

## MOOI-MGENI TRANSFER SCHEME PHASE 2 (MMTS-2)

### Construction of the Spring Grove Dam Wall



### ENVIRONMENTAL AUDIT REPORT -

Environmental Audit 03 Undertaken on 11 October 2012 on Site



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**1. LIST OF ACRONYMS**

<b>DEA</b>	Department of Environmental Affairs
<b>ECO</b>	Environmental Control Officer
<b>EO</b>	Environmental Officer
<b>EM</b>	Environmental Monitor
<b>EMC</b>	Environmental Monitoring Committee
<b>EMP</b>	Environmental Management Plan
<b>EPA</b>	Environmental Protection Agency
<b>ISO</b>	International Standards Organisation
<b>MMTS-2</b>	Mooi Mgeni Transfer Scheme Phase 2
<b>TCTA</b>	Trans-Caledon Tunnel Authority
<b>RoD</b>	Record of Decision

## 2. DEFINITIONS

### Auditing

An 'environmental' audit is a methodical examination (including tests, checks, and confirmation) of environmental procedures and practices with the view of verifying whether they comply with internal policies, accepted practices and legal requirements

### Record of Decision

The written statement from the relevant environmental authority in terms of the Environment Conservation Act (Act 73 of 1989), with or without conditions, that records its approval of a planned activity and the implementation thereof and the mitigating measures required to prevent or reduce the effects of environmental impacts during the life of a contract.

### Environmental Management Plan (EMP)

A detailed plan of action prepared to ensure that recommendations for enhancing positive impacts and/or limiting or preventing negative environmental impacts are implemented during the life-cycle of a project.

### Monitoring

'Compliance' monitoring is a continuous and systematic process to ensure that the conditions in the Record of Decision (RoD) Environmental Management Plan (EMP) are being adhered to.

### Environmental Management Programme Audit:

Environmental Management Programme audit is an audit of the environmental measures, procedures and principles that are in place to ensure environmental compliance at the project or programme level.

### Environmental Compliance Audit:

Environmental compliance audits examine the compliance of an organisation, a site or operation with environmental legislation, regulations, licences, and other documentation, including internal environmental policies. Compliance audits are applicable at a project and organisational level.

### Environmental Management Systems (EMS) Audit:

An EMS audit is usually required to maintain accreditation and to ensure that the EMS is functional, relevant, commitments made in the EMS are upheld, and that the EMS is properly implemented

### Technical or Process Audit:

Technical or process environmental audits are specialised types of audits undertaken by industry or government departments for the purpose of determining whether a particular

operation or process has a detrimental effect on the environment, or to assess the environmental impact of a specific part of an operation or process

*Due Diligence Environmental Audit:*

This is an audit to ensure that due diligence conditions have been met. Due diligence environmental audits may be required before the lending of funds or by the organisation considering a merger, acquisition or divestment

*Environmental Marketing Audit:*

An environmental marketing audit assesses the environmental standing of a product or a range of products, by conducting a life-cycle assessment of a product, as well as ensuring that the company's operations meet legislative requirements and public expectations.

*Environmental Management tools audit:*

The environmental management tool audit aims to assess the extent to which the tool assists in correctly predicting potential impacts, was the tool relevant, etc

*Life Cycle Audit:*

An environmental performance audit is an on-going environmental management activity which examines and assesses practices and procedures which, in the event of failure, would cause an environmental impact or result in an environmental risk. This audit takes into account the various requirements during the life cycle of a project and/or programmes to ensure that environmental impacts are identified and mitigated against.

## 1. INTRODUCTION

The Mooi-Mgeni Transfer Scheme Phase 2 (MMTS-2) comprises the construction of a 38 meter roller compacted concrete dam with a storage capacity of 142 million m<sup>3</sup> on the Mooi River upstream of the Mearns Weir with an associated water transfer system to Mpofana River. The Spring Grove Dam will be located 2 km south west of Rosetta on the farms Rosetta and Spring Vale. The purpose of the MMTS-2 is to augment the growing water requirements of the Mgeni System by 60 million m<sup>3</sup> per annum. The System supplies eThekweni, Msunduzi, Ilembe, Ugu, Umgungundlovu and Sisonke Municipalities.

Nemai Consulting was appointed by the Trans-Caledon Tunnel Authority (TCTA) as the independent external Auditor on the MMTS-2 project. The external auditor's functions include auditing the environmental performance of the implementation of the project and compliance against the conditions of the Record of Decision (RoD). The presence of an external auditor for the MMTS-2 project is a condition of the RoD issued by the Department of Environmental Affairs on 15 June 2009.

An Environmental Compliance Audit which examined the compliance of the project with environmental legislation (using the RoD and EMP) was undertaken on 11 October 2012 in line with the requirements of the RoD.

## 2. DEFINING ENVIRONMENTAL AUDITING

There are numerous definitions of environmental auditing however, a commonly used definition is that of the United States Environmental Protection Agency (EPA) which defines environmental auditing as a 'documented, periodic and objective review of operations and practices related to meeting environmental requirements'. Another common definition is that of the International Chamber of Commerce which defines an environmental audit as 'a management tool comprising a systematic, documented, periodic and objective evaluation of how well an environmental organisation, management and equipment are performing with the aim of helping to safeguard the environment by: (1) facilitating management control of environmental practices; and (2) assessing compliance with company policies, which includes meeting regulatory requirements. '

The International Standards Organisation (ISO) defines an environmental audit as a 'systematic, documented verification process of objectively obtaining and evaluating audit

evidence (verifiable information, records or statements of fact) to determine whether specified environmental activities, events, conditions, management systems, or information about these matters conform with audit criteria (policies, practices, procedures or requirements against which the auditor compares collected audit evidence about the subject matter), and communicating the results of this process to the client (organisation commissioning the audit).'

Environmental audits are necessary in assuring the accuracy and relevance of environmental monitoring. Issues identified during the audit process may lead to environmental standards that exceed regulatory requirements. Audits can apply at a project level as well as at a strategic level.

It is important to note that a requirement of an environmental audit is that evidence must be verified by supporting documents, if this is not the case, then the process is a review, survey or assessment, but not an audit. Often the terms, audit and monitoring are used interchangeably, however these are two different concepts: monitoring is a continuous and systematic process to ensure that the conditions in the RoD and Environmental Management Plan (EMP) are met while, an environmental audit is a methodical examination (including tests, checks, and confirmation) of environmental procedures and practices with the view of verifying whether they comply with internal policies, accepted practices and legal requirements.

Audits are conducted less frequently than monitoring, often annually or biannually. Possible methods for conducting an environmental audit vary from simple checklists to more complex programmes. These procedures use a systematic and structured approach to record whether an organisation is meeting its environmental objectives.

### **3. OUTLINE OF THE AUDIT PROCESS**

Below, is an overview of the audit process that was followed by the audit team. The MMTS-2 environmental team were given two months notice of the audit. In addition, the agenda, the list of people to be interviewed and the approach to the audit were circulated to the team.

The first stage of the environmental audit is to determine the audit objectives, followed by the scope of the audit. Since the last audit the objectives and the scope of the audit remained the same. Information provided during the audit was verified on site and included in this

report. A questionnaire was used as the audit tool. This report formally presents the results of the audit conducted and will be used for decision making and any necessary corrective actions.

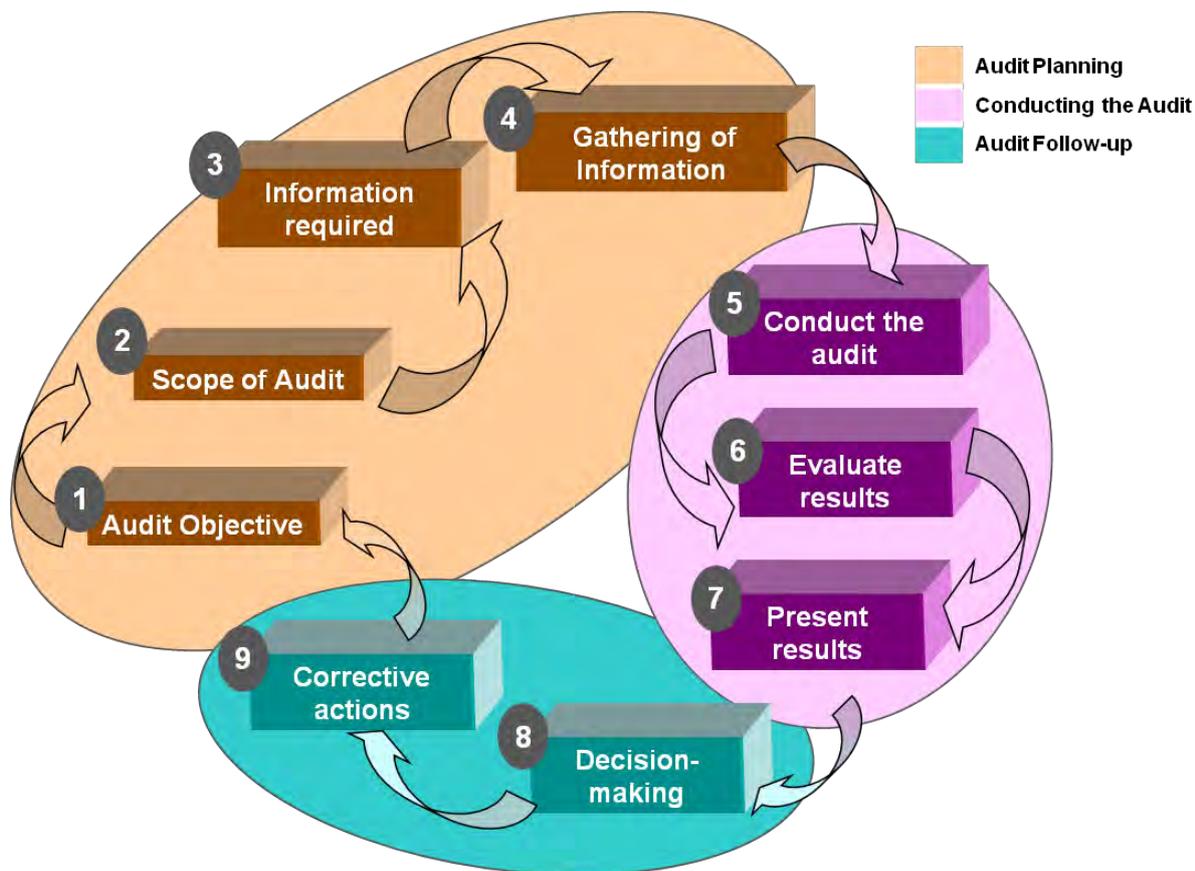


Figure 1: Outline of the Audit Process Followed at the MMTS-2 Audit.

#### 4. DESCRIPTION OF AUDIT REPORT

The draft Audit Report was submitted to TCTA for review and comment. The final Audit Report will be distributed to the EMC and DEA. The audit report is structured in the following manner:

- **Description of administrative aspects of the audit -**

This includes the date the audit was conducted, the objective and scope of the audit, who performed the audit, and any limitations or exclusions regarding the audit scope or methodology.

- **Description of the Audit Findings -**

Each finding of the audit is described in terms of compliance, priority and effectiveness. The audit results are presented in the form of simple graphs which show overall environmental performance. The percentage compliance is presented graphically.

- **Recommendations -**

The report suggests recommendations to address any the issues raised in the audit. The implementation of the recommendations will discussed in the next audit.

- **Conclusions -**

The requisite conclusions will be drawn regarding environmental performance and independent verification of data.

- **Supporting Data and Information -**

The audit findings are supported by relevant information. A copy of the information verified on site is included in the Appendices of the audit report.

## 5. ENVIRONMENTAL COMPLIANCE AUDIT RESULTS

### 6.1. Administrative Details

The Environmental Compliance Audit for the MMTS-2 project took place on 11 October 2012 in the MMTS-2 boardroom at the construction camp. The environmental audit team consisted of Nicky Naidoo (Lead Auditor) from Nemaï Consulting, Ms R Maharaj (Junior Auditor) from Nemaï Consulting, Ms Kogi Govender, the TCTA onsite Environmental Manager, Ms Sandisha Jay Narain, the full time onsite Environmental Monitor (EM), Mr Ryan Phelan, the Group 5 Environmental Officer (EO), Mr L Molaba, the BKS Environmental Tainee and Ms Katie Fenenga, the Social Monitor.

A checklist, based on the conditions of the RoD and EMP, was used to audit the compliance of the project. A site walk about was held after the audit interviews were completed. A telephonic verification of the complaints register was conducted. One site employee was

randomly identified on the day and interviewed. A photocopy of material verified on site is provided in Appendix 5: Verified Information Sample.

## **6.2. Objective of the Environmental Compliance Audit**

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The objectives of the audit include:

- Evaluating the effectiveness of recommendations and corrective actions from the MMTS-2 Environmental Audit 01.
- Verifying MMTS-2's performance against the requirements of the RoD and the EMP; and
- Independently verifying through a random sample that compliance is being achieved and that information provided is an accurate reflection of onsite activities.

## **6.3. Scope of the Environmental Compliance Audit**

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The entire MMTS-2 project, including the infrastructure components, construction domain, construction activities and access roads were audited in terms of whether the environmental objectives and requirements of the RoD and EMP are being met. The scope includes the development footprint of the MMTS-2 project.

Verification of compliance includes the following:

- Determining and verifying whether all conditions stipulated in the RoD are adhered to;
- Determining and verifying whether environmental targets set in the EMP are adhered to, by checking against pre-determined indicators;
- Determining and verifying whether all environmental requirements, criteria and mitigation measures recommended in the EMP are adhered to;
- Determining and verifying whether the implementation of the EMP has been successful in preventing environmental pollution and damage; and
- Determining and verifying the overall effectiveness of environmental management practices onsite.

Environmental issues to be investigated include:

- The complaints register for the auditing period will be checked and the manner and turn-around period for attending to the complaints will be appraised;
- Performance of environmental management measures for non-conformances and incidents;

- Determining that information required by RoD is present and available as well as easily accessible; and
- Assessing how recommendations and corrective actions from the MMTS-2 Environmental Audit 012 were taken into account.

#### 6.4. Information Verified Onsite

An audit checklist based on the requirements of the RoD and related EMP was developed. Onsite information maintained by the EM and the EO was audited and verified. This included the following:

- Environmental Non-Conformance / Incident Register;
- Issues Register;
- Sampling and Analyses Results;
- Waste Disposal Certificates;
- Toolbox Talks Registers;
- Public Notifications (e.g. blasting);
- Weekly and Monthly ECO Monitoring Reports and;
- Environmental and Administrative Records.

#### 6.5. Environmental Compliance Audit Report

<b>COMPANY/DEPT AUDITED:</b>		<b>FORM NO.:</b>	
MMTS-2 Project		MMST-2^03	
<b>Audit date:</b>		<b>Audit leader and team:</b>	
11 October 2012 from 08H00 until 15H30		N. Naidoo	
<b>Project/Programme/Activity audited:</b>		<b>Responsible manager:</b>	
MMTS-2 Project		K. Govender (Environmental Manager)	
<b>Audit type:</b>		<b>List of interviewees (including responsibilities and information reviewed):</b>	
Environmental Compliance Audit		S. Jay Narian (Environmental Monitor) R. Phelan (Environmental Officer)	

K Maasdorp (Social Monitor)  
 M Pote (Telephone Interview)  
 A Masice (Site Interview)  
 T Hlongwane (Site Interview)

**Objectives of the audit:**

The objectives of the audit include:

- Evaluating the effectiveness of recommendations and corrective actions from the MMTS-2 Environmental Audit 02;
- Verifying MMTS-2's performance against the requirements of the RoD and the EMP; and
- Independently verifying through sampling that compliance is being achieved and that information provided is accurate.

**Scope of the audit:**

The entire MMTS-2 project, including the infrastructure components, construction domain, construction activities and access roads were audited in terms of whether the environmental objectives and requirements of the RoD and EMP are being met.

Each attendee were given the opportunity to discuss their concerns, and any areas that they are aware of that is currently non-compliant. All problems must be declared. K Govender mentioned that the wash bay has been closed as DWA wants the water quality for fluoride to decrease to the baseline concentration.

S Jay Narain declared that the daily monitoring format from the Environmental Manager has changed. What is found in inspection sheet might not be found in the daily sheets, but will be found on the weekly sheet.

**Tools used during the audit:**

Checklist

Site Verification through Interviews and site visit.

**Description of the project/programme/activity audited:**

The Mooi-Mgeni Transfer Scheme Phase 2 (MMTS-2) comprises the construction of a 38 meter roller compacted concrete dam with a storage capacity of 142 million m<sup>3</sup> on the Mooi River upstream of the Mearns Weir with an associated water transfer system to Mpofana River. The Spring Grove Dam will be located 2 km south west of the Rosetta on the farms Rosetta and Spring Vale. The purpose of the MMTS-2 is to augment the growing water requirements of the Mgeni System by 60 million m<sup>3</sup> per annum.

**Audit Techniques:**

The conditions of the RoD and EMP were translated into a checklist. S. Jay Narian, R. Phelan and K Maasdorp were asked to produce the necessary information for verification. In addition, a site verification

was conducted through an interview with a randomly chosen staff member.

#### Evaluation of Audit Results:

The recommendations from the Audit 02 was addressed as follows.

No	Recommendation	Corrective Action
1	The format of the NCR reports needs to be re-considered. The report does not state whether the how the NCR was addressed or whether the mitigation measures were acceptable. The report must include due dates.	The NCR format changed as per previous audit. A column has been added for comments, due dates, mitigation measures and whether or not the proposed mitigation measure has been accepted.
2	Until DEA accepts the TCTA proposal to decrease the onsite hours of the ECO from 80 to 40 per month, TCTA is in non-conformance.	The DEA letter approving the deviation from the 80 to 40 hours for the ECO was in the file.
3	All complaints raised must be closed in such a way that the complaint can demonstrate satisfaction.	A column was added to the register as proof that the problem was resolved and another column to explain whether or not the complainant has accepted the remedial action.
4	The external monitoring reports require improvement. Threshold limits must be specified and units for flouride and mercury are inconsistent. All anomalies reported must be explained in full.	In the external monitoring report, the thresholds previously indicated were inaccurate. Changes have been made. The results are not interpretation and the threshold limits are included in the report
5	D Henning to consider keeping the Material Safety Data Sheets between the OHS file and the EM file due to a split function.	The change to the EMPr condition will be tabled a the 07/11/12 EMC meeting.
6	Only the site labour were made aware of the conditions of the authorisation. This must be extended to include all staff.	All Contractor staff attended a training session. Attendance register was included in the file.

The Environmental Compliance Audit provided information of the overall compliance of the MMTS-2 project to the RoD and the EMP. The project is performing well in all majority of categories (Figure 2). 5 of the 6 recommendations from Audit 02 were instituted. Since the last audit the compliance score improved from 86% to 98%. The project did not get 100% compliance in 3 areas namely:

- The EO/EM action register did not have an observation for 19/06/12 and therefore considered incomplete.
- DH must present the deviations from the EMP to the EMC.
- BKS Staff must be made aware of the conditions of the RoD and EMP.

The impact though is considered marginal.

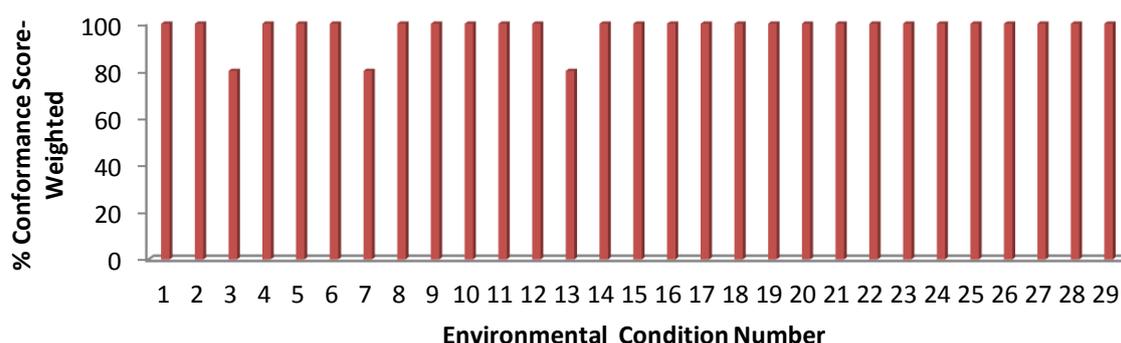


Figure 2: Weighted Conformance Percentages for Environmental Conditions Audited

Table 1: Environmental Conditions Audited

<b>1</b>	<b>Notification of DEA for any project changes / deviations</b>
<b>2</b>	Notification of stakeholders of the DEA authorisation
<b>3</b>	A daily site diary to be maintained on site by the ECO
<b>4</b>	A non-conformance register to be maintained on site by the ECO
<b>5</b>	A public complaints register to be maintained on site by the ECO
<b>6</b>	Monitoring reports of the contractor/s to be maintained on site by the ECO
<b>7</b>	Compliance and audit reports to be maintained on site by the ECO
<b>8</b>	Training registers to be maintained on site by the ECO
<b>9</b>	Copies of the ROD and EMP to be maintained on site by the ECO
<b>10</b>	Waste disposal certificates to be maintained on site by the ECO
<b>11</b>	Copies of all permits required during the construction phase to be maintained on site by the ECO
<b>12</b>	A copy of the ROD to be available on site during construction
<b>13</b>	All staff, contractors and sub-contractors to be familiar with or be made aware of the ROD contents
<b>14</b>	All public complaints during construction must be adhered to as soon as possible
<b>15</b>	A complaints register to be kept up to date and produced upon request
<b>16</b>	Copies of method statements to be maintained on site by the ECO
<b>17</b>	Compliance/non-compliance records must be kept and shall be made available upon request from the relevant authorities within five days of receipt of the request
<b>18</b>	A record of all types and quantities of hazardous materials on site to be kept
<b>19</b>	Hazardous substances to be stored safely and in secondary containers within a bunded area
<b>20</b>	Hazardous material management plan for safe handling, storage and use of hazardous substances to be complied with
<b>21</b>	Organogramme of Contractor's Management Structure
<b>22</b>	Filing system for environmental documentation to be kept on site and be up to date
<b>23</b>	Environmental document control procedure to ensure that the environmental file contains all the environmental information including the CEMP, ROD Authorization, environmental induction information; etc.
<b>24</b>	Environmental induction programme to ensure that all contractors attend the environmental induction training and records of this training are kept in the environmental file on site
<b>25</b>	Records of all environmental training sessions to be kept on site
<b>26</b>	The concept of "clean site" policy to be explained to all construction workers
<b>27</b>	A waste register regarding materials removal from the site, the type of material, the quantity, the date removed, the haulage contractor, the disposal site to be maintained
<b>28</b>	All staff to be trained regarding storage practices for hazardous materials
<b>29</b>	Employees training to include spillage prevention; containment and cleanup and reporting of spills

Table 2: Overall Conformance Score for the Environmental Compliance Audit

Environmental Compliance Audit	Total	%
Number of Items Scored for this Monitoring Event	29	
Highest Possible Conformance Score for this Monitoring Event	136	0
Actual Conformance Score	133	97.79

## Description of non-compliance noted during the audit:

No major non-conformances were noted.

## List of supporting documents:

Please see Appendix 5: Supporting Documents

## Recommendations and Conclusions:

The following recommendations were made:

- The EO/EM action register did not have an observation for 19/06/12 and therefore considered incomplete.
- DH must present the deviations from the EMP to the EMC.
- BKS Staff must be made aware of the conditions of the RoD and EMP.

Signed/date:

Nicky Naidoo

Lead Auditor:

Responsible Manager/Licence Holder

K. Govender

## 6. CONCLUSION

Environmental audits help in assuring the accuracy and relevance of environmental monitoring. A requirement of an environmental audit is that evidence must be verified by supporting documents and environmental auditing is defined as a methodical examination (including tests, checks, and confirmation) of environmental procedures and practices with

the view of verifying whether they comply with internal policies, accepted practices and legal requirements.

Audits are conducted less frequently than monitoring, often annually or biannually. In this case, the environmental audit of the MMTS-2 project will occur biannually and used two main tools: a checklist and site verification through interviews. The team is complemented on improving on the last audit score and for achieving an outstanding compliance score of 97.79%.

<b>APPENDIX 1: ENVIRONMENTAL SCORING SYSTEM AND RESULTS</b>
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### ENVIRONMENTAL AUDIT REPORT:

CONFORMANCE SCORES	DESCRIPTION
1	Task not achieved
2	Task 20% complete
3	Task 50% complete
4	Task 80 % complete
5	Task 100% completed in accordance with the EMP
IMPACT SCORES	IMPACT
1	<b>Low</b> – mitigation not needed/ mitigation measures to be maintained
2	<b>Medium</b> – mitigation should be considered
3	<b>High</b> – mitigation compulsory
PENALTY SCORES	DESCRIPTION
0	Not Applicable / Impact or Non-Conformance occurred in area of low Environmental Significance
1	<b>Moderate</b> – Impact/Non-Conformance occurred in area of moderate Environmental Significance (1% Deduction from total conformance score)
2	<b>High</b> – Impact/Non-Conformance occurred in area of high Environmental Significance (3% Deduction from total conformance score)
3	<b>Very High</b> – Impact/Non-Conformance Occurred in area of very high Environmental Significance (5% Deduction from total conformance score)

Table 3: Breakdown of Compliance Audit Score

N o.	Conditions / Mitigation Measures	Responsibility	Conformance Score	Conformance Weighting	Conformance Score-Weighted	Percentage Conformance score	Comments	Appendix	Mitigation
1	Notification of DEA for any project changes / deviations	Applicant / ECO	5	1	5	100	Copy of DEA letter accepting the change in the external ECO hours was in the file	Photocopy of DEA letter taken- Appendix 3	None
2	Notification of stakeholders of the DEA authorisation		5	1	5	100	The DEA response was presented at the EMC meeting. Included in minutes of meeting.	No photocopy taken- verified by lead auditor.	None
3	A daily site diary to be maintained on site by the ECO	ECO	5	1	4	80	The Environmental Monitor's Daily Diary was verified. Item 11 Waste Disposal was verified. A Sanitec Certificate dated 12/06/12 was verified. However, the EO/EM action register did not have an observation for 19/06/12.	Appendix 3	The action register must note all the days that an observation was made.
4	A non-conformance register to be maintained on site by the ECO	ECO	5	1	5	100	J00846-NCR025 on 12/07/12 was checked. The issue was closed and verified in the external ECO report on 19/07/12.	Appendix 3	None
5	A public complaints register to be maintained on site by the ECO	ECO	5	1	5	100	Complaint 255 was logged by M Pote on 19/06/12. The complaint was called and he verified that the complaint was correctly recorded and closed.	Appendix 3	None

No.	Conditions / Mitigation Measures	Responsibility	Conformance Score	Conformance Weighting	Conformance Score-Weighted	Percentage Conformance score	Comments	Appendix	Mitigation
6	Monitoring reports of the contractor/s to be maintained on site by the ECO	ECO	5	1	5	100	The EO's Daily Diary is kept in an A4 triplicate book, one copy is given to the EM for filing. June 2012 monitoring reports verified by Lead Auditor.	Appendix 3	None
7	Compliance and audit reports to be maintained on site by the ECO	ECO	5	1	4	80	Audit and external ECO reports maintained on site.	No photocopy taken- verified by lead auditor.	DH must present the deviations from the EMP to the EMC.
8	Training registers to be maintained on site by the ECO	ECO	5	1	5	100	Training registered were verified.	Appendix 3	None
9	Copies of the ROD and EMP to be maintained on site by the ECO	ECO	5	1	5	100	The copies of the ROD and EMP were maintained in the EM's files and verified by the lead auditor.	No photocopy taken- verified by lead auditor.	None
10	Waste disposal certificates to be maintained on site by the ECO	ECO	5	1	5	100	The general waste disposal certificates are kept in an A4 triplicate book by the EO. The EM receives a copy from the triplicate book. Verified certificate of 18/06/12.	Appendix 3	None
11	Copies of all permits required during the construction phase to be maintained on site by the ECO	ECO	5	1	5	100	Permits are kept with the EM and were verified by the lead auditor.	No photocopy taken- verified by lead auditor.	None

N o.	Conditions / Mitigation Measures	Responsibility	Conformance Score	Conformance Weighting	Conformance Score-Weighted	Percentage Conformance score	Comments	Appendix	Mitigation
12	A copy of the ROD to be available on site during construction	Contractor	5	1	5	100	The RoD was available-verified by lead auditor.	No photocopy taken- verified by lead auditor.	None
13	All staff, contractors and sub-contractors to be familiar with or be made aware of the ROD contents	Contractor	4	0.8	3.2	80	BKS Staff must be made aware of the conditions of the RoD and EMP	Note Applicable	All the Contractors staff is made aware of the conditions of the authorisation. This must be extended to include all staff including the BKS team.
14	All public complaints during construction must be adhered to as soon as possible	Contractor	5	1	5	100	The Issues Register was verified. Verified by interview with M Pote	Verified on site by Lead Auditor.	None
15	A complaints register to be kept up to date and produced upon request	Contractor	5	1	5	100	The Issues Register is maintained by K. Maasdorp and updated regularly.	Appendix 3	None
16	Copies of method statements to be maintained on site by the ECO	ECO	5	1	5	100	The emergency response method statement was verified on site.	Appendix 3	None
17	Compliance/non-compliance records must be kept and shall be made available upon request from the relevant authorities within five days of receipt of the request	ECO	5	1	5	100	The non-conformance register was checked. J00846-NCR025 was verified.	Appendix 3	None

No.	Conditions / Mitigation Measures	Responsibility	Conformance Score	Conformance Weighting	Conformance Score-Weighted	Percentage Conformance score	Comments	Appendix	Mitigation
18	A record of all types and quantities of hazardous materials on site to be kept	Contractor	5	1	5	100	The materials registers were verified by the lead auditor.	No photocopy taken- verified by lead auditor.	None
19	Hazardous substances to be stored safely and in secondary containers within a bunded area	Contractor	5	1	4	100	All hazardous material is properly labeled, a site photograph was taken in order to verify that proper documentation regarding proper storage was kept, the Diesel bund area weekly checklist for November 2011 was verified	Appendix 3	None
20	Hazardous material management plan for safe handling, storage and use of hazardous substances to be complied with	Contractor	5	1	4	100	The chemical management plan was verified.	No photocopy taken- verified by lead auditor.	None
21	Organogramme of Contractor's Management Structure	Contractor	5	0.5	2.5	100	The organogram is kept in both EM and EO's files as well as on the wall in the offices.	No photocopy taken- verified by lead auditor.	None
22	Filing system for environmental documentation to be kept on site and be up to date	Contractor	5	1	5	100	All recommendations on filing from Audit 01 were taken into account.	No photocopy taken- verified by lead auditor.	None

No.	Conditions / Mitigation Measures	Responsibility	Conformance Score	Conformance Weighting	Conformance Score-Weighted	Percentage Conformance score	Comments	Appendix	Mitigation
23	Environmental document control procedure to ensure that the environmental file contains all the environmental information including the CEMP, ROD Authorization, environmental induction information; etc.	Contractor	5	1	5	100	All recommendations on document control from Audit 01 were taken into account.	No photocopy taken- verified by lead auditor.	None
24	Environmental induction programme to ensure that all contractors attend the environmental induction training and records of this training are kept in the environmental file on site	Contractor	5	1	5	100	Basic Induction training and toolbox talks were verified.	Appendix 3	None
25	Records of all environmental training sessions to be kept on site	Contractor	5	1	5	100	Verified attendance register of Washing Vehicles on Site Toolbox Talk	Appendix 3	None

No.	Conditions / Mitigation Measures	Responsibility	Conformance Score	Conformance Weighting	Conformance Score-Weighted	Percentage Conformance score	Comments	Appendix	Mitigation
26	The concept of "clean site" policy to be explained to all construction workers	Contractor	5	1	5	100	Verified by interview	Appendix 3	None
27	A waste register regarding materials removal from the site, the type of material, the quantity, the date removed, the haulage contractor, the disposal site to be maintained	Contractor	5	0.7	3.5	100	The materials registers were verified by the lead auditor. Specifically, the MSDA for Ethylene Glycol was verified.	Appendix 3	None
28	All staff to be trained regarding storage practices for hazardous materials	Contractor	5	1	5	100	Attendance Register of Toolbox Talk verified.	No photocopy taken- verified by lead auditor.	None
29	Employees training to include spillage prevention; containment and cleanup and reporting of spills	Contractor	5	1	5	100	Basic Induction training and toolbox talks were verified.	No photocopy taken- verified by lead auditor.	None

**Table 4: Environmental Compliance Audit Scores with Penalty Deductions**

<b>Environmental Compliance Audit</b>	<b>Total</b>	<b>%</b>
Number of Items Scored for this Monitoring Event	<b>29</b>	
Highest Possible Conformance Score for this Monitoring Event	136	0
Actual Conformance Score	133	97.79









**APPENDIX 3: SUPPORTING DOCUMENTS**