

LOERIESFONTEIN BRIDGE – ENVIRONMENTAL SITE INSPECTION AND AUDIT

NO. 3

2 FEBRUARY 2021



ECO

Enviro Namaqua

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CONSTRUCTION OF A VEHICULAR BRIDGE ACROSS WATER COURSE, TOWN OF LOERIESFONTEIN, NORTHERN CAPE.

Contract No: 32780.03/2019

DENC Reference NC/BA/24/NAM/HAN/CAL2/2019

Project Reference: Loeriesfontein Bridge

Project Description: Construction of a vehicular bridge across a water course

Client: Loeriesfontein 2 Wind Farm & Khobab Wind Farm

Consulting Engineers: BVi Consulting Engineers Springbok.

Environmental Consultants: Enviro Logic and Enviro Namaqua

Main Contractor ASLA Construction

Contractor on Site Niel Strauss

Authorizing Authority Northern Cape Province Department of Environment & Nature Conservation.



ECO ENVIRONMENTAL AUDIT SCORE:

45

50

90%

ECO ENVIRONMENTAL CHECKLIST

Item	Yes	No	Comments	Score
1. Record Keeping				
1.1. Environmental Weekly Checklist completed	x		Asla	1
1.2. Maintaining environmental incidents register	x		Asla	1
1.3. Maintaining a "Complaints Register".	x		Asla	1
1.4. Method Statements required.		x	To be supplied to ECO, not compulsory as stated in the EMP by Enviro Logic (EMP p12)	0
2. Services				
2.1. Care taken of existing services. Fences, gates, Tel. & Power Line.	x			1
3. Mandatory Site Equipment				
3.1. Sufficient and suitable chemical toilet facilities.	x		Toilets should be cleaned weekly (EMP p17)	1
3.2. Refuse bins, which are weather and wind proof, with proper lids.	x			1
3.3. Fire extinguishers.	x		All are serviced and up to date	1
3.4. Drip trays available.	x		Drip trays in use must be secured against the wind to prevent spills and pollution	1
3.5. Leak proof container for the storage of oiled equipment.	x			1
4. Demarcation and fencing				
4.1. Construction site fenced off or marked with colour coded poles.	x			1

5. Heritage				
5.1. Any archaeological sites exposed.	NA			
5.2. Any unmarked human burials uncovered.	NA			
6. Top Material Removal and Stockpiling				
6.1. Vegetation and topsoil removed from construction site and separately stockpiled in heaps no higher than 1.5 m.	x		Topsoil removed and stockpiled next to the demarcated site. No topsoil needed to be removed according to the EMP (EMP p15)	1
7. Dust Control				
7.1. Dust production controlled.		x	Dust is a big problem, even after wetting of the site and materials. Especially on a windy day.	0
8. Appropriate use of Machinery				
8.1. All vehicles and equipment maintained in a good condition.	x			1
9. Anti-erosion measures				
9.1. Appropriate measures in place.		x	Dust is a problem, even after attempt to control it. Excessive dust conditions to be reported to BVi Consulting Engineers and the Eco (EMP p15). Control measures and rehabilitation to be discussed at the site meeting on the 2/2/2021.	0
10. Contractors camp site				
10.1. Maintained. Good housekeeping.	x		Good housekeeping	1
11. Lights				
11.1. Interfere with road traffic.	NA		No lights used on site at the moment	
11.2. Disturbance to neighbors.	x			1
12. Eating, Washing and Resting Area				

12.1. Designate restricted places for eating, washing and resting.	x		Bins should be cleaned on a daily basis (EMP p16)	1
12.2. Refuse bins provided and cleaned.	x			1
13. Drinking Water				
13.1. Sufficient drinking water available for all staff on site.	x			1
13.2. Water stored on site clearly distinguished and demarcated as drinking water and multi-purposed water.	x		Water connection point on site is used for drinking and multi-purpose.	1
14. Toilets				
14.1. Sufficient and suitable chemical toilets.	x		<p><i>Toilet is too close to the river. It should be 50m from the water body (EMP p17)</i></p> <p>The toilet is situated inside the fenced site office area which is less than 50m from the water body. This was requested and agreed upon by the engineer due to the following reasons:</p> <ul style="list-style-type: none"> - The fenced site office terrain is above the flood line of the river - The toilets must be in the fenced area to be protected. - The toilet is portable and has storage tank where the waste is stored, no leakage into ground can occur. This must be monitored. - Moving the toilet 50m away from the waterbody/site will result in the disturbed area increasing, as a result of workers walking 	1

			to and from the toilets. Extra toilet needed when recruiting more workers. Toilet has its maximum occupants at the moment.	
14.2. Toilets secured to prevent them from blowing over.	x			1
14.3. Toilets are emptied at close of each working week.	x			1
14.4. Toilet waste disposed of at a registered waste disposal site.	x		Should be cleaned each week (EMP p17)	1
15. Hydrology				
15.1. Increased run-off managed.	x			1
16. Discharge of construction water				
16.1. Cement effluent from washings (mixer, wheelbarrows, etc.) contained in suitable sedimentation ponds.	NA			
16.2. Sedimentation ponds lined with HDPE liners.	x			1
16.3. Sedimentation removed and disposed of at waste disposal site.	x			1
17. Waste Disposal (Refuse)				
17.1. Refuse control system.		x	Still some trash found on site and not placed in bins. Cigarette buds, empty cigarette packets etc.	0
17.2. Refuse bins weather and animal-proof with proper lids.	x			1
17.3. Refuse collected and disposed of at waste disposal site.	x			1
17.4. Discarded construction/ building materials collected and disposed of at waste disposal site.	x			1
17.5. Hazardous substances / material used on site, disposed of at	NA			

registered waste site.				
18. Fuel and Service areas				
18.1. Temporary aboveground fuel storage.	NA			
18.2. Drip tray available on site.	x		Problem with generator leaking petrol, rectified on site.	1
18.3. Fuels, oils, chemicals and inflammable materials stored in suitably equipped storage areas.	x		Storage containers should be clearly marked and display appropriate safety signs depicting "no smoking", "No Naked Lights" and "Danger" (EMP p20)	1
18.4. Fuel / oil containers left unattended within drainage areas.	x		Leaking fuel drum stored correctly after inspection in January.	1
18.5. Necessary materials and equipment on site to deal with spills.	x			1
19. Construction and Building Material				
19.1. Materials stored and prepared at a designated place.	x			1
20. Concrete works				
20.1. Cement mixing takes place in a cement mixer and within HDPE plastic lined bund.	NA			
20.2. Cement contaminated water contained and sediment disposed of at a waste site.	x			1
20.3. Cement bags stored securely.		x	Most bags stored in container; one bag left unattended on site. Should be secured in, especially on windy days.	0
20.4. Excess or spilled cement / concrete removed to waste site.	x			1
21. Blasting				
21.1. Necessary precautions taken. SE informed.	NA			

22. Fires			
22.1. No open fires on site	x		1
22.2. Adequate fire facility at camp site.	x		1
22.3. Adequate firefighting equipment available.	x		1
23. Working Hours			
23.1. Working hours restricted to normal hours	x		1
24. Noise			
24.1. Noise levels kept within acceptable limits	x		1
24.2. Neighbors notified regarding unusually noisy activities.	x		1
25. Safety			
25.1. Notices displayed at all entrances to construction site.	x		1
25.2. Numbers and names posted at relevant locations.	x	At the site office	1
25.3. Traffic safety precautions/ sign boards, etc.	x		1
26. Crime			
26.1. Incidents of theft.	x	No incidents reported	1
27. Site Clean Up			
27.1. Temporary structures, equipment and materials removed.	x	Some structures have been removed	1
28. Rehabilitation			
28.1. Stabilization of construction areas.	NA		
28.2. Rehabilitation of construction areas.	NA		
29. Other			
	NA		

Summary of Environmental Audit

The purpose of the audit was to check for compliance and maintenance of the Environmental Management Plan.

Findings

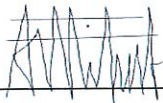
The contractor scored 90% according to the Enviro Logic and Enviro Namaqua Compliance Audit checklist. Some findings were raised but all were minor and should be resolved without difficulty.

- Dust is a problem and should be closely monitored, especially on windy days. Some rectification was done on the day of the audit, but was still not sufficient. Rehabilitation measures was discussed at the site meeting after the Audit was concluded.
- Housekeeping regarding litter inside the site. Cigarette packets and buds were found. This can also be a fire hazard.
- Cement storage is very important, especially in windy conditions.
- Method statements still need to be submitted to the ECO

Some of the problems observed at the inspection done in January was rectified. These include:

- The removal and storage of a leaking oil container
- Generator leaking petrol was contained with a drip dray during the Audit
- Efforts to control dust pollution was noted during the Audit.

It is important that these issues are resolved as soon as possible and reported back to the ECO and the engineer.



Environmental Control Officer

02/02/2021

Date: Site visit