



ENVIRONMENTAL COMPLIANCE AUDIT REPORT

PROJECT: THE REHABILITATION OF DIVISIONAL ROAD 1688 FROM CALITZDORP
(KM1.00) TO THE CALITZDORP SPA TURNOFF (KM15.64), WESTERN CAPE
PROVINCE

Reference: C1008.01

Prepared for:



Date: October 2019

Att.: Simon Blyth, Andre Greyling, Riaan van Wyk, Tiaan Swart

Cc: Morne Lambrecht, Stan Mitchell, Arthur Bergh, Gladwin Malgas

Prepared by:

Elana Mostert

elana@enviroworks.co.za

Today's Impact | Tomorrow's Legacy

1. ABBREVIATIONS

DEA&DP - Department of Environmental Affairs and Development Planning

DEAT - Department of Environmental Affairs and Tourism

DWAF - Department of Water Affairs and Forestry

EA - Environmental Authorisation

EAP - Environmental Assessment Practitioner

ECO - Environmental Control Officer

EIA - Environmental Impact Assessment

EMP - Environmental Management Programme

EO - Environmental Officer

ESO - Environmental Site Officer

I&AP - Interested and Affected Parties

DENC - Department of Environment and Nature Conservation

2. Summary of audit findings for October 2019 inspection:

No. of Compliant	147
No. of Partial Compliance	22
No. of Not Compliant	7

3. Site instruction outstanding from previous audit:

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
3	• Declaration of understanding by the Developer	19-20	Not compliant	Not signed yet.	June 2019
30	All empty containers must be stored in a dedicated area and later removed from the site for appropriate disposal at a Licensed Landfill site. All empty cement bags are to be picked up immediately to ensure that cement dust is not blown away. Cement dust is poisonous and will be detrimental to the environment and especially to the non perennial watercourses. Any spillage that may occur must be investigated and immediate remedial action shall be taken.	38	Partially compliant	Proof of safe disposal for cement bags (and any hazardous waste) to be provided and kept on file.	
54	The contractor's camp, offices and storage facilities shall be located within the site boundaries. If this is not feasible an alternative should be designated in consultation with the ECO.	51 – 63	Partially compliant	Stockpile 3 (not approved) should be rehabilitated and proof kept on file (not existing lay-by but 'natural' area).	
63	In terms of the National Heritage Act, 1999 (Act No. 25 of 1999), should any archaeological artefacts be exposed during construction activities, work on the area where the artefacts were found shall cease immediately and the ECO as well as the Local Council shall be notified within 24 hours. Upon receipt of such notification, the ECO will arrange for the excavation to be examined by an Archaeologist. Under no circumstances shall archaeological artefacts be removed, destroyed or interfered with.		Partial compliance	Contractor to include procedure of heritage find in Toolbox talks and keep procedure at hand on site.	

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
	Any archaeological sites exposed during demolition or construction activities must not be disturbed prior to authorisation by the Heritage Western Cape and/or the South African Heritage Resources Agency on the appropriate provincial heritage resource agency.				
67	Existing roads and services must be utilised thus reducing the infringement of the development on natural habitat. If new access roads have to be constructed the road should follow existing roads for as far as possible in order to minimize the area of disturbance.		Partial compliance	Access controlled as far as possible. Unauthorized access roads and turning lanes to be marked as 'no-go' areas and rehabilitated. Proof of rehabilitation to be kept on file.	
68	Any authorised clearing for access roads must be done under the supervision of the ECO.		Partial compliance	<ul style="list-style-type: none"> Access controlled as far as possible. Unauthorized access roads and turning lanes to be marked as 'no-go' areas and rehabilitated. Proof of rehabilitation to be kept on file. New access roads to be indicated on layout map and sent to ECO for consideration. Proof of rectification to be kept on file. 	
69	Access roads for earthmoving-equipment must be clearly designated and be positioned as close as possible to the proposed development site. No driving off from the marked roads is permitted and designated parking areas must be identified and demarcated with applicable signage.		Partial compliance	All current access road to be demarcated and strictly adhered to. Proof of rectification to be kept on file.	
76	The construction site staff will be trained to load and unload materials correctly to avoid breakage and wastage.	87 - 89	Partial compliance	Damaged cement pallets at Crusher site. Materials should be protected during offloading, moving and storage to be protected from damage. Open pallets must be stored on impermeable surface and covered with plastic when not in use.	
81	Oil and chemicals These substances must be confined to specific and secured areas within the contractor's camp away from the non perennial watercourses, and in a way that does not pose a danger of pollution even during times	37	Partial compliance	<ul style="list-style-type: none"> Hazardous cement currently kept on impermeable surface and covered with plastic. Some damaged and open pallets of cement still on site and should be 	July 2019

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
	of high rainfall. These areas must be imperviously bunded with adequate containment (at least 1.1 times the volume of the fuel) for potential spills or leaks.			covered.	
82	All spilled hazardous substances must be contained in impermeable containers for removal to a General & Hazardous Waste Landfill site, (this includes contaminated soils, and drenched spill kit material).	37	Not compliant	<ul style="list-style-type: none"> • Proof sent that properly marked containers for hazardous waste are on site. • Proof sent that contaminated soil and slurry disposed of as per hazardous waste disposal procedure. • No proof that contaminated soil and spilled cement treated/disposed of as per method statement (only bitumen waste on file). Proof to be kept on file. 	
83	Empty containers shall be removed to a General & Hazardous Waste Landfill site.	39	Partial compliance	House-keeping improved dramatically on site. Waste to be disposed of at registered landfill site. All records of waste removal to be updated and kept on file.	
85	All maintenance and washing of vehicles and equipment shall be done off-site as far as possible. During servicing of vehicles or equipment, a suitable drip tray shall be used to prevent spills onto the soil. Leaking equipment shall be repaired immediately or be removed from site to facilitate repair.	49	Partial compliance	<ul style="list-style-type: none"> • Drip trays to be used beneath stationary vehicles and machinery. • Proof that contaminated soil removed and treated as hazardous waste to be provided and kept on file. • No proof provided for previous oil contaminated soil. 	
91	Care will be taken to ensure that materials are stored appropriately according to supplier specifications to reduce the risk of damage or deterioration	87-89	Partial compliance	Some open cement pallets stored properly but still some damaged cement pallets not stored properly on site. Proof of rectification to be kept on file.	
99	The stockpiles may only be placed within the demarcated areas the location of which must be approved by the RE, EO or ECO.	36	Not compliant	<ul style="list-style-type: none"> • Site agent to demarcate stockpile 2 boundary with markers. • Crusher site demarcation, boundary overstepped as originally demarcated boundary no longer intact. Boundary to be clearly demarcated and disturbed 	

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
				<p>areas marked as no-go areas for rehabilitation. If practically possible, activities outside boundary to be moved within boundary or to stockpile 2.</p> <ul style="list-style-type: none"> • Third non-approved stockpile should be marked as no-go area and rehabilitated. • Proof to be kept on file of all rehabilitation/remediation measures. 	
100	Stockpiling of road-building material must be confined to strictly demarcated areas such as at existing lay-bys to limit the distribution of this material in the road reserve.	36	Not compliant	<ul style="list-style-type: none"> • Stockpile 2 to be demarcated with droppers or the like. • Stockpile 3 should be rehabilitated and proof kept on file (not existing lay-by but 'natural' area). 	
101	Drip trays (minimum of 10cm deep) must be placed under all machinery and vehicles.	37	Not compliant	Drip trays available on site but not always used on all stationary equipment, machines resting at Crusher site and generators. Contaminated soil at crusher site from vehicle oil drips to be removed and treated and disposed of like hazardous waste. Proof of rectification and safe disposal to be kept on file.	
102	All empty containers must be stored in a dedicated area and later removed from the site for appropriate disposal at a Licensed Landfill site. All empty cement bags are to be picked up immediately to ensure that cement dust is not blown away. Cement dust is poisonous and will be detrimental to the environment and especially to the non perennial watercourses. Any spillage that may occur must be investigated and immediate remedial action shall be taken.	38	Partially compliant	Hazardous waste storage areas at Crusher site should be covered to protect against wind blowing cement and rainwater mixing with material.	
108	Dust production must be controlled by regular watering of roads and works area, should the need arise. (NB: Concrete dust is toxic and damages soil properties. Therefore watering to prevent dust spread must not be done where concrete dust has fallen or it will infiltrate	48	Partial compliance	Proof sent that empty cement bags picked up. Open and exposed cement on pallets should be covered with plastic.	

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
	into the soil. Concrete bags must not be allowed to blow around the site and spread cement dust. This cement dust will be detrimental to the environment.)				
109	The contractor's camp, offices and storage facilities shall be located within the site boundaries. If this is not feasible an alternative should be designated in consultation with the ECO.	51 – 63	Partially compliant	Crusher site demarcation, boundary overstepped. Boundary to be clearly demarcated and disturbed areas marked as no-go areas for rehabilitation. If practically possible, activities outside boundary to be moved within boundary or to stockpile 2. Proof of rectification should be kept on file.	
120	A record must be kept of all spills and the corrective action taken.	41	Partial compliance	Register available on site but should be updated after accidental oil, dry cement, slurry and bitumen spill. Proof of corrective actions to be kept on file. Incident register requested from site agent to verify.	
121	All spills of hazardous substances must be reported to the ESO, EO, RE or ECO.	49	Partial compliance	Register on site. Register to be updated by 25 November 2019.	
126	The surveys for the overall project area and construction footprint as approved in the Environmental Authorisation (EA) must be complete and clearly demarcated before the contractors set up their crew camps or begin construction.	28	Not compliant	<ul style="list-style-type: none"> Site agent to demarcate stockpile 2 boundary with markers. Third stockpile should be rehabilitated according to method that will be discussed with Engineers and ECO. Proof to be kept on file of all rehabilitation/remediation measures. Proof to be kept when any new areas demarcated. 	
129	Materials such as fuel, oil, paint, herbicide and insecticides must be sealed and stored in bermed areas or under lock and key, as appropriate, in well-ventilated areas. Storage facilities should be bunded, roofed, secure, rain, wind and tamper proof.	39	Partial compliance	Hazardous material such as some open pallets of cement not kept on impermeable surface and protected from rain.	
132	Rubble and litter must be removed every two weeks or more often as the need arises and be disposed of at a registered landfill site as designated by Kannaland	51-63	Partial compliance	<ul style="list-style-type: none"> Waste disposed at registered landfill site, records kept on file not up to date. Records of all hazardous waste disposal to 	

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
	Municipality and Eden District Municipality Solid Waste removal department.			be kept on file (only bitumen waste available).	
133	Site demarcation and development The surveys for the overall project area and construction footprint as approved in the Environmental Authorisation (EA) must be complete and clearly demarcated before the contractors set up their crew camps or begin construction.	28	Not compliant	<ul style="list-style-type: none"> Demarcated construction footprint not adhered to everywhere. Findings of disturbance outside footprint. Disturbed areas to be marked as no-go areas and rehabilitated. Proof of rectification should be kept on file. Site agent to demarcate stockpile 2 boundary with markers. Crusher site demarcation, boundary overstepped. Boundaries no longer intact. Boundary to be clearly demarcated and disturbed areas marked as no-go areas for rehabilitation. If practically possible, activities outside boundary to be moved within boundary or to stockpile 2. Third stockpile should be rehabilitated according to method that will be discussed with Engineers and ECO. Proof to be kept on file of all rehabilitation/remediation measures. Proof to be kept when any new areas demarcated. 	September 2019
135	The EO and ECO must be on site in order to make sure the correct areas are fully demarcated.	28	Partially compliant	ECO inspects demarcations as part of monthly audits. EO to be present for demarcation of entire site. Demarcation to be completed as any disturbance outside demarcation to be considered a new finding. Overstepping of Crusher site boundary should be dealt with as above.	
137	The road reserve is however, despite its poor condition, an important zone of natural or semi-natural habitat that should	32	Partial compliance	Disturbance beyond construction footprint, such as soil disturbance due to construction,	

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
	be managed to encourage a diversity of plant species. Road building activities must therefore be approached with caution to ensure that there is no further degradation of the habitat.			turning lanes, driving and topsoil clearing still evident (specifically crusher site boundary). Disturbance outside demarcated footprint to be marked as no-go areas, rehabilitated and records kept on file. Non-approved third stockpile are to be rehabilitated and records should be kept on file.	
138	The stockpiles may only be placed within the demarcated areas the location of which must be approved by the RE, EO or ECO.	36	Not compliant	<ul style="list-style-type: none"> • Site agent to demarcate stockpile 2 boundary with markers. • Crusher site demarcation, boundary overstepped as originally demarcated boundary no longer intact. Boundary to be clearly demarcated and disturbed areas marked as no-go areas for rehabilitation. If practically possible, activities outside boundary to be moved within boundary or to stockpile 2. • Third non-approved stockpile should be marked as no-go area and rehabilitated. • Proof to be kept on file of all rehabilitation/remediation measures. 	
139	Stockpiling of road-building material must be confined to strictly demarcated areas such as at existing lay-bys to limit the distribution of this material in the road reserve.	36	Not compliant	<ul style="list-style-type: none"> • Stockpile 2 to be demarcated with droppers or the like. • Stockpile 3 should be rehabilitated and proof kept on file (not existing lay-by but 'natural' area). • Crusher site demarcation, boundary overstepped. Previous boundary no longer intact. Boundary to be clearly demarcated and disturbed areas marked as no-go areas for rehabilitation. If practically possible, activities outside boundary to be moved within boundary or to stockpile 2. 	

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
140	Oil and chemicals These substances must be confined to specific and secured areas within the contractor's camp away from the non perennial watercourses, and in a way that does not pose a danger of pollution even during times of high rainfall. These areas must be imperviously bunded with adequate containment (at least 1.1 times the volume of the fuel) for potential spills or leaks.	37	Partial compliance	<ul style="list-style-type: none"> Hazardous waste contained in designated area, but overflowing (waste left on bare soil) and should be covered with plastic when not in use to protect from elements and pollution occurring. Some damaged and open pallets of cement still on site and should be covered. Proof sent that properly marked containers for hazardous waste are on site. Proof sent that contaminated soil and slurry disposed of as per hazardous waste disposal procedure. All records of safe disposal to be kept on file. 	
141	All spilled hazardous substances must be contained in impermeable containers for removal to a General & Hazardous Waste Landfill site, (this includes contaminated soils, and drenched spill kit material).	37	Not compliant	<ul style="list-style-type: none"> Proof sent that properly marked containers for hazardous waste are on site. Proof sent that contaminated soil and slurry disposed of as per hazardous waste disposal procedure. Contaminated soil at crusher site from vehicle oil drips to be removed and treated and disposed of like hazardous waste. No proof that contaminated soil and spilled cement treated/disposed of as per method statement (only bitumen waste on file). Proof to be kept on file. 	
142	All empty containers must be stored in a dedicated area and later removed from the site for appropriate disposal at a Licensed Landfill site. All empty cement bags are to be picked up immediately to ensure that cement dust is not blown away. Cement dust is poisonous and will be detrimental to	38	Partially compliant	<ul style="list-style-type: none"> Proof received that marked hazardous waste bins on site and empty cement bags disposed of. Hazardous waste register indicates cement bags are burned. This is in contradiction to 	

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
	the environment and especially to the non perennial watercourses. Any spillage that may occur must be investigated and immediate remedial action shall be taken.			<p>contractor method statement. No waste is allowed to be burned.</p> <ul style="list-style-type: none"> • Proof of safe disposal for cement bags (and any hazardous waste) to be provided and kept on file. • Hazardous waste storage areas at Crusher site should be covered when not in use to protect against wind blowing cement and rainwater mixing with material. 	
143	The visible remains of concrete, either solid, or from washings, shall be physically removed immediately and disposed of as waste to a Licensed Landfill site. Washing of the remains into the ground is unacceptable.	38	Partially compliant	<ul style="list-style-type: none"> • Dried cement/concrete observed on site to be properly removed and proof of safe disposal kept on file. • Spilled dry cement and contaminated soil to be properly disposed of with proof of rectification kept on file. 	
144	Materials such as fuel, oil, paint, herbicide and insecticides must be sealed and stored in bermed areas or under lock and key, as appropriate, in well-ventilated areas. Storage facilities should be bunded, roofed, secure, rain, wind and tamper proof.	39	Partial compliance	Hazardous material such as some open pallets of cement not kept on impermeable surface and protected from rain.	
149	Workshop areas shall be monitored for oil and fuel spills and such spills shall be cleaned and remediate to the satisfaction of the EO or RE. Cleaning and remediation must be done with products that are in line with best environmental practice i.e. Sunisorb.	49	Not compliant	<ul style="list-style-type: none"> • Leaks/drips observed on site and should be cleaned up. • Drip trays to be used beneath stationary vehicles and machinery. • Proof that contaminated soil removed and treated as hazardous waste to be provided and kept on file. • No proof provided for previous oil contaminated soil. 	
153	The road reserve is however, despite its poor condition, an important zone of natural or semi- natural habitat that should be managed to encourage a diversity of plant species. Road building activities must therefore be approached with	51 - 63	Partial compliance	Disturbance outside approved crusher site boundary to be marked as no-go areas and rehabilitated. Proof to be kept on file.	

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
	caution to ensure that there is no further degradation of the habitat.				
154	No plants/trees may be destroyed prior to notify the ECO about the plan. The ECO is to approve all plants to be removed.	51 - 63	Partial compliance	Disturbance outside approved crusher site boundary to be marked as no-go areas and rehabilitated. Proof to be kept on file.	
156	All construction activities must remain within the boundaries of the development area, as demarcated at the start of the construction phase. There must be no vehicular access to the drainage lines outside the development area thus reducing the infringement of the development on natural habitat. The construction footprint must be kept to a minimum by constructing boundaries and demarcated areas not to be disturbed. These No-go areas must be demarcated with fencing / warning tape and signs before any construction activities commence. These areas and the type of fencing/demarcation must be approved by the relevant specialist involved in the EIA process. The EO and ECO must be on site in order to make sure the correct areas are fully demarcated.	51 - 63	Partial compliance	<ul style="list-style-type: none"> Demarcation of construction footprint done. All demarcation done for the rest of the year's scheduled work. Proof to be kept when any new areas demarcated. Any areas beyond demarcation considered no-go area. Disturbance outside approved crusher site boundary to be marked as no-go areas and rehabilitated. Proof to be kept on file. 	

4. New site instructions and findings:

#	Requirement	EMP ref. no.	Compliance	Instruction/comment	Date of instruction
157	Oil and chemicals These substances must be confined to specific and secured areas within the contractor's camp away from the non perennial watercourses, and in a way that does not pose a danger of pollution even during times of high rainfall. These areas must be imperviously bunded with adequate	37	Partial compliance	<ul style="list-style-type: none"> Hazardous waste contained in designated area, but overflowing (waste left on bare soil) and should be covered with plastic when not in use to protect from elements and pollution occurring. Some damaged and open pallets of 	October 2019

	containment (at least 1.1 times the volume of the fuel) for potential spills or leaks.			<p>cement still on site and should be covered.</p> <ul style="list-style-type: none"> • Proof sent that properly marked containers for hazardous waste are on site. • Proof sent that contaminated soil and slurry disposed of as per hazardous waste disposal procedure. • All records of safe disposal to be kept on file. 	
158	All spilled hazardous substances must be contained in impermeable containers for removal to a General & Hazardous Waste Landfill site, (this includes contaminated soils, and drenched spill kit material).	37	Not compliant	<ul style="list-style-type: none"> • Proof sent that properly marked containers for hazardous waste are on site. • Proof sent that contaminated soil and slurry disposed of as per hazardous waste disposal procedure. • Contaminated soil at crusher site from vehicle oil drips to be removed and treated and disposed of like hazardous waste. • No proof that contaminated soil and spilled cement treated/disposed of as per method statement (only bitumen waste on file). Proof to be kept on file. 	October 2019
159	All maintenance and washing of vehicles and equipment shall be done off-site as far as possible. During servicing of vehicles or equipment, a suitable drip tray shall be used to prevent spills onto the soil. Leaking equipment shall be repaired immediately or be removed from site to facilitate repair.	49	Partial compliance	<ul style="list-style-type: none"> • Leaks/drips observed on site and should be cleaned up. • Drip trays to be used beneath stationary vehicles and machinery. • Proof that contaminated soil removed and treated as hazardous waste to be provided and kept on file. • No proof provided for previous oil contaminated soil. 	October 2019
160	The surveys for the overall project area and construction footprint as approved in the Environmental Authorisation (EA) must be complete and clearly demarcated before the contractors set up	28	Not compliant	Demarcated construction footprint not adhered to everywhere. Findings of disturbance outside footprint. Disturbed	October 2019

	their crew camps or begin construction.			areas to be marked as no-go areas and rehabilitated. Proof of rectification should be kept on file.	
--	---	--	--	---	--

Pictures taken during October 2019 site audit



Figure 1 Demarcation at Crusher site no longer intact



Figure 2 Demarcation at Crusher site no longer intact



Figure 3 Empty cement bags left on site



Figure 4 Proof submitted that empty cement bags cleaned up and hazardous waste ins provided on site



 <p><i>Figure 5 Drip trays not used beneath stationary vehicles and contaminated soil not cleaned and disposed of as required</i></p>	<p>Upper site</p>	<p>X</p>
 <p><i>Figure 6 Drip trays not used beneath stationary vehicles and contaminated soil not cleaned and disposed of as required</i></p>	<p>Crusher site</p>	<p>X</p>



Figure 7 Overflowing bins with no lid at upper site



Figure 8 Proof submitted that bins emptied and sturdy bins with lid supplied on site



Figure 9 Disturbance by operators outside demarcated footprint



Figure 10 Footprint more clearly demarcated and disturbance rehabilitated



Figure 11 Disturbed vegetation and topsoil should be rehabilitated

Third non-approved stockpile

X

 <p><i>Figure 12 Broken cement bags spilling dry cement on bare soil</i></p>	Crusher site	X
 <p><i>Figure 13 Disturbance and driving outside demarcated footprint</i></p>	Upper site	X
 <p><i>Figure 14 Hazardous waste should be on impermeable surface, protected from wind and rain when not in use and waste should be removed more often</i></p>	Crusher site	X
 <p><i>Figure 15 Proof submitted that spilled slurry and contaminated soil cleaned</i></p>	Road reserve	✓