.2	2.2.11	33	The demarcation must be positioned well away from sensitive areas (e.g. protected trees) and must be emptied weekly. In such cases where the accumulation for such waste is higher than the carrying capacity of the designated areas, emptying of the areas should be carried out more regularly to avoid environmental problems.	During construction
17.3	2.1.5	34	The burning of waste on site is strictly prohibited.	During construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
17.4	.	.	General waste that may result from construction must be collected in containers disposed of regularly at a permitted landfill site. Recyclable waste must be recovered for recycling purposes. No temporary dumping of waste is allowed on site. Precautionary measures should be taken to prevent refuse from spreading from or on site.	During construction
17.5	.	.	All forms of pollution must be prevented, or where it cannot, should be minimised or remedied.	During construction
17.6	.	.	It is the responsibility of the environmental authorisation holder to ensure that all domestic waste is collected regularly and disposed off at a permitted landfill site.	As required
17.7	2.2.11	.	No on-site burying or dumping of any waste materials, vegetation, litter or refuse to occur.	During construction
17.8	2.2.11	.	The contractor to provide vermin and weather proof bins with lids of sufficient number and capacity to store the solid waste produced on a daily basis. The lids to be kept firmly on the bins at all times.	During construction
17.9	2.2.11	.	No bins to be allowed to become overfull and to be emptied at least once a day. Waste from bins may be temporarily stored on site in a central waste area that is weatherproof and scavenger- proof and which the project manager and the ECO has approved.	During construction
17.10	.	58	Mixing of concrete in areas where excess material could enter drainage systems must be avoided.	During construction
17.11	.	.	The contractor must use Ready-mix concrete. Alternatively, concrete can be mixed on mixing trays only and not on exposed soil. Concrete must be mixed only in areas which have been specially demarcated for this purpose.	During construction
17.12	2.1.7	.	Old cement bags, mixing bags, platforms etc. should be discarded in a wind and spill proof container. No cement bags, closed or open, should be left lying around on site. All visible remains of concrete should be physically removed as soon as possible and disposed off at a suitable site.	During and at the end of construction
17.13	2.1.5	.	No material to be left on site that may harm man or animal.	During and at the end of construction



EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
17.14	2.1.22	.	No waste (hazardous & non-hazardous) may be buried on site	During and at the end of construction
17.15	2.1.23	.	No waste (hazardous & non-hazardous) may be buried on site	During construction
17.16	2.1.7	.	All wastewater resulting from batching of concrete shall be disposed of via the contaminated water management procedure.	During construction
<b>18</b>	.	.	<b>HAZARDOUS SUBSTANCES STORAGE AND HANDLING</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	The release of hazardous substances into the receiving environment could result in air, soil and water pollution and may affect the health and well being of people, plants and animals. Substances such as fuels, lubrication oils, hydraulic and brake fluid, solvents, paints and anti-corrosives, insecticides and pesticides, as well as the by-products and waste associated with use of these products will be present on the site.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Ensure appropriate storage and handling of hazardous substances to prevent pollution and health risks.	.
.	.	.	<b>Mitigation Measures:</b>	.
18.1	.	63	Operations for the final phases of the development must not commence before the waste water treatment plant is upgraded as indicated in the agreement between Sishen Mine and the Gamagara Municipality.	As required
18.2	2.1.5, 2.1.22	.	No hazardous material e.g. oil or diesel to be disposed off at any unregistered waste site.	During and at the end of construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
18.3	2.1.9	.	If potentially hazardous substances are to be stored on site, the contractor to provide a method statement detailing the substances/materials to be used, together with the storage, handling and disposal procedures of the materials to the project manager and ECO.	During construction
18.4	2.1.9	.	No paint products may be disposed off on site and brush/roller wash facilities to be established to the satisfaction of the project manager and the ECO. Oil based paints and chemical additives and cleaners such as thinners and turpentine to be strictly controlled. A method statement detailing the paint management procedures is required.	During construction
18.5	2.1.9	.	If potentially hazardous substances are to be stored on site, the contractor to provide a method statement detailing the substances/materials to be used, together with the storage, handling and disposal procedures of the materials to the project manager and ECO.	During construction
18.6	2.1.9, 2.2.11	.	Hazardous building materials (e.g. asbestos, fibre claddings, refrigerants, coolants, substation cooling oils etc.) to be identified and dealt with in accordance with the relevant safety and health legislation. All such material to be separated on site and disposed off at an appropriate licenced facility. The contractor to supply the ECO with a certificate of disposal.	During construction
19	.	.	<b>SPILL PREVENTION, RESPONSE AND CLEAN-UP</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Substances such as fuels, lubrication oils, hydraulic and brake fluid, solvents, radioactive components, paints and anti-corrosives, insecticides and pesticides, as well as the by-products and waste associated with use of these products will be present on site. The release of these hazardous substances into the receiving environment that could result in air, soil and water pollution and may affect the health and well being of people, plants and animals.	.
.	.	.	<b>Goals and Objectives:</b>	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
.	.	.	Define and implement control measures for hazardous spill prevention, and ensure adequate response and clean-up measures are put in place.	.
.	.	.	<b>Mitigation Measures:</b>	.
19.1	.	41	Spillages of petrochemical products must be avoided. These products must be stored in areas that are banded and demarcated to avoid soil and groundwater contamination.	During construction
19.2	2.1.22	45	A specific area must be demarcated for fuelling and workshop services. The area must be bunded and spills are cleaned and disposed at a registered site. All hazardous substance spillages must be reported to the Department of Water Affairs (DWA) within 48 hours of the incident.	Prior to and during construction
19.3	2.1.10	.	The contractor to ensure that his employees are aware of the procedure to be followed for dealing with spills and leaks, which shall include notifying the project manager, the ECO and the relevant authorities. Treatment and remediation of the spill areas to be undertaken to the reasonable satisfaction of the ECO and local authority.	During construction
19.4	2.1.22	.	If it is necessary to do maintenance outside of a workshop area the contractor to obtain approval from the project manager and the ECO prior to commencing activities.	During construction
19.5	2.1.22	.	The contractor to ensure that in the workshop and other plant maintenance facilities, including those areas where, after obtaining the project manager and ECO's approval, the contractor carries out emergency plant maintenance, there is no contamination of the soil or vegetation.	During construction
19.6	2.1.22	.	The workshops (if these are to be installed on site) to have smooth impermeable floors either constructed from concrete or thick plastic covered with sufficient sand to protect the plastic from damage.	During construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
19.7	2.1.22	.	The workshop floors to be bunded and sloped towards an oil trap or sump to contain any spillages of substances. A method statement detailing the design and construction of the workshop must be submitted, if this is to be installed.	Prior to construction
19.8	2.1.22	.	All vehicles and equipment to be kept in good working order and serviced regularly. Leaking equipment to be repaired immediately or removed from site.	During construction
19.9	2.1.22	.	When servicing equipment, drip trays to be used to collect the waste oil and other lubricants. Drip trays to also be provided in construction areas for stationary plant (e.g. compressors) and for parked plant (e.g. scrapers, loaders, vehicles). Drip trays to be kept free of water that will float the oil to overspill.	During construction
19.10	2.1.22	.	The washing of equipment to be restricted to urgent or preventative maintenance requirements only. All washing to be undertaken in the workshop or maintenance areas and these areas must be equipped with a suitable impermeable floor and sump or oil trap.	During construction
19.11	2.1.22	.	The use of detergents for washing to be restricted to low phosphate and nitrate containing and low sudsing-type detergents.	During construction
19.12	2.1.22	.	In the event of a breakdown in the veld, any oil spills to be cleaned up immediately. All contaminated soil to be removed and placed in containers. Contaminated soil can be taken to one central point at the contractors campsite where bio-remediation can be done. Bigger spills can be treated on site. A specialist contractor to be used for the bio-remediation.	During construction
19.13	2.1.22	.	Jet fuel and other fuel storage to be done in properly chosen and protected areas. Bund walls to be installed around such areas.	During construction
19.14	2.1.22	.	Contaminated areas around the fuel storage areas at the contractor's campsite to also be re-mediated upon completion of the contract.	During construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
20	.	.	<b>AESTHETICS, HOUSEKEEPING AND VISUAL IMPACTS</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Alteration of the visual and landscape character of the immediate surroundings.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Maintain the visual quality and appeal of construction site and surroundings.	.
.	.	.	<b>Mitigation Measures:</b>	.
20.1	.	59	The proposed residential development and access road must be well maintained and kept in good order at all times.	During and at the end of construction
20.2	2.1.2	.	The applicant/contractor to not deface, paint, damage or mark any natural features (e.g. trees, buildings etc.) situated in or around the site during surveying or for any other purposes.	Prior to and during construction
20.3	2.2.4	.	No littering to be allowed. The ECO to monitor the neatness of the work sites as well as the campsites.	During construction
20.4	2.2.4	.	The necessary waste collection bins to be kept on site.	During construction
20.5	2.2.4	.	All litter and rubble to be removed from the servitude on a daily basis.	During construction
20.6	1.1.13, 2.2.9	.	The contractor to take all reasonable measures to minimise any dust nuisance, pollution of the adjacent area and inconvenience to, or interference with the public (or other) as a result of the execution of the works.	During construction
20.7	2.2.10	.	The contractor shall ensure that any lighting installed on the site for his activities does not interfere with visitors and/or residents on the farmers or other users of the area.	During construction
20.8	2.2.11	.	The contractor to make provision for workers to clean up the contractor's camp and working areas every day to that no litter is left lying around and so that the site is in a neat and tidy state.	During construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
20.9	2.2.11	.	Refuse screens to be installed at runoff concentration points from large parking facilities, wash bays, storm water outlets, ablution and eating areas. These facilities to be serviced and monitored.	During construction
20.10	2.1.7	.	All manufactured and/or imported material shall be stored within the demarcated area, and, of so required, out of the rain.	During construction
20.11	2.1.14	.	All site establishment components (incl. equipment) shall be positioned to limit visual intrusion on neighbours and the size of areas disturbed. The type and colour of roofing and cladding materials to the Contractor's temporary structures shall be selected to reduce reflection.	During construction
20.12	2.2.3	.	The Contractor shall designate eating areas to the approval of the ECO which shall be clearly demarcated. No eating of meals shall take place outside these designated areas without the approval of the Contractor.	During construction
20.13	2.2.3	.	The feeding, or leaving of food for animals is strictly prohibited.	Ongoing
20.14	2.2.3	.	Sufficient waste bins shall be present in the designated eating areas and shall be emptied regularly.	Ongoing
<b>21</b>	.	.	<b>REHABILITATION</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Long-term environmental degradation due to incomplete site clean-up and rehabilitation.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Minimise residual impacts and ensure physical and chemical stability of site. Ensure human safety.	.
.	.	.	<b>Mitigation Measures:</b>	.
21.1	.	53	Disturbed areas must be rehabilitated progressively to minimise the total open area.	During construction

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
21.2	.	.	Should the project be abandoned or decommissioned, a Closure Management Plan must be compiled and the holder of the environmental authorisation must rehabilitate the site to the satisfaction of the DENC.	As required
21.3	2.1.8	.	Any area used for stockpiling which will not be covered by building development to be returned to at least the same state as it was prior to stockpiling and it must be ensured that the erosion potential of these areas are not increased.	Prior to and during construction
21.3	2.1.3	.	All temporary access routes to be rehabilitated at the end of the contract to the satisfaction of the ECO	At the end of construction
<b>22</b>	.	.	<b>PUBLIC AND LABOUR RELATIONS</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Negative public perception. Community mobilisation.	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Maintain transparent communication with project affected community. Keeping project affected community up to date with developments at Sishen. Maintain community based "license to operate".	.
.	.	.	<b>Mitigation Measures:</b>	.
22.1	2.1.12	.	The ECO shall ensure that all agreements reached with the Landowners are fulfilled and that such areas be rehabilitated once the project is completed.	As required
22.2	2.1.12	.	Should any claim be instituted against the PM due to the actions of the Contractor at a camp site, the PM shall hold the Contractor fully responsible for the claim until such time that the Contractor can prove otherwise with the necessary documentation.	As required

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
23	.	.	<b>SITE DEMARCATION AND INFRASTRUCTURE</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Injury of people and livestock due to unauthorised access onto construction area. Protection of sensitive receptors	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Implementation of adequate access control	.
.	.	.	<b>Mitigation Measures:</b>	.
23.1	2.1.14	.	The Contractor shall erect and maintain permanent and/or temporary fences/demarcation of the type and in the locations directed by the PM and the ECO. Such fences shall, if so required, be erected before undertaking designated activities.	As required. Prior to construction
23.2	2.1.14	.	All storage areas and site camps should be fenced with wooden standards. It is proposed that these standards be at 20m centres, with 3 wooden droppers between the standards. A minimum of 3 plain wire strands should be tensioned horizontally, the lowest strand being at a height of 500mm above average ground level and the highest being at 1.2m.	As required. Prior to construction
23.3	2.1.14	.	The above mentioned fencing shall also be installed along the boundary between any "No go" areas and adjacent areas where construction activities are going to take place. Such fencing should be agreed upon between the PM, Contractor and the ECO and must be installed before any construction activities take place.	As required. Prior to construction
23.4	2.1.14	.	The contractor shall maintain in good order all demarcation, fencing and barriers for the duration of construction activities, or as otherwise instructed.	Ongoing
23.5	2.1.14	.	Any temporary fencing removed for the execution of any portion of the works is to be reinstated by the Contractor as soon as practicable.	As required



EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
23.6	2.1.14	.	The contractor, at the end of the contract, shall remove all demarcation, fencing or barriers not forming part of the final works on site.	As required
23.7	2.1.14	.	Should any person, vehicle, equipment or material involved in the construction go beyond the boundaries of the site (apart from when leaving the site via the access roads) the ECO can then order the Contractor to install a fence or barrier to specifications supplied by the PM. The cost of the barrier shall be carried by the Contractor.	Ongoing
23.8	2.1.14	.	A Method Statement detailing the layout and method of establishment of the construction camp (including all buildings, hostels, offices, lay down yards, vehicle wash areas, fuel storage areas, batching areas and other infrastructure required for the running of the project that may be of relevance) shall be submitted.	Prior to construction
23.9	2.1.14	.	The Contractor shall supply and maintain adequate and suitable sheds for the storage of materials. Sheds that may deteriorate or corrode if exposed to the weather shall be weatherproofed, adequately ventilated and provided with raised floors.	As required. Prior to construction
<b>24</b>	.	.	<b>CONTAMINATED WATER</b>	.
.	.	.	<b>Environmental Aspect / Impact Source:</b>	.
.	.	.	Water pollution resulting from construction activities	.
.	.	.	<b>Goals and Objectives:</b>	.
.	.	.	Define and implement control measures for the prevention of water pollution. response procedure to handle and remediate polluted water.	Adequate
.	.	.	<b>Mitigation Measures:</b>	.

EMP No	Host Site EIA/ EMP	DENC EA (Amend) Conditions	Technical and Management Commitments	Scheduling
24.1	2.1.19	.	Potential pollutants of any kind and in any form shall be kept, stored and used in such a manner that any escape can be contained and the water table not endangered. This particularly applies to water emanating from runoff from fuel depots/workshops/truck washing areas.	During construction
24.2	2.1.19	.	Wash down areas shall be placed and constructed in such a manner so as to ensure that the surrounding areas are not polluted. Contaminated water includes water that is carrying excess sediment due to construction activities	Prior to and during construction
24.3	2.1.19	.	Contaminated water storage facilities shall not be allowed to overflow and appropriate protection from rain and flooding shall be implemented.	Prior to and during construction
24.4	2.1.19	.	Contaminated water that is removed from site shall be disposed of at a facility approved by the ECO and Local Authority.	During construction
24.5	2.1.19	.	No contaminated water that does not meet the water quality standards and criteria under the National Water Act may be released into a natural system, whether it be to surface or groundwater.	During construction
24.6	2.1.19	.	A Method Statement shall be required that details the contaminated water management system for the site which will cover wastewater from all wash areas where hydrocarbon and hazardous materials and pollutants are expected to be used. This includes, but is not limited to, batching areas, vehicle washing, workshop wash bays, paint wash and cleaning.	During construction
24.7	2.1.19	.	The Contractor shall notify the PM and the ECO immediately of any pollution incidents on site and the event recorded in the site book.	During construction