

**Updated Environmental Management Plan (EMP) / Environmental Clearance
Certificate (ECC) Renewal Report for the:
Henning Crusher Brick Making Factory in Ondangwa, Oshana Region**



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ECC Renewal Application No.: **APP-00923**

Old ECC No.: **ECC00504**


Proponent: **Henning Crusher (Pty) Ltd**
P O Box 184 Tsumeb, Namibia

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Title: Environmental Clearance Certificate (ECC) Renewal Report / Updated Environmental Management Plan (EMP) - Henning Crusher Brick Making Factory in Ondangwa, Oshana Region

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EXECUTIVE SUMMARY

Henning Crusher (Pty) Ltd (hereinafter referred to as the Proponent) intends to continue with the operational activities of making bricks at their factory (project site) in Ondangwa Town of the Oshana Region. The factory is located on the western side of the Town (immediate west of Pick' n Pay Olunkono) along the C46 towards Ongwediva. The site has been in operation since the early 2000s and covers a surface of 35,397.41m².

The project associated work are listed activities in the Environmental Impact Assessment (EIA) Regulations (2012) of the Environmental Management Act (EMA) No. 7 of 2007 that may not be undertaken without an Environmental Clearance Certificate (ECC) and that the ECC needs to be renewed every three years:

The associated listed activities include:

3. Mining and Quarrying Activities

- Listed activity 3.2: Other forms of mining or extraction of any natural resources whether regulated by law or not – **The associated extraction of sand offsite by suppliers (such as Traditional Authorities) to provide the crusher site for brick manufacturing.**
- Listed activity 3.3: Resource extraction, manipulation, conservation and related activities – **the manipulation of sand transported to site for mixing to make bricks.**

9. Hazardous Substance Treatment, Handling and Storage

- Listed activity 9.2: The storage and handling of a dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location – **the storage of two diesel storage tanks with a combined capacity of 46 cubic meters (two 23,000 litre fuel tanks).**

The current and expiring project ECC was issued on the 29th of January 2020 upon approval of the EMP at the time and expired on the 29th of January 2023. The copy of the expired ECC is attached hereto.

Therefore, for the project to remain compliant to the environmental legislation and ensure sustainability, an ECC renewal should be applied for (accompanied by an updated Environmental Management Plan (EMP) and submitted to the Environmental Commissioner at the Ministry of Environment, Forestry and Tourism (MEFT)).

To ensure a continued compliance with the EMA and its 2012 EIA, Henning Crusher appointed Serja Hydrogeo-Environmental Consultants CC, independent Environmental Consultants to apply for the ECC renewal, accompanied by an updated EMP.

The updated EMP would include information of what may have changed between the date of ECC issuance to date as well as the confirmation of actual implementation of the environmental management and mitigation measures recommended upon approval of the first EMP. The updated EMP is then submitted to the Environmental Commissioner at MEFT for ECC renewal consideration.

The new ECC has been applied for and submitted to MEFT on the 27th of January 2023. The date stamped copy of the ECC renewal application (Form 1) also been uploaded on the ECC online system (Portal) of MEFT and upon submission of this updated Environmental Management Plan (EMP), a new ECC for the project will be considered by the Environmental Commissioner.

The Potential Adverse Impacts identified

The potential (key) impacts that had been identified (and as updated) are as follows.

Positive

- Socio-economic impact such as job creations to 90 people and procurement services from external suppliers
- Production of bricks used for construction industries
- Social uplifting and betterment through Corporate Social Responsibility (CSR) activities
- National development through taxes.

Negative (Adverse)

- Site soil disturbance (compaction by heavy trucks)
- Traffic (vehicular) safety
- Noise
- Dust and Air Quality
- Occupational and community health and safety
- Waste generation (general, sewage and wastewater).

The management measures were made for these impacts and as updated as deemed necessary in January 2023.

The implementation of the EMP and compliance during the validity period of the expiring environmental clearance certificate (ECC) and after the ECC's expiry is provided in this document. The project site status presents the project activities and EMP implementation progress have been made between 29 January 2020 and 27 January 2023 (validity of the ECC) to improve, promote, and ensure environmental management and sustainability.

RECOMMENDATIONS AND CONCLUSIONS

Recommendations

The Henning Crusher's Ondangwa site was observed to assess the implementation of the EMP on the project site for the purpose of the project's ECC renewal. The project is of medium-scale level and activities are well limited within the site boundaries. From site observations, the Proponent has been fully compliant with most of the EMP requirements as recommended within the current ongoing project phase (operations).

The components of the EMP (management measures) that were recommended for the current project activities have been fully implemented and this has been observed with onsite biophysical and social environmental and within proximity of site.

The only non-compliance component observed is monitoring because there is no record of EMP compliance monitoring (Audit)/Bi- or Annual Monitoring done for the site since the issuance of the expiring ECC. However, this can be greatly improved on the way forward, with the assistance of the Environmental Consultant or project ECO/SHE Officer and the Proponent's full commitment and co-operation.

Therefore, the Environmental Consultant is confident that the potential negative impacts associated with the project activities on site can continue to be mitigated by effectively implementing the recommended management action measures and with more effort and commitment put on implementation monitoring (Bi-Annual Environmental Monitoring and reporting). It is therefore, recommended that the brick making factory and associated activities onsite be granted a new Environmental Clearance Certificate, and provided that:

- All the management measures (mitigations) provided herein and as developed through the project implementation continue to be implemented effectively with compliance emphasis pointed out in Table 4-2 and where required, improvement should be effectively put in place.
- All required permits, licenses, approvals, and document renewals that may be required for the project activities in future are obtained as required.
- The Proponent and all their project workers, contractors and or specialists comply with the legal requirements governing their project and its associated activities.
- All the necessary environmental and social (occupational health and safety) precautions provided are adhered to.
- To avoid very late renewal of the ECC, the Proponent' SHE Officer (or an ECO) OR Environmental Consultant should effectively conduct Environmental (EMP) Compliance Bi-Annual Monitoring and most importantly, ensure timely renewal of the ECC. A Renewal application can be submitted at least 3 months before the expiry date of the valid ECC to allow time for the evaluation of the ECC Renewal Report (Updated EMP) by the DEAF and approval by the Environmental Commissioner; and
- The EMP Compliance check (Bi-Annual Monitoring) should be done and this can be The monitoring exercise can be undertaken either by the project ECO/SHE Officer and audited by an external independently appointed Environmental Assessment Practitioner (EAP) / Environmental Consultant or just by the EAP when applying for an ECC renewal. An Environmental Audit/Compliance/Bi-Annual Report shall be compiled for every monitoring and submitted to the DEAF at the Ministry of Environment, Forestry and Tourism for archiving (via the ECC Online Portal under the valid ECC details). This would make the next ECC Renewal easier because of an in-between track record of monitoring progress prior to the expiry date of the valid ECC.

Conclusions

The Environmental Consultant recommends that the expired ECC be renewed so that the Proponent can continue with the project activities (to make bricks) and continue to positively impacting the nation through the existing economic opportunities.

The site is generally well-kept and equipped with the necessary and required services infrastructure, well-maintained and adheres to the site and activity-specific environmental management requirements. Therefore, the Environmental Consultant is of the same hope that Henning Crusher Ondangwa will continue to maintain the same commitment towards environmental sustainability and ethics even if after the renewal of the ECC and most importantly ensuring its renewal on time.

Therefore, it is crucial for the Proponent, their workers, contractors and or specialists to continue with the effective implementation of the recommended management measures to protect both the biophysical and social environment. The aim would be to promote sustainable and safe development while ensuring a smooth and harmonious existence of the project activities in the host environment

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Appendix B: Copy of the ECC Renewal Application

LIST OF ABBREVIATIONS

ABBREVIATION	MEANING
CSR	Corporate Social Responsibility
DEAF	Department of Environmental Affairs and Forestry
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
ECO/SHE Officer	Environmental Control Officer / Safety Health & Environment Officer
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
HSE	Health, Safety and Environment
MEFT	Ministry of Environment, Forestry and Tourism
MME	Ministry of Mines and Energy
NAD	Namibian Dollar
NORED	Northern Namibia's Regional Electricity Distributor
PPE	Personal Protection Equipment
RA	Roads Authority of Namibia

1 INTRODUCTION

1.1 Background and Project Location

To contribute to the country's construction industry and economic development, Henning Crusher (Pty) Ltd (hereinafter referred to as the Proponent) intends to continue with the operational activities of making bricks at their factory (project site) in Ondangwa Town of the Oshana Region. The factory is located on the western side of the Town (immediate west of Pick' n Pay Supermarket Olunkono) along the C46 towards Ongwediva as shown on the map in Figure 1-1. The site has been in operation since the early 2000s and covers a surface of 35,397.41m².

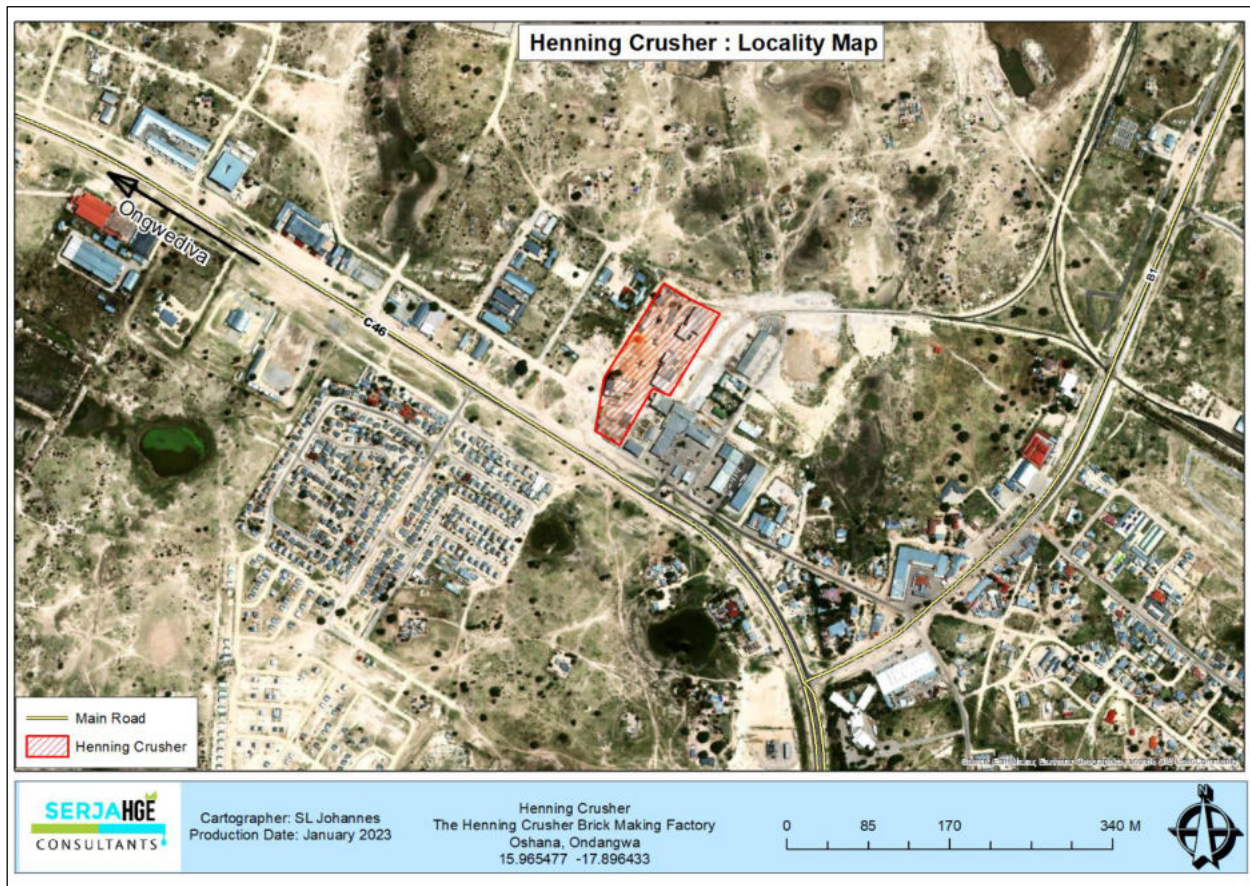


Figure 1-1: Locality map of the Henning Crusher Brick Making Factory (project site) in Ondangwa

The GPS coordinates of the Henning Crusher Site in Ondangwa are as follows:

- Point A: -17.8958 15.9667
- Point B: -17.8952 15.9657
- Point C: -17.8969 15.9646

- Point D: -17.8978 15.9645
- Point E: -17.898 15.9649
- Point F: -17.8971 15.9655
- Point G: -17.8972 15.9658

The project associated work are listed activities in the Environmental Impact Assessment (EIA) Regulations (2012) of the Environmental Management Act (EMA) No. 7 of 2007 that may not be undertaken without an Environmental Clearance Certificate (ECC) and that the ECC needs to be renewed every three years:

The associated listed activities include:

Mining and Quarrying Activities

- Listed activity 3.2: Other forms of mining or extraction of any natural resources whether regulated by law or not – **The associated extraction of sand offsite by suppliers (such as Traditional Authorities) to provide the crusher site for brick manufacturing.**
- Listed activity 3.3: Resource extraction, manipulation, conservation and related activities – **the manipulation of sand transported to site for mixing to make bricks**

Hazardous Substance Treatment, Handling and Storage

- Listed activity 9.2: The storage and handling of a dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location – **the storage of two diesel storage tanks with a combined capacity of 46 cubic meters (two 23,000 litre fuel tanks).**

The current and expiring project ECC was issued on the 29th of January 2020 upon approval of the EMP at the time and expired on the 29th of January 2023. The copy of the expired ECC is attached as Appendix A.

Therefore, for the project to remain compliant to the environmental legislation and ensure sustainability, an ECC renewal should be applied for (accompanied by an updated Environmental Management Plan (EMP) and submitted to the Environmental Commissioner at the Ministry of Environment, Forestry and Tourism (MEFT)).

To ensure a continued compliance with the EMA and its 2012 EIA, Henning Crusher appointed Serja Hydrogeo-Environmental Consultants CC, independent Environmental Consultants to apply for the ECC renewal, accompanied by an updated EMP.

The updated EMP would include information of what may have changed between the date of ECC issuance to date as well as the confirmation of actual implementation of the environmental management and mitigation measures recommended upon approval of the first EMP. The updated EMP is then submitted to the Environmental Commissioner at MEFT for ECC renewal consideration.

1.2 The Aim of this EMP

This document has been compiled to inform the Ministry of Environment, Forestry and Tourism (MEFT) of what has happened on the project site since the issuance of the expired ECC to date to enable the renewal of the ECC issued in January 2020. The aim is also to report on the progress of actual work done on site, implementation of the environmental management and mitigation measures of potential impacts identified.

For the project to remain compliant with the environmental legislation and ensure sustainability, a new ECC should be applied for by launching an application with MEFT for evaluation and consideration of renewing the ECC.

The purpose of renewing an ECC is to ensure that the project activities are undertaken in an environmentally friendly and sustainable manner. This is done by the effective implementations of environmental management and mitigation measures recommended in the previously approved EMP to minimize the adverse identified impacts while maximizing the positive impacts. Not only by the mere implementation of these measures, but also bi-annual monitoring of this implementation through audit and project activities' compliance exercises on site throughout the project life cycle and validity of the ECC over time.

Subsequently, to comply with the EMA and its 2012 EIA Regulations, the Proponent appointed an independent Environmental Consultant to undertake the necessary tasks for their ECC renewal. The required tasks include assessing of the site, checklist the status of the implementation of the old EMP/management and mitigations, compiling an updated Environmental Management Plan (EMP) and submitting the ECC renewal application and Report to the competent and regulatory authority, respectively.

The short description of the current operational site activities is presented under the next chapter.

2 DESCRIPTION OF CURRENT ACTIVITIES ONSITE: SITE AUDIT

2.1 Operational Activities and Maintenance

The brick making operations on the site has been done since the early 2000s and has been supplying both local, regional and at some instances national end-users (customers) in the construction industry.

According to the Proponent, the factory manufactures about 4 million bricks per month, and these are delivered to the customers on a daily basis based on the demand.

The general brick manufacturing process has six phases: 1) mining and storage of raw materials, 2) preparing raw materials, 3) forming the brick, 4) drying, 5) firing and cooling and 6) de-hacking and storing finished products¹. However, these phases may vary from project to project depending on the site conditions, raw materials used and other factors.

As part of the requirements and conditions of the environmental clearance renewal, an Environmental Audit of the site was done by Ms. Fredrika Shagama from Serja Hydrogeo-Environmental Consultants on the 26th of January 2023 from 10am to 12pm (midday).

This process flow of the brick making project in Ondangwa is shown in Figure 2-1.

¹ [https://www.gobrick.com/docs/default-source/read-research-documents/technicalnotes/9-manufacturing-of-brick.pdf?sfvrsn=0#:~:text=The%20manufacturing%20process%20has%20six,products%20\(see%20Figure%201\).](https://www.gobrick.com/docs/default-source/read-research-documents/technicalnotes/9-manufacturing-of-brick.pdf?sfvrsn=0#:~:text=The%20manufacturing%20process%20has%20six,products%20(see%20Figure%201).)

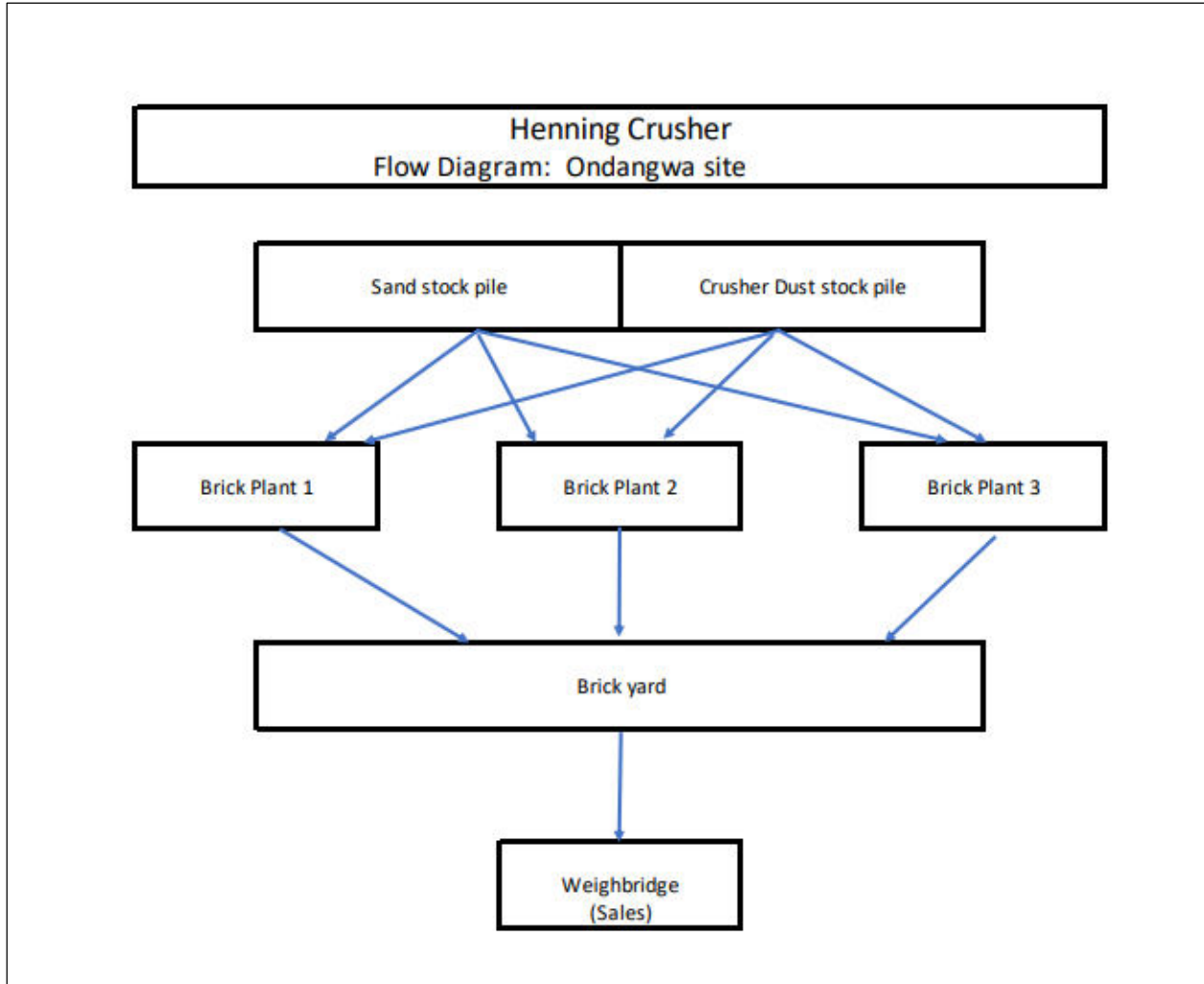


Figure 2-1: The flow diagram of brick making at Henning Crusher Site in Ondangwa

For the Henning Crusher site in Ondangwa, the sand is mined (extracted) offsite and according to site personnel, the sand is bought from the Traditional Authorities who extract it from the regulated borrow pits/sites (about 6 tonnes of sand per month). The material is stored at designed areas onsite – Figure 2-2.



Figure 2-2: The raw material (sand and gravel) stored onsite

The brick making is a close-system process, i.e., there is no direct contact between the factory workers and the raw materials such as cement, sand, etc. The photos of some of the brick making process at one of the factory buildings are shown in Figure 2-3 (A, B, C, and D) whereby human labour is required and part of the process that is being automated Figure 2-3 (E and F).



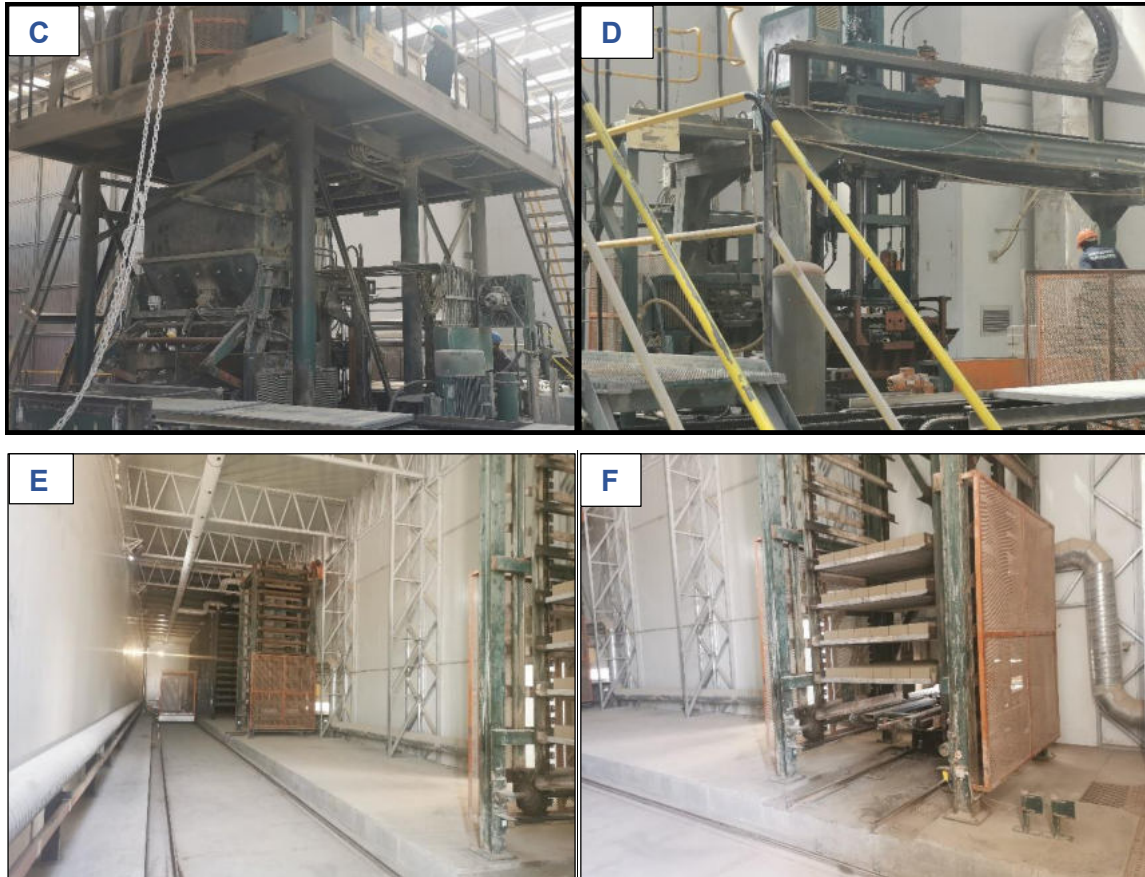


Figure 2-3: The overview of the brick making process in one of the factory buildings onsite

Following the Audit done for the site on the 26th of January 2023, the findings and observations of the site (in terms of compliance, services, resources and infrastructures) have been noted down and included in this updated EMP as presented below.

2.2 Site Findings and Observations of the Project Activities

The site was audited based on the project activities and done in terms of the actual resources (human and technical as well as services infrastructure) onsite, and they are as follows:

- **Human resources:** The project employs ninety (90) people, of which three are females. The high number of male workers is probably because of the strenuous nature of the project activities requiring more male power to get the work done especially in the factory buildings and workshops with heavy handling of machinery and driving heavy trucks and equipment on and offsite. The workers range from machine operators, drivers, technical personnel, administration, and support.

- **Accommodation for the workers:** most workers are accommodated in the Henning Crusher houses located to the immediate eastern side of the site, while some workers stays in the houses in Extension 16 of Ondangwa Town on the western side of the Town.
- **Administration offices:** there is an administration building at the entrance of the site.
- **Equipment, Machinery, and Vehicle:** in terms of project vehicles, there were fifteen (15) heavy trucks (and now only fourteen (14)), two excavators, two loaders, seven forklifts and one pick-up truck (bakkie) that are used to move and transport materials and goods onsite. Some of the vehicles and machinery seen onsite during the Audit are shown in Figure 2-4. The tools and equipment are inspected weekly to ensure that they are fit for the operations to ensure efficiency and avoid occupational injuries owing to non-functional tools and equipment.

The vehicles are washed at the washing bay onsite, and the water is captured for recycling and re-used for dust suppression onsite.



Figure 2-4: Some of the project equipment, materials and vehicles observed onsite

- **Water supply:** water for the project is supplied by the Ondangwa Town Council water supply system which is feeding the site water storage tanks. There are eighteen (18) 10,000-litre water tanks onsite (Figure 2-5) of which 8 of the tanks supply water to the office (administration building) and the remaining 10 tanks supply to the factory (actual brick making works). The project uses 1170 units per month on average.



Figure 2-5: A- the 8 water tanks for the office and B- factory use water storage tanks onsite

- **Fuel supply:** the project vehicles and machinery are supplied with fuel from two 23,000-litre above-ground diesel tanks onsite - Figure 2-6. Through a visual observation, there was rain water inside the paved floor of the tanks containment area and it taken away for disposal daily. There were no observed ground spills or oil stains. The areas around the tanks is interlocked but possibly wind-blown sand can be seen on the surface of the interlocked area.



Figure 2-6: The two 23,000-litre diesel tanks onsite

- **Power supply:** The Site is connected to the NORED electricity grid for power supply.
- **Waste Management:** the site waste management was audited for the following waste types:
 - Solid waste (domestic and general): There site generally clean and solid waste is kept in waste bins and skips onsite. The bins are collected by the Town Council waste management every 2nd or 3rd day of the week.
 - Hazardous waste: there is a storage and handling of hazardous substance at the site. The used fuels are stored in red drums at a designated closed off area in one of the workshop buildings – Figure 2-7. There are also oil drip trays onsite to ensure that spills are prevented.



Figure 2-7: The red storage drums for use fuels kept in one of the workshops onsite

The used hydrocarbons (fuels) are collected by Wesco for refinery. Therefore, no disposal of hazardous waste on and around the site.

- Sewage: The site is provided with flushing toilets that are connected to the Ondangwa Town Council's sewer reticulation systems. No other effluent is generated onsite.
- Scrap metals and wood: there are some scrap metals and wood onsite. These are transported to Tsumeb for recycling.
- **Occupation health and safety:**
 - **First Aid Kit**: There are six fully-furnished first aid kits onsite and one of the kit is shown in Figure 2-8.



Figure 2-8: One of the first aid kits onsite

- **Fire extinguishers**: There are plenty of fire extinguishers onsite that every building has 2 or 3 fire extinguishers that are well-serviced and up-to-date (the next service date is September 2023). One of the fire extinguishers is shown in Figure 2-9. The fire extinguisher are inspected on a monthly basis.



Figure 2-9: One of the many fire extinguishers onsite

- **Warning and Hazard signage:** there are sufficient warning or cautionary signage onsite. However, some signage writings are fading and thus, not clearly visible. Therefore, these should be improved.
- **Personal Protective Equipment (PPE):** The site personnel are equipped with appropriate personal protective equipment (PPE) while performing tasks on site. Some workers with PPE are shown in Figure 2-10.



Figure 2-10: some of the project workers with PPE

- **Health and Safety Inductions and Trainings:** Trainings are offered to personnel (site workers) on a monthly basis and refresher trainings to all workers. The induction trainings are also provided to new workers with training manuals. These trainings entails emergency action plans, safety and health as well as disciplinary code. During the trainings, there are always interpreters for easy communication and to ensure that the message is understood by everyone. There is a new factory building that is different from the existing ones, therefore, training will be offered to all workers before starting operations in the new building. Some photos of the Safety and Health Training documents onsite are shown in Figure 2-11.

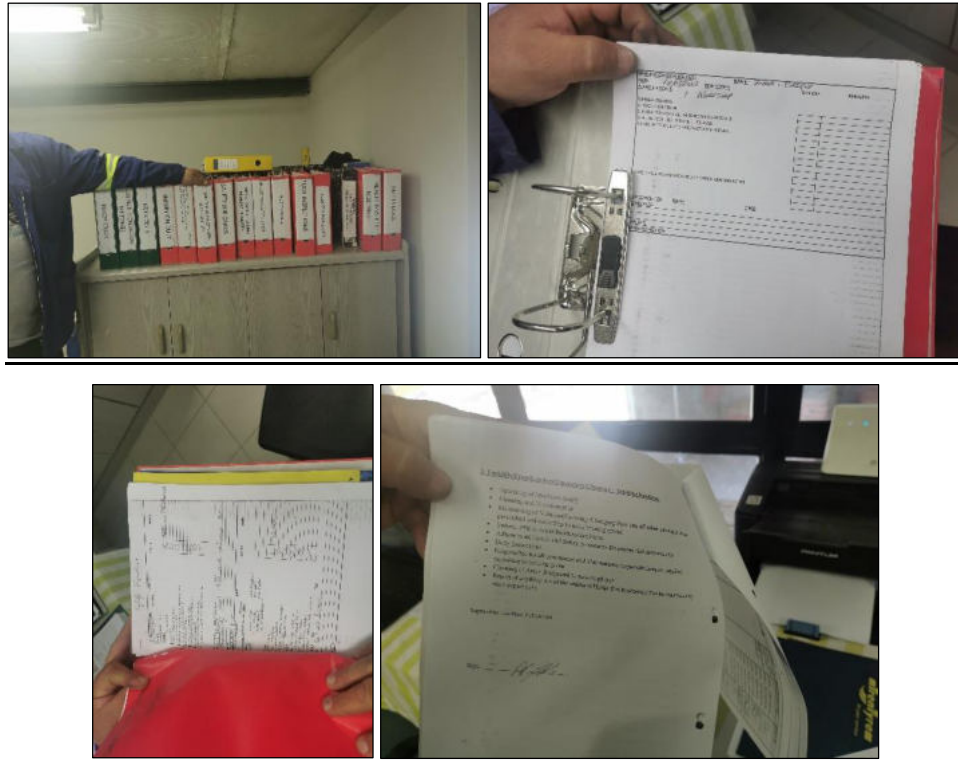


Figure 2-11: The Safety and Healthy Training documents and records onsite

- **Site Safety and Security:** the site is well secured with an electric fence wire and access to the site is controlled by security guards stationed at both the gate and administration building. The site fencing on the southern boundary is shown in Figure 2-12.



Figure 2-12: The fencing around the site

- **Site accessibility (Road):** The site is accessed from the C46 via an unpaved access road that is used by the project related vehicles to and from site.

2.3 Corporate Social Responsibility (CSR)

Henning Crusher has been involved in many CSR through donations in the surrounding communities and outside Ondangwa. The donations have been done in form monetary assistance, free bricks, etc. The recorded beneficiaries include some vulnerable individuals (members of society in dire need), schools, churches, Ondangwa Town Council activities such as cleaning campaigns, Oshana Police, University of Namibia, among others. Some of the donations proofs and CSR activities are shown in the photos provided in Figure 2-13 (as seen on file during site audit).

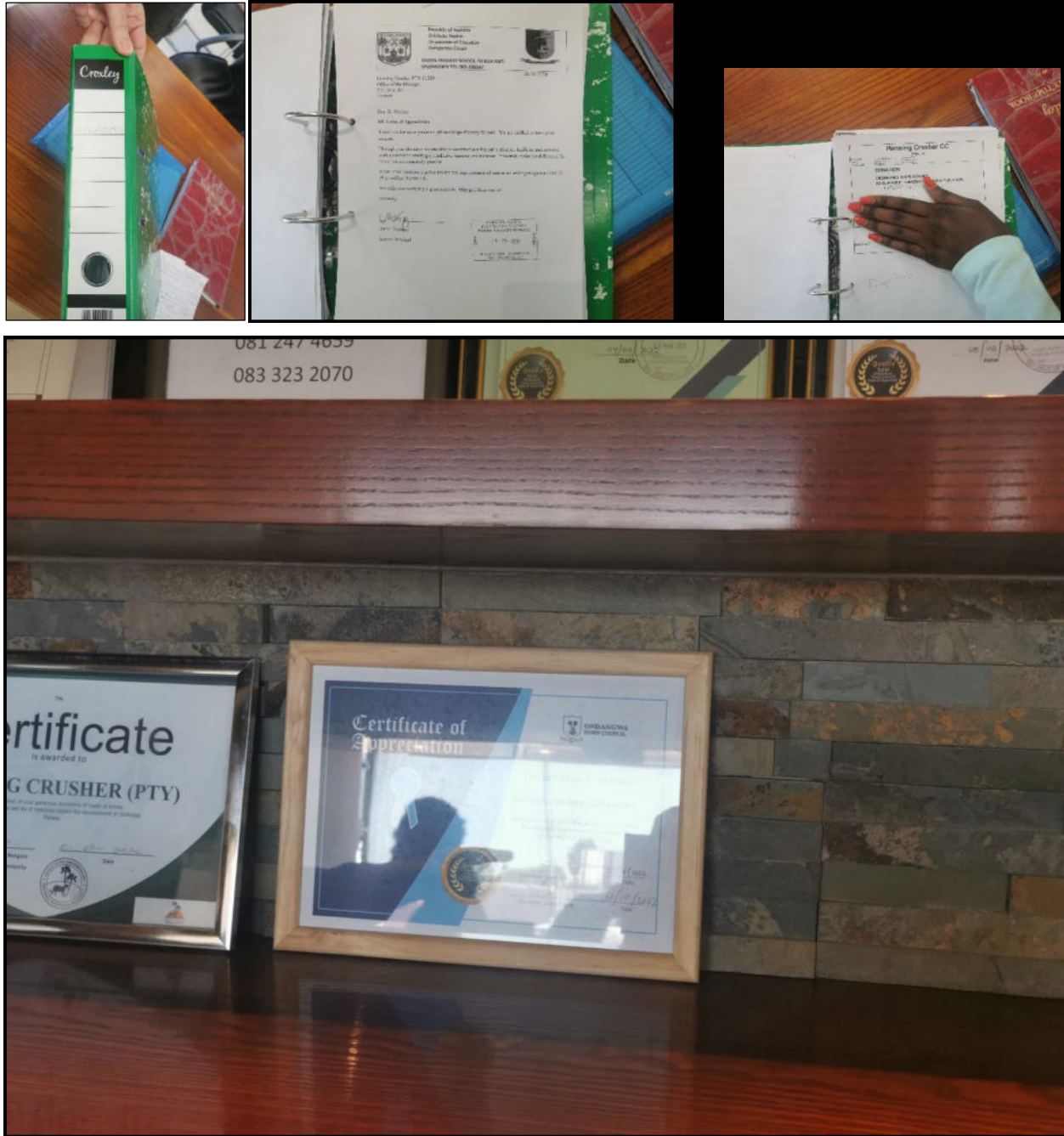


Figure 2-13: The CSR donations proofs and CSR appreciation certificates

To celebrate its 45th anniversary as a company, Henning Crusher has committed to award its long-term employees with years of service between 17 and 38 years land valued at NAD100,000 and the longest serving employee of 42 years with a house valued at NAD600,000.00 (to a total value of NAD2,2 million). The notice proof of this is pasted at the administration building (Figure 2-14).

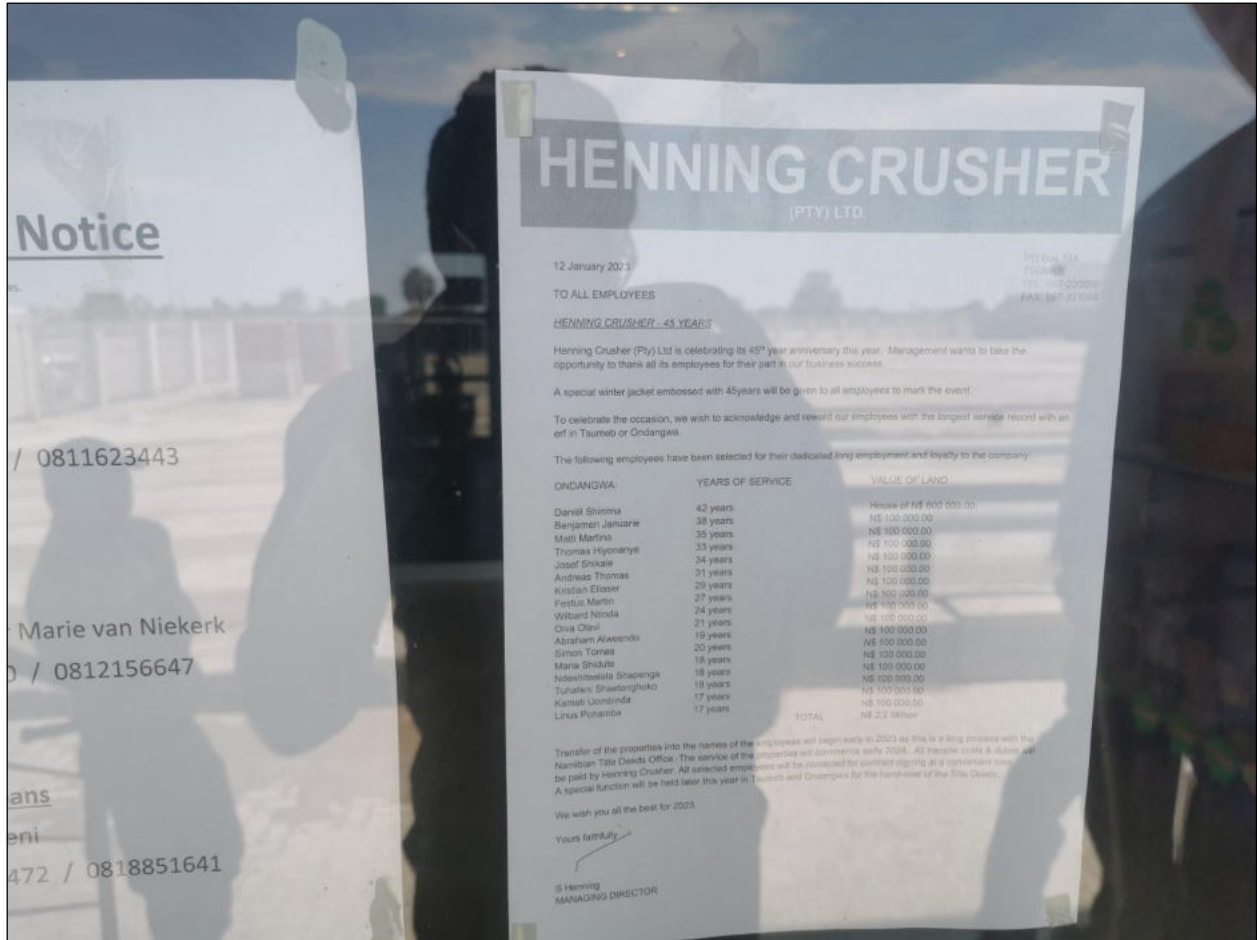


Figure 2-14: The proof of the NAD2,2 million value appreciation to employees for long-service

3 LEGAL FRAMEWORK: OPERATIONAL PERMITTING AND LICENSES

The project's activities are undertaken in a biophysical and social environment. These activities or some of them may even at minimum impact some of these environmental components. It is therefore necessary to consider the legislations and legal requirements governing the project and its associated activities.

The main legal framework presented herein is that of Namibia for the relevant project component under the scope of this document and this is regarding the authorizations and permitting for project activities as presented in Table 3-1.

Table 3-1: List of applicable legislation where required, permits or licenses for the project activities

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Environmental Management Act EMA (No 7 of 2007)	Requires that projects with significant environmental impacts are subject to an environmental assessment process (Section 27). The details principles which are to guide all EAs.	The EMA and its regulations should inform and guide this EA process. ECC Renewal: An ECC should be renewed every 3 years prior to its expiry date (at least 3 months before expiry date). The contact details at the Department of Environmental Affairs and Forestry (DEAF) are as follows: Mr. Timoteus Mufeti: Environmental Commissioner Tel.: 061 284 2701
Environmental Impact Assessment (EIA) Regulations GN 28-30 (GG 4878) Regulated under the Ministry of Environment, Forestry and Tourism	Details requirements for public consultation within a given environmental assessment process (GN No 30 S21). The details the requirements for what should be included in an Environmental Scoping Report (GN No 30 S8) and an EIA report (GN No 30 S15) were already incorporated in the initial reports submitted for the expired ECC in 2015.	The project is already in its operational phase. However, if necessary and required, constant consultations and engagements with the interested and affected parties (stakeholders) should be continued. In case of grievances raised by the neighbouring land users to the Proponent, this should be addressed and resolved amicably.

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Soil Conservation Act (No 76 of 1969) Regulated under the Ministry of Agriculture, Water and Land Reform	The Act makes provision for the prevention and control of soil erosion and the protection, improvement and conservation of soil, vegetation and water supply sources and resources, through directives declared by the Minister.	Duty of care must be applied to soil conservation and management measures must be included in the EMP. This is mainly aimed at soil disturbance through unnecessary creation of new tracks and pollution from project related activities.
Petroleum Products and Energy Act (No. 13 of 1990) Regulations (2001) Regulated under the Ministry of Mine and Energy (MME)	Regulation 3(2)(b) states that “No person shall possess or store any fuel except under authority of a licence or a certificate, excluding a person who possesses or stores such fuel in a quantity of 600 litres or less in any container kept at a place outside a local authority area”	There are two fuel storage tanks (combined volume of 46,000 litres) kept on site. Therefore, the Proponent should ensure that the Permit to store fuel in that volume is obtained from the Petroleum Affairs at the MME. Care must be exercised when handling hydrocarbon products onsite. Mr. Carlo Mcleod: Acting Director of Petroleum Affairs & Deputy Director: Compliance, Regulations and Economics Tel: +264 (0) 61 284 8291
Forestry Act 12 of 2001 Regulated under the Ministry of Environment, Forestry and Tourism	Prohibits the removal of any vegetation within 100 m from a watercourse (Forestry Act S22(1)). The Act prohibits the removal of and transport of various protected plant species.	There is seldom appearance of small desert vegetation at very few areas of the site. Although not considered protected species, they should not be disturbed nor destroyed.
Pollution Control and Waste Management Bill Regulated under the Ministry of Environment, Forestry and Tourism	The bill aims to “prevent and regulate the discharge of pollutants to the air, water and land” Of particular reference to the Project is: Section 21 “(1) Subject to sub-section (4) and section 22, no person shall cause or permit the discharge of pollutants or waste into any water or watercourse.”	The Proponent and their workers should continue with the good waste management work (directly or indirectly) to ensure that the waste does not cause environmental threat and risk. No permit or license required.

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
	Section 55 "(1) No person may produce, collect, transport, sort, recover, treat, store, dispose of or otherwise manage waste in a manner that results in or creates a significant risk of harm to human health or the environment."	
Public Health Act (No. 36 of 1919)	Section 119 states that "no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health."	The Proponent and all its employees should ensure compliance with the provisions of these legal instruments. No permit or license required.
Health and Safety Regulations GN 156/1997 (GG 1617)	Details various requirements regarding health and safety of labourers.	
Public and Environmental Health Act No. 1 of 2015 Regulated under the Ministry of Health and Social Services	To provide a framework for a structured uniform public and environmental health system in Namibia; and to provide for incidental matters.	
Road Traffic and Transport Act, No. 22 of 1999 Regulated under the Ministry of Works and Transport	The Act provides for the establishment of the Transportation Commission of Namibia; for the control of traffic on public roads, the licensing of drivers, the registration and licensing of vehicles, the control and regulation of road transport across Namibia's borders; and for matters incidental thereto.	Mitigation measures should be provided for if the roads and traffic impact cannot be avoided. The relevant access road permits must therefore be applied for. The Proponent should apply for a formal access road permit from the nearest Roads Authority: Ministry of Works and Transport. Or Contact Head Office: Mr. Eugene de Paauw

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
<p>Labour Act (No. 6 of 1992)</p> <p>Regulated under the Ministry of Labour, Industrial Relations and Employment Creation</p>	<p>Ministry of Labour, Industrial Relations and Employment Creation is aimed at ensuring harmonious labour relations through promoting social justice, occupational health and safety and enhanced labour market services for the benefit of all Namibians. This ministry ensures effective implementation of the Labour Act No. 6 of 1992, specifically its Regulations, No. 156 Labour Act, 1992: Regulations relating to the health and safety of employees at work</p>	<p>The Proponent should ensure that the factory operations, and maintenance works, do not compromise the safety and welfare of workers.</p> <p>No permit or license required.</p>

4 ENVIRONMENTAL MANAGEMENT ACTION PLANS CHECKLIST

This chapter presents the potential impacts that were identified at the time the environmental clearance was issued, the environmental management actions (measures) recommended and the implementation checklist (status of EMP implementation). It is under this chapter that the Environmental Consultant indicates whether Henning Crusher has been maintaining the implementation of management and mitigation actions plans on site to manage and mitigate the significance of the adverse potential impacts stemming from the current project phase and associated activities.

4.1 Key Potential Impacts

The main potential impacts identified are as follows:

Positive

- Socio-economic impact such as job creations to 90 people and procurement services from external suppliers
- Production of bricks used for construction industries
- Social uplifting and betterment through Corporate Social Responsibility (CSR) activities
- National development through taxes.

Negative (Adverse)

- Site soil disturbance (compaction by heavy trucks)
- Traffic (vehicular) safety
- Noise
- Dust and Air Quality
- Occupational and community health and safety
- Waste generation (general, sewage and wastewater).

4.2 EMP Implementation Roles and Responsibilities

This section is presentation of the roles of different parties involved in the project cycle (for its current phase (operations and maintenance)) and their respective responsibilities towards the implementation of the EMP.

This EMP informs all relevant parties listed below and everyone employed at the site as to their duties in the fulfilment of the legal requirements for the operation of the brick making factory. This is done to prevent and mitigate the potential negative environmental impacts. All parties should note that obligations imposed by the EMP are legally binding in terms of the Environmental Clearance granted by MEFT to:

- Ensure compliance with regulatory authority stipulations and guidelines which may be local, provincial, national, and/or international.
- Verify environmental performance through information on impacts as they occur.
- Provide feedback for continual improvement in environmental performance.

- Identify a range of mitigation measures which could reduce and mitigate the potential impacts to minimal or insignificant levels.
- Detail specific actions deemed necessary to assist in mitigating the environmental impact of the project.
- Create management structures that addresses the concerns and complaints that may be raised by interested and affected parties (I&APs) with regards to the project; and
- Establish a method of monitoring and auditing environmental management practices during the project.

The roles and responsibilities of all parties involved in the effective implementation of the EMP are set in Table 4-1.

Table 4-1: The persons and institutions responsible for the Implementation of the EMP

Responsible person or institution	Responsibility
Henning Crusher (Proponent)	<ul style="list-style-type: none"> -Managing the implementation of the EMP and updating and maintaining it when necessary. -Management and monitoring of individuals and/or equipment on-site in terms of compliance with the EMP. -The implementation of and compliance with the environmental management measures proposed in this document. -Ensuring compliance with relevant environmental and related authorisations and license conditions.
Site Manager	<ul style="list-style-type: none"> -Ensure that relevant commitments contained in the EMP Action Plans are adhered to. -Ensure relevant staff is trained in procedures entailed in their duties. -Maintain records of all relevant environmental documentation for the project. -Reviewing the EMP annually and amending the document when necessary. -Issuing fines to individuals who may be in breach of the EMP provision and if necessary, removing such individuals from the site. -Cooperate with all relevant interested and affected parties/stakeholders.

Responsible person or institution	Responsibility
	<p>-Management and facilitation of communication between the Proponent and Interested and Affected Parties (I&APs), where required.</p> <p>-Development and management of schedules for daily activities</p>
<p>Environmental Control Officer (ECO) or Safety, Health & Environmental (SHE) Officer</p>	<p>-Make sure that the provisions of the EMP as well as the environmental authorization are complied with onsite. The ECO/SHE Officer must be fully conversant with the Environmental Impact Assessment, Environmental Management Plan/Programme and environmental legislations, specifically the Environmental Management Act No. 7 of 2007 and its 2012 EIA Regulations.</p> <p>-Issue instructions to the Proponent where environmental considerations call for action need to be taken.</p> <p>-Submit regular written reports, ensuring that activities on site comply with all relevant environmental legislation, monitoring and verifying that adverse environmental impacts are kept to a minimum.</p> <p>-Conducting monthly site inspections with reporting for the activities undertaken on all site areas with respect to the implementation of the EMP (monitor and audit the implementation of the EMP).</p> <p>-Advising the Proponent on the removal of person(s) and/or equipment not complying with the provisions of the EMP.</p> <p>-Making recommendations to the Proponent with respect to the issuing of fines for contraventions of the EMP.</p> <p>-Undertaking an annual review of the EMP and recommending additions and/or changes to the document.</p> <p>-Maintain records of all relevant environmental documentation.</p>

Responsible person or institution	Responsibility
Project workers and contractors	They have a personal responsibility to aid in the implementation of the EMP while present and working on site. Therefore, they will be required to adhere to the relevant management and mitigation measures to collectively protect the environment and promote environmental sustainability.

4.3 EMP Auditing Based on Observations and Required Actions

The evaluated and compliance status in Table 4-2 has been done to check EMP compliance (the implementation of the management and mitigation measures (action plans)) with regards of what has been happening on site between when the ECC was issued (January 2020) and current (January 2023).

As mentioned above, has. Where further recommendations or action plan is required to improve environmental sustainability and ensure compliance with legal requirements, this is also indicated in Table 4-2.

4.4 EMP Requirements Compliance Status (Current Activities)

The environmental management measures (actions) have been checked for compliance with regards of what has been happening onsite since January 2020. The management actions are categorized as per implementation by the Proponent as follows:

- **Fully Compliant** – the Proponent undertook or has been undertaking the project activity/ies according to the environmental management action recommended, therefore complies with the EMP requirements.
- **Compliant** - the Proponent undertook or has been undertaking project the activity/ies according to the recommended environmental management actions, but not fully. An action plan would be expected to change such status from “Compliance” to “Full Compliance”.
- **Non-Compliant** – the Proponent did not undertake or has not been undertaking the project activity/ies (or some of the activities) as per the recommended environmental management actions in the EMP. The Proponent’s commitment for improvement is required in this case to achieve full compliance or progressive partial compliance in the next EMP implementation check.

Table 4-2: Environmental Management Plan (EMP) Compliance between January 2020 and January 2023 and further actions 2022 where needed

Aspect	Activity	EMP Implementation and Observations	Compliance Status	Required Action Measures
OPERATIONAL PHASE AND ASSOCIATED ACTIVITIES				
EMP and training Implementation	EMP required permits such as Road Access Permit	-The site does not have a formal access road permit	NON-COMPLIANT	-The Road Access Permit should be applied for and obtained from Roads Authority (RA).
ECC	The validity of the ECC	-The ECC has recently expired but the application for renewal has been submitted to MEFT prior to expiry date (Appendix B).	COMPLIANT	-The next ECC renewal application should be applied for at least 3 months before expiry date.
Reporting system on monitoring aspects of operations and maintenance as outlined in the EMP	Reporting	-Establish a reporting system to report on aspects of operation and maintenance as outlined in the EMP. -Keep monitoring reports (bi-annual reporting) on file for submission with Environmental Clearance Certificate renewal applications where needed.	NON-COMPLIANT this has been explained by the Environmental Consultant for improvement	-Environmental Monitoring/Audit Reports should be compiled (bi-annually or annually) depending on the conditions of the new ECC.
Labour and Recruitments	Appointments	-Contractors appointed and employees hired and enter into an agreement -Locals are employed for the fencing works	FULLY COMPLIANT	-None
Management system in Health, Safety and Environmental	Health, Safety & Environment Management systems and measures should be in place.	-There are safety and health warnings onsite. -The writing of some of the site warning signs are fading away. Therefore, these should be improved. -There are safety and health trainings conducted on a monthly basis and refresher trainings to all personnel. The training components include emergency action plans, safety and disciplinary code. There are training manuals onsite for the sessions and recorded.	COMPLIANT	-The warning signs should be improved to ensure that they are clearly visible and understood.

Aspect	Activity	EMP Implementation and Observations	Compliance Status	Required Action Measures
Occupational health and safety	Health, safety and environment(HSE)	<p>-There are six fully furnished first aid kits and there are personnel who are trained on how to administer first aid.</p> <p>-Documentation for HSE are on file as inspected by the Environmental Consultant.</p> <p>-There are sufficient Personal Protection Equipment (PPE) for workers ranging from overalls, safety boots, hard hats, safety glasses, gloves, dust masks, and others.</p> <p>-PPE is appropriately worn by most site workers, except for some but they were informed by the Environmental Consultant to take PPE seriously.</p>	COMPLIANT	<p>-Induction training for all who enter the site is required.</p> <p>-Make provisions to have an HSE Coordinator to implement the EMP and oversee occupational health and safety as well as general environmental related compliance at the site.</p> <p>-The sex health education awareness should be included in annual trainings and condoms should be availed at the workers residence.</p> <p>-Have the emergency plans, equipment, and personnel in place to deal with all emergencies.</p> <p>-Risk Management / Mitigation / Environmental Management Plan / Emergency Response Plan and HSE Manuals.</p> <p>-Adequate protection and indemnity insurance cover for incidents.</p> <p>-Ensure that adequate emergency facilities, including first aid kits, are available on site and knowledge of administering it is provided to workers. Induction training for all who enter the site is required.</p> <p>-Equipment that must be locked away on site and must be placed in a way that does not encourage criminal activities.</p>

Aspect	Activity	EMP Implementation and Observations	Compliance Status	Required Action Measures
				<p>-Security personnel to prevent unauthorised entry to site.</p> <p>A register of all incidents must be maintained daily. This should include measures taken to ensure that such incidents do not re-occur.</p> <p>-Inventory of all safety and health stock to be reported on a weekly basis.</p>
Enhanced skills & technology transfer to Ondangwa and economic development promotion	<p>People need skills to perform their jobs.</p> <p>Development of people and technology are key to economic development</p>	-The employed locals are employed for some skilled works and unskilled, thus, gaining skills in their respective jobs.	FULLY COMPLIANT	<p>-Continue the employment of local residents and immediate areas around Ondangwa Town for jobs that they are capable of.</p> <p>-Promote the procurement of goods and services opportunities by local businesses, and if not locally available, Oshana Region based businesses should be prioritized.</p>
Stormwater Management	-The management of stormwater to prevent flooding	-There is a stormwater diversion system onsite.	FULLY COMPLIANT	-None
Soils	-Soil contamination and compaction	<p>-There are signs of soil compaction in some site areas, particularly where the heavy trucks are packed to the northern and eastern side of the site. However, the trucks are packed at one place, thus, reducing the impact on a large area onsite.</p> <p>-Vehicles are making use of provided access roads to and within the site</p>	COMPLIANT	<p>-Adjacent areas to the project site and unneeded areas within the site areas should not be disturbed.</p> <p>-The use of existing tracks such as access roads is essential to minimize the footprints on the soils over time. Therefore, project vehicles should only make use of such provided access roads.</p>

Aspect	Activity	EMP Implementation and Observations	Compliance Status	Required Action Measures
				<p>-Ensure that when areas outside the project site boundaries are disturbed by project related activities, rehabilitation should be conducted immediately once the activity has been completed.</p> <p>-Any future oils spills on the ground should be cleaned as soon as possible to ensure that it does not infiltrate further into the ground to pollute soils and groundwater.</p>
<p>Water resources (specifically groundwater) and soil contamination</p>	<p>Porous surface sediments in areas like northern Namibia can provide ready pathways for contaminants such as unwanted hazardous and ecologically detrimental substances to seep down to the water table either at the site of spill or after being washed away by surface flow during heavy rainy seasons.</p> <p>Accidental spills of fuel, and other chemicals that may be used on site might occur.</p>	<p>-The soils onsite do not have any spills from oils or fuels.</p> <p>-There are oil drip trays onsite and water-oil separators at the washing area at the site workshop to ensure that any oil spill on the interlocks is washed down the separator for proper disposal.</p> <p>-Sewage is handled by the Ondangwa Town Council through a closed system (sewer reticulation system) to ensure that it does not get on the soils during transfers and contaminate it.</p> <p>-The site has proper diversion system to ensure that rainwater is washed down the intended paths of the Town's stormwater management systems.</p>	<p>FULLY COMPLIANT</p>	<p>-All precautions are to be taken to prevent contamination of the soil as this could enter the ecosystem.</p> <p>-Proper training of project personnel would reduce the possibility of the impact occurring, especially with onsite soil contamination.</p> <p>-Any fuel spills must be reported, and remediation action taken.</p> <p>-Contaminated soil must be transported away from the site to an approved, appropriately classified waste disposal site. Contaminated soil should be remediated.</p>
<p>Water resources use</p>	<p>-Water required for project activities should be used efficiently.</p>	<p>-The water is only used for the brick making and drinking as well as ablution facilities.</p> <p>-There are no sign of water wastage onsite.</p>	<p>FULLY COMPLIANT</p>	<p>-Continued water saving awareness to workers.</p>

Aspect	Activity	EMP Implementation and Observations	Compliance Status	Required Action Measures
				-Water should be re-used and recycled, where possible.
Littering and waste management	-The waste management at the site.	-There are currently no signs of litter on and around the site. -Waste is properly contained in respective bins and area for disposal by the relevant waste collectors.	FULLY COMPLIANT	-The continued management of different waste is highly encouraged.
Waste generation	There is a generation of both general, and human waste on site. Potential soil polluted by hydrocarbons that may be handled on site especially from accidental oil or fuel leaks from vehicles or equipment should be treated as hazardous waste	-The waste should continue to be disposed of at approved and appropriate waste facilities. -The waste is properly sorted and disposed of accordingly. The solid waste is collected by the Town Council, hazardous waste is collected by Wesco for refinery, and sewage is managed through the Town Council sewer reticulation system connected to the site, while scrap metals and wood are sent to Tsumeb for recycling). -There is adequate ablution facilities on site to better manage sewage.	FULLY-COMPLIANT	-Maintain the regular removal of waste to maintain visual orderliness, but more so to not give time for liquid waste to enter the soil substrate. Dry waste is at risk of increasing the dust / litter impact so should be removed regularly. Recycling of solid waste should be encouraged to minimise the amount of waste that goes to landfill.

Aspect	Activity	EMP Implementation and Observations	Compliance Status	Required Action Measures
Vehicular Traffic use and Safety	The site is located off the C46 road and operational activities are may potentially have some impact on the movement of traffic to the site (on the C46 and site access roads) when transporting material, supplies and equipment.	<ul style="list-style-type: none"> -The project vehicles only make use of the existing access road to the site -All motor vehicle drivers and machine operators have the required licenses to do so. -Traffic management systems are in place. -Diversion or management of traffic when required is implemented. 	COMPLIANT	<ul style="list-style-type: none"> -The project vehicles should avoid creation of new tracks (roads). -The vehicles should be driven at the speed of 40km/hour when on the access road and within the site. -No person shall drive or use any vehicle on site whilst under the influence of alcohol or any other narcotic substance or in such a way that is dangerous to human life or that may cause damage to any property or the environment. -Appropriate road signage and warnings should be erected or put up at the site access roads. -Existing tracks leading to the site should be used and unnecessary new tracks or roads should not be created. -Devise and submit a traffic management programme for sections of the roads to be closed or traffic diverted if necessary, during the delivery of equipment.
Accidental Fires	Outbreak of an uncontrolled fire due to the use of machinery or presence of open fires made by workers onsite.	<ul style="list-style-type: none"> -Safety talks and job hazard analysis are done and provided to all new workers and during refresher trainings. -There is sufficient firefighting resources are available. 	FULLY-COMPLIANT	<ul style="list-style-type: none"> -Firefighting measures as per the Material Safety Data should be provided, implemented, and adhered to.

Aspect	Activity	EMP Implementation and Observations	Compliance Status	Required Action Measures
				<p>-All personnel must be sensitised about responsible fire protection measures and good housekeeping such as the removal of flammable materials including rubbish, dry vegetation, and hydrocarbon-soaked soil from the vicinity of the site. Regular inspections should be carried out to check for these materials at the site.</p> <p>- A holistic plan must include an emergency response plan and firefighting plan. Regular surveys of the fire-fighting equipment and water supply should be carried out.</p> <p>-Experience has shown that the best chance to rapidly put out a major fire is in the first 5 minutes. It is important to recognise that a responsive fire prevention plan does not solely include the availability of firefighting equipment, but more importantly, it involves premeditated measures and activities to timeously prevent, curb and avoid conditions that may result in fires.</p>
Dust and gaseous emissions	Dust generated during the operations is expected from untarred roads and offloading of sands onsite, particularly on windy days.	<p>-There are air quality management measures in place include the Dust Beast equipment onsite near the sand stockpiles.</p> <p>-The workers are supplied with dust masks.</p>	COMPLIANT	<p>-Regular dust suppression (using a reasonable amount of water) should be implemented when dust becomes an issue for dust problematic areas onsite.</p> <p>-Vehicles and machinery should not be left idling.</p>

Aspect	Activity	EMP Implementation and Observations	Compliance Status	Required Action Measures
		<p>-There are two dust monitoring stations onsite (to the north and south) as recommended by the study done by AirShed Planning Professionals in 2019.</p>		<p>-Personnel are to be issued with dust masks for health reasons when needed.</p> <p>-A complaints register of dust generated or harmful gas emitted from site related activities must be maintained.</p> <p>-The sand transporting trucks should be covered to prevent wind-blown sand from the trucks into the environment.</p>
Noise	Noise impact to both the site workers and surrounding communities	<p>-The noise study was done by AirShed Planning Professional in 2019 and it was considered acceptable recommendations made have been implemented onsite.</p>	COMPLIANT	<p>-It is recommended that a complaints register be kept and that the community around the facility (factory/site) be made aware of the register.</p> <p>-Should there be persistent complaints, further investigation of noise mitigation options at the site is recommended.</p> <p>-workers in noisy site areas should be provided with ear plugs that should be worn at all times (to protect their hearing).</p> <p>-Heavy vehicles and machinery should not be left idling when not in use.</p> <p>-Avoid noisy activities between 5pm and 8am.</p>
Impact on biodiversity (fauna and flora) and ecosystem	Impacts on the ecosystem from the project related activities and vehicle movements may lead to land degradation, and killing/harming of local animals.	<p>-The site is within the Town boundaries where there is little to no vegetation. However, the northern towns including Ondangwa are frequented by local livestock such as goats and cattle. Therefore, these may graze around the site.</p>	FULLY COMPLIANT	<p>-Project activities should be limited within the site boundaries.</p> <p>-All employees should be educated about the value of biodiversity.</p>

Aspect	Activity	EMP Implementation and Observations	Compliance Status	Required Action Measures
		<p>-There are no reported and recorded incidents of project workers implicated in the stealing or harming of livestock around the site.</p> <p>-The remaining little vegetation onsite is preserved.</p>		<p>-Strict conditions prohibiting harvesting of flora and snaring/stealing of local livestock occurring in the area should be incorporated into employment contracts.</p> <p>-Killing, injuring, capturing, disturbing, or feeding of any animal or remove any part of any wild animal, whether alive or dead is prohibited.</p> <p>-No removal, destroying, damage or disturb of any egg, nest, or burrow on and around the site is allowed.</p> <p>-A register of all plant and animal species encountered within the site premises and boundary should be recorded. Photos should be taken and recorded. The details should include date of encounter, animal name and location. This include snakes. Do not kill any of them.</p>

5 ENVIRONMENTAL MONITORING, COMPLIANCE AND AUDITING

To ensure compliance with the legal requirements, minimize potential adverse impacts and improve environmental sustainability, some monitoring activities are recommended for the site. These recommended monitoring exercises are to be implemented as follows:

5.1 Monitoring of EMP Implementation and ECC Renewal

- **Environmental (during the validity period of the ECC):** Bi-Annual Compliance Monitoring of the EMP implementation should be undertaken throughout the project cycle, i.e., twice a year (every 6 months) throughout the operations. Environmental Monitoring reports are to be compiled and submitted to the Department of Environmental Affairs and Forestry (DEAF) for archiving through provision made on the ECC Portal (once the ECC issued). This practice will make the ECC renewal easier when it is about to expire in future. Therefore, the Proponent should effectively monitor the EMP implementation and submit the monitoring reports to the DEAF. The submission is not only done for record keeping purposes, but also in compliance with the environmental legislation and conditions of the new ECCs.
- **Environmental Compliance Checklist:** To make impact monitoring and EMP compliance easy, the Proponent should keep an Impact-Indicator Checklist that can be used by the ECO/SHE Officer and updated every 6 months. If found to be necessary, the checklist should contain the management action recommended in the EMP in a "Questionnaire" format, observations, recommended further action, date of monitoring and next proposed monitoring date.

5.2 Environmental Awareness

Henning Crusher should ensure that its employees and any third party who carries out all or part of their obligations are adequately trained regarding the implementation of the EMP, as well as regarding environmental legal requirements and obligations. Training may be conducted by the ECO/SHE Officer, where necessary.

Environment and health awareness training programmes should be targeted at three distinct levels of employment, i.e., the executive, middle management, and labour. Environmental awareness training programmes shall contain the following information:

- The names, positions, and responsibilities of personnel to be trained.
- The framework for appropriate training plans.
- The summarized content and schedule for the presentation of the training courses.
- The ECO/SHE Officer shall ensure that records of all training interventions are kept in accordance with record keeping and documentation control requirements as set out in this EMP. The training records shall verify each of the targeted personnel's training experience.

The recommendations and conclusions made for this document are under the next chapter.

6 RECOMMENDATIONS AND CONCLUSIONS

6.1 Recommendations

The Henning Crusher's Ondangwa site was observed to assess the implementation of the EMP on the project site for the purpose of the project's ECC renewal. The project is of medium-scale level and activities are well limited within the site boundaries. From site observations, the Proponent has been fully compliant with most of the EMP requirements as recommended within the current ongoing project phase (operations). The components of the EMP (management measures) that were recommended for the current project activities have been fully implemented and this has been observed with onsite biophysical and social environmental and within proximity of site.

The only non-compliance component observed is monitoring because there is no record of EMP compliance monitoring (Audit)/Bi- or Annual Monitoring done for the site since the issuance of the expiring ECC. However, this can be greatly improved on the way forward, with the assistance of the Environmental Consultant or project ECO/SHE Officer and the Proponent's full commitment and co-operation.

Therefore, the Environmental Consultant is confident that the potential negative impacts associated with the project activities on site can continue to be mitigated by effectively implementing the recommended management action measures and with more effort and commitment put on implementation monitoring (Bi-Annual Environmental Monitoring and reporting). It is therefore, recommended that the brick making factory and associated activities onsite be granted a new Environmental Clearance Certificate, and provided that:

- All the management measures (mitigations) provided herein and as developed through the project implementation continue to be implemented effectively with compliance emphasis pointed out in Table 4-2 and where required, improvement should be effectively put in place.
- All required permits, licenses, approvals, and document renewals that may be required for the project activities in future are obtained as required.
- The Proponent and all their project workers, contractors and or specialists comply with the legal requirements governing their project and its associated activities.
- All the necessary environmental and social (occupational health and safety) precautions provided are adhered to.
- To avoid very late renewal of the ECC, the Proponent' SHE Officer (or an ECO) OR Environmental Consultant should effectively conduct Environmental (EMP) Compliance Bi-Annual Monitoring and most importantly, ensure timely renewal of the ECC. [A Renewal application can be submitted at least 3 months before the expiry date of the valid ECC to allow time for the evaluation of the ECC Renewal Report \(Updated EMP\) by the DEAF and approval by the Environmental Commissioner: and](#)
- The EMP Compliance check (Bi-Annual Monitoring) should be done and this can be The monitoring exercise can be undertaken either by the project ECO/SHE Officer and audited by an external

independently appointed Environmental Assessment Practitioner (EAP) / Environmental Consultant or just by the EAP when applying for an ECC renewal. An Environmental Audit/Compliance/Bi-Annual Report shall be compiled for every monitoring and submitted to the DEAF at the Ministry of Environment, Forestry and Tourism for archiving (via the ECC Online Portal under the valid ECC details). This would make the next ECC Renewal easier because of an in-between track record of monitoring progress prior to the expiry date of the valid ECC.

6.2 Conclusions

The Environmental Consultant recommends that the expired ECC be renewed so that the Proponent can continue with the project activities (to make bricks) and continue to positively impacting the nation through the existing economic opportunities.

The site is generally well-kept and equipped with the necessary and required services infrastructure, well-maintained and adheres to the site and activity-specific environmental management requirements. Therefore, the Environmental Consultant is of the same hope that Henning Crusher Ondangwa will continue to maintain the same commitment towards environmental sustainability and ethics even if after the renewal of the ECC and most importantly ensuring its renewal on time.

Therefore, it is crucial for the Proponent, their workers, contractors and or specialists to continue with the effective implementation of the recommended management measures to protect both the biophysical and social environment. The aim would be to promote sustainable and safe development while ensuring a smooth and harmonious existence of the project activities in the host environment.

APPENDIX A: COPY OF THE CURRENT AND EXPIRING ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC) - ECC00504

ECC - 00504 Serial: n7Kg2D504



REPUBLIC OF NAMIBIA
MINISTRY OF ENVIRONMENT AND TOURISM
OFFICE OF THE ENVIRONMENTAL COMMISSIONER

ENVIRONMENTAL CLEARANCE CERTIFICATE
ISSUED

In accordance with Section 37(2) of the Environmental Management Act (Act No. 7 of 2007)

TO

Henning Crusher (Pty) Ltd.
P.O Box 184, Tsumeb.


TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY
Henning Crusher Brick Making Factory in Ondangwa, Oshana Region


DEPUTY ENVIRONMENTAL COMMISSIONER

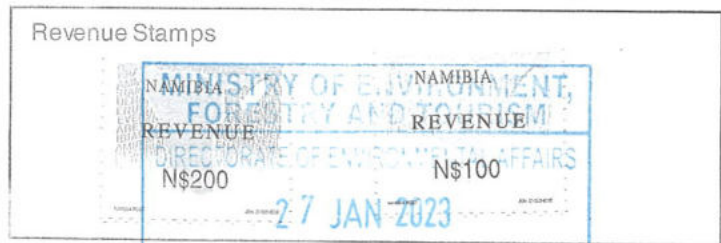
Issued on the date: 2020-01-29
Expires on this date: 2023-01-29

(See conditions printed over leaf)

This certificate is printed without erasures or alterations



APPENDIX B: COPY OF THE ECC RENEWAL APPLICATION



ANNEXURE 1

Tel: 061 204 2701

FORMS

RECEIVED 2

Signature: *Mey*

Form 1

REPUBLIC OF NAMIBIA

ENVIRONMENTAL MANAGEMENT ACT (No. 7 of 2007)

(Section 32)

APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE

PART A: DETAILS OF APPLICATION

1. Name: Henning Crusher (Pty) Ltd
2. Business Registration No.: CY/1980/0035
3. Correspondence Address: P. O. Box 184 Tsumeb, Namibia
4. Name of Contact Person: Mrs. Tia Henning
5. Position of Contact Person: Financial Manager
6. Telephone No.: +264 67 220 856
7. Fax No: 264 67221088
8. E-mail Address: tia@henningcrusher.com

PART B: SCOPE OF THE ENVIRONMENTAL CLEARANCE CERTIFICATE

1. THE ENVIRONMENTAL CLEARANCE CERTIFICATE IS FOR:

The 'listed activities' that are relevant or related to the proposed activities are listed below:

ASSOCIATED ACTIVITIES: MINING AND QUARRYING ACTIVITIES

BRICK MAKING FACTORY

-Listed Activity 3.2 other forms of mining or extraction of any natural resources (*associated sand mining transported to the Factory*) whether regulated by law or not.

-Listed Activity 3.3 Resource extraction, manipulation, conservation, and related activities.

2. DETAILS OF THE ACTIVITY(S) COVERED BY THE ENVIRONMENTAL CLEARANCE CERTIFICATE:

2.1 Title of Activity

Renewal of the Environmental Clearance Certificate (ECC) for the Henning Crusher Brick Making Factory in Ondangwa, Oshana Region

2.2 Location of Activity

The Henning Crusher Brick Making Factory (Site) is situated on the western side of the Ondangwa Town along the B1 towards Ongwediva. The site covers an area of 35,397.41m² - the locality map is shown in Figure 1.

The locality map is presented in the Background Information Document (BID) accompanying this application.

2.3 Nature of Activity

Brick making activities in Ondangwa and distribution to consumers as per demand.



2.4 Scale and Scope of the Activity

The continuation of brick making brick at the Factory (project site) and distribution to end-users (construction industries).

The project requirements in terms of human resources, technology, equipment, vehicles, and machinery are described in the attached BID.

The ECC renewal and effective implementation of the Environmental Management Plan (EMP) will ensure that the project activities comply with the Environmental Management Act, 2007, and the 2012 Environmental Impact Assessment (EIA) Regulations.

PART C: DECLARATION BY APPLICANT

I hereby certify that the particulars given above are correct and true to the best of my knowledge and belief. I understand the environmental clearance certificate may be suspended, amended, or cancelled if any information given above is false, misleading, wrong, or incomplete.

Fredrika Shagama

FREDRIKA SHAGAMA

Environmental Assessment Practitioner

Signature of Applicant Full Name in Block letters

Position

Serja Hydrogeo-Environmental Consultants

on behalf of Henning Crusher (Pty) Ltd

27 January 2023

Date

MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM
DIRECTORATE OF ENVIRONMENTAL AFFAIRS
27 JAN 2023
Tel: 061 284 2701
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Signature:.....