ANNEXURE B

Example of an organisational structure, with respective roles and responsibilities

The organisational structure provided below, as an example that could be implemented by the Project Proponent, identifies and defines the responsibilities and authority of the various role-players (individuals and organisations) involved in the project. All instructions and official communications regarding environmental matters could follow the organisational structure presented in Figure 1. It is essential is that the responsibilities outlined below are assigned to competent personnel with capacity and experience to undertake the outlined tasks.

The organisational structure has been developed to ensure that:

- There are clear channels of communication;
- There is an explicit organisational hierarchy for the project; and
- Potential conflicting or contradictory instructions are avoided.

In terms of the suggested organisational structure, all instructions that relate to environmental matters will be communicated to the Contractor via the IPP Contractor/Project Manager’s Representative. The only exception to this rule would be in an emergency (defined as a situation requiring immediate action and where failure to intervene timeously would, in the reasonable opinion of the Environmental Control Officer (ECO), result in unacceptable environmental degradation), where instructions may be given directly to the Contractor. The detailed roles and responsibilities of the various role-players identified in the organisational structure are described hereunder.

As is evident in Error! Reference source not found., to follow, the key-role-players for the project are MET:DEA, the Project Proponent, IPP Contractor/Project Manager, Environmental Control Officer (ECO) and the Contractor. The detailed roles and responsibilities of each of these organisations are outlined below.

1. The Authorities

As the competent environmental authority, the MET:DEA has the responsibility to ensure that the proponent complies with the conditions of the Environmental Clearance Certificate (ECC) as well as the requirements in terms of the broader environmental legislation, specifically the Environmental Management Act (Act No. 7 of 2007). Compliance would be confirmed via the following mechanisms:

- Receipt and review of the monthly environmental compliance reporting compiled by the ECO; and
- Ad hoc and planned site inspections.

---

1 It should be noted that there is likely to be a considerable amount of informal communication between the ECO and the Contractor's environmental representatives. However, where such communication (1) represents an instruction, (2) could lead to liability on the part of the Employer or Engineer or (3) could have financial implications, this must be addressed through the formal channels of communication defined in the organisational structure.
Figure 1: Example of an Environmental communications organogram
2. The Project Proponent

The Project Proponent must ensure that the implementation of the project complies with the requirements of the MET:DEA’s ECC, the Scoping Report as well as any obligations emanating from other relevant environmental legislation. Although part of this obligation is being met by the development of the EMP, and its integration into the tender documentation and the appointment of the ECO, the Project Proponent cannot delegate or defer these obligations. Accordingly, the Project Proponent must retain an oversight role and retain some key roles and responsibilities as it relates to environmental management during the construction phase. The Project Proponent as an organisation must ensure that adequate funding is made available for the implementation and monitoring of the environmental controls.

The Project Proponent’s responsibilities include the following:

- Identify and appoint a suitably qualified independent ECO and issue a clear Terms of Reference (ToR);
- Be fully conversant with the Scoping Report and EMP for the project, any conditions of the ECC, the Construction EMP and all relevant environmental legislation;
- Ensure that the contents of the EMP, legal constraints and the Project Proponent standards and procedures pertaining to the project, specifically with regards to environment management, are highlighted to the IPP Contractor(s) so that they are aware of these;
- Ensure that the EMP is correctly implemented throughout the project by means of site inspections and monthly site meetings;
- Identify and appoint a suitably qualified Community Liaison Officer to assist with the management and monitoring of social impacts and to act as an intermediary between the Project Proponent and the local communities;
- Make financial provisions for the inclusion of an Environmental Manager as part of the Project Manager’s Contract, inclusive of all staff and equipment resources needed to execute their functions; and
- Issue ad hoc instructions, corrective action requests, or initiate punitive proceedings where non-compliances are not adequately addressed.

3. The Environmental Control Officer

The Project Proponent shall appoint a suitably qualified and independent ECO to monitor compliance with the conditions of Environmental Clearance, requirements of the EMP and the environmental legislation on a regular basis (two site visits a month are recommended). To fulfil these requirements, the ECO would need to have relevant on-site experience and would need to be on site for at least two days a month during the construction phase.

The ECO will be responsible for monitoring, auditing, reviewing, and verifying compliance by the IPP Contractor/s with the EMP. Accordingly, the ECO would be required to:

- Be fully conversant with the contents of the Scoping Report for the project, any conditions of the ECC, the EMP and all relevant environmental legislation;
• Be fully knowledgeable with the contents of all the Project Proponent’s environmental policies and procedures, and ensure compliance with these;

In meeting the aforementioned obligations, the ECO’s specific duties would include the following:

• Liaising with the Project Proponent, Project Manager or Engineer and MET:DEA;
• Advising on the removal of person(s) and/or equipment not complying with the EMP from site;
• Assisting the Project Manager in certifying payment for items related to implementation of the EMP;
• Completing the requisite environmental reporting, a monthly environmental compliance audit report and incident reports for submission to the Project Proponent and MET:DEA;
• Confirming that activities on site comply with legislation;
• Ensuring that a register of complaints is kept by the Contractor and that all complaints are appropriately recorded and addressed;
• Ensuring that the requisite environmental induction occurs for all new personnel coming onto site;
• Inspecting the site and surrounding areas regularly with regard to compliance with the EMP;
• Reviewing monitoring records;
• Keeping a photographic record of progress on site from an environmental perspective;
• Monitoring and verifying that environmental impacts are kept to a minimum;
• Monitoring, verifying and recording that the conditions of the Environmental Clearance and EMP are adhered to at all times and requiring the IPP Contractor to take action if these are not followed;
• Ensuring the proactive and effective implementation and management of environmental protection measures;
• Ensuring that the requisite remedial action is implemented in the event of non-compliance;
• Recommending the issuing of penalties for contraventions of the EMP if a penalty system is incorporated into the Contract;
• Reporting back on the environmental issues at the monthly site meetings and other meetings that may be called regarding environmental matters; and
• Reviewing and approving construction Method Statements together with the Project Manager.

As outlined previously, all instructions issued by the ECO would go through the Project Manager’s Representative, who would then convey these to the Contractor.

4. The IPP Contractor/ Project & Environmental Managers

The IPP Contractor is responsible for ensuring that the Contract is carried out to completion on time, in budget and that the Contractor/Sub-contractor fulfils his obligations in terms of
conditions contained in the EMP and ECC. There are typically two roles for the IPP Contractor, namely the Project Manager and the Environmental Manager.

The Project Manager (often referred to as the Engineer) is responsible for the following:

- Appointing the Environmental Manager;
- Issuing all instructions to the Contractor;
- Administering all contractual issues, including any stop works orders, penalties or punitive measures initiated as result of environmental non-compliances; and
- Ensuring that issues pertaining to environmental management (all recommendations of the Environmental Manager) are handled and resolved as any other construction or contractual relater matter by providing adequate support to and authority to the Environmental Manager and ECO.

The Project Manager shall appoint a suitably qualified staff member on a full time basis to be on-site permanently who shall be responsible for all environmental monitoring set forth in the Construction EMP. This position shall be designated as the Environmental Manager. As a minimum requirement the Environmental Manager should possess a tertiary qualification in a relevant field and at least two years of experience in environmental monitoring and control. Where necessary, the Environmental Manager shall be provided with an assistant with qualifications and or experience in standard environmental sampling and monitoring protocols. The Environmental Manager, supported by the authority of the Project Manager, will be responsible for the oversight of all environmental aspects and compliance monitoring across all Contacts.

The responsibilities of the Environmental Manager and assistants shall include the following:

- Be fully knowledgeable with the contents of the Scoping Report, EMP and any conditions of the ECC;
- Be fully knowledgeable with the contents of the Construction EMP;
- Attend monthly site meetings and report back on environmental monitoring and compliance issues;
- Review and make recommendations regarding all environmental matters contained in the Contractor’s method statements;
- Conduct daily site inspections of all construction areas and liaise with Contractor’s staff in terms of compliance with the EMP;
- Keep the Project Manager abreast of all environmental issues on a continuous basis;
- Liaise frequently with the ECO on all environmental matters and appropriate measures to be instituted;
- Investigate all environmental incidents and report the findings to the ECO and Project Manager and propose corrective and remedial actions;
- Establish and implement the environmental monitoring programmes for the full construction duration, including:
  - General compliance monitoring;
  - Visual monitoring;
  - Alien plant species monitoring; and
  - Groundwater monitoring.
- Maintain a complete set of environmental monitoring records.
• Compile monthly environmental monitoring reports, per primary Contract, for submission to the ECO and MET:DEA comprising:
  o General construction progress and notable events;
  o Photographic record of progress on site from an environmental perspective;
  o Incident and accident reports (including all responses and corrective actions taken);
  o Compliance monitoring of the various Contractors;
  o Site instructions issued of environmental significance;
  o Public queries or complaints received;
  o Environmental monitoring data; and
  o Recommendations and motivations relating to amendments to the EMP.
• Ensure there is frequent communication with the relevant parties on matters concerning the environment; and
• Ensure that no actions are taken which will harm or may indirectly cause harm to the environment, and take steps to prevent pollution on the site.

It is suggested that general compliance monitoring and inspections by the Environmental Manager occur and are reported on daily. These daily reports, or daily site diary entries can then be submitted collectively as monthly, allowing tracking of progress and corrective actions from day-to-day over the period.

5. The Contractor

By virtue of the environmental obligations delegated to the Contractor through the Contract Document, all staff (including subcontractors and staff), suppliers, and service providers appointed for the project would be responsible for:

• Ensuring adherence by providing adequate staff and provisions to meet the requirements of the EMP;
• Compile a final EMP
• Ensuring that Method Statements are submitted to the Environmental Manager for approval before any work is undertaken - any lack of adherence to this will be considered as non-compliance to the EMP;
• Ensuring that any instructions issued by the Project Manager, on the advice of the Project Proponent, the ECO or Environmental Manager, are adhered to;
• Ensuring the representation of a report at each site meeting, documenting all incidents that have occurred during the period before the site meeting;
• Ensuring that a register of all the transgressions issued by the ECO is kept in the site office;
• Ensuring that a register of all public complaints is maintained; and
• Ensure that all employees, including those of sub-contractors receive training before the commencement of construction in order that they can constructively contribute towards the successful implementation of the environmental requirements of the Contract.
6. The Environmental Officer

The most important actions of the Contractor to ensure compliance with the environmental requirements, relate to the establishment of an adequate and appropriate organisational structure for ensuring the implementation and monitoring of the requisite environmental controls. In terms of this requirement the Contractor shall delegate the environmental responsibility to a suitably qualified senior staff member employed full time on site by the Contractor, subject to the approval of the Project Manager. This position shall be designated as the Environmental Officer. The Environmental Officer shall be a person with adequate environmental knowledge to understand and implement this Construction EMP and have adequate authority to instruct any member of the Contractor’s staff, at his discretion, without having to defer such instruction through higher level of management. It is vital that the Environmental Officer is appointed prior to the commencement of a contract. A four week period should typically be allowed.

The Environmental Officer's specific duties relate to the physical implementation of the environmental controls contained within the EMP, and which are audited by the ECO. Accordingly, the Environmental Officer’s duties include:

- Ensuring that activities on site comply with the EMP, ECC, approved method statements, prevailing legislation, and any ad hoc site instructions issued by the Project Manager;
- Monitoring that all environmental controls in the EMP are adhered to at all times and take actions where these are not followed;
- Compiling the requisite Method Statements for review by the Project Manager;
- Proactively developing environmentally responsible solutions to problems, in consultation with the Project/Environmental Manager and ECO, where necessary;
- Reporting back on the environmental issues at the monthly site meetings and other meetings that may be called regarding environmental matters;
- Keeping daily records of all activities/incidents concerning the environment on site;
- Inspecting the site and surrounding areas regularly with regard to compliance with the EMP and keeping daily records of all activities/incidents concerning the environment on site and completing the requisite environmental reporting, namely a daily compliance checklist, a record of staff induction and incidence reports, for submission to the Project Manager;
- Keeping the key employment figures and submitting these to the Environmental Manager and the Project Proponent’s Community Liaison Officer at routine intervals;
- Maintaining a register of complaints, ensuring that all complaints are appropriately recorded and addressed and notifying the Project Manager of each complaint and how it was resolved; and
- Undertaking the requisite environmental induction for all new personnel coming onto site, as well as any refresher or ad hoc induction that might be required during the Contract.