	Work Instruction	Medupi Power Station Project
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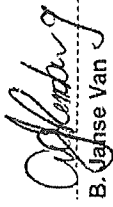
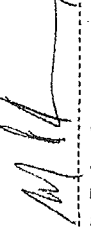
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1. Introduction

This document is designed for Principal Contractors (PCs) to use as a guide in preparing a Spill Prevention, Control, and Countermeasures (SPCC) Plan in response to primarily land-based spills for the Construction Phase of the Medupi Power Station Project, but also includes responses to spills on water bodies and concreted surfaces. All PCs will be required to develop their own SPCC-Plan, in conjunction with related procedural documents, to effectively govern their activities in terms of spill management as appropriate to meet the requirements of the Medupi Site. The PCs' specific SPCC-Plan must be accepted by TM Environmental Department. This document forms part of the Project's Environmental Management System as an Operational Control Plan.

2. Supporting Clauses

2.1 Scope

This document sets out the requirements for the actions required to avoid, mitigate, and respond to, land-based spills that occur on the Medupi construction site, and areas and activities deemed to form part of such, under relevant contractual arrangements. It addresses spills of all liquids deemed hazardous to the environment, which includes, but is not limited to:

- Hydrocarbons;
- Lubricants, solvents and paints; and
- Hazardous liquid wastes, including leachates.

All PCs shall use the SPCC-Plan Template (200- 80600), which is explained in this document, for the duration of the Project, and it will be updated throughout the Project's construction phase so that the SPCC-Plan reflects actual site conditions and practices. At a minimum, PCs must review and update their SPCC-Plans on an annual basis. TM Environmental Department will retain an updated copy of the PCs' SPCC-Plans.

This SPCC-Plan Document provides:

- References to control guidelines and standards;
- Responsibilities for the implementation of an SPCC-Plan;
- Mitigation measures to be implemented by the PC during construction and/or installation works to meet the project commitments and eliminate or reduce potential spills;
- Verification and monitoring of implemented requirements; and
- Reporting requirements.

2.1.1 Purpose

The purpose of an SPCC Plan is to develop and implement a spill prevention and management plan in order to protect human health and the environment from spills and releases of hazardous chemical substance (HCS).

The objectives of this document are to:

- Guide the PCs to develop and implement a Site Specific SPCC-Plan for the management of land-based spills during the Construction Phase of the Medupi Power Station Project.

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- Assists the TM in ensuring that the intended outcomes of the spill response measures implemented by PCs are achieved and assures compliance with legal and policy obligations and other requirements.
- To serve as an important part of the environmental management process to translate commitments made by PCs, in regards to spill response, into actions.

2.1.2 Applicability

This document shall apply to TM and all PCs shall use the SPCC-Plan Template (200- 80600). I think this statement should say "This document shall apply to the Medupi Power Station Construction activities.

2.1.3 Effective date

This document is effective from the date of authorisation.

2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

Document Title	Document Number
Project Execution Plan	200 5919
Project Quality Plan	200 1679
Medupi EMS Scope and Manual	PME 200-73971
Development and Change of Medupi EMS Documents	200 5665
Documents and Record Management Procedure	200 1680
Unit Construction Procedure Manual	200-163680
Record of Decision for the Medupi Project	12/12/20/695
Medupi Power Station, S.4 Employer Policy and Procedures – Part 9; Safety, Health and Environmental Requirements Schedule	200-10609
Environment Communications Procedure	200-38432
Medupi Environmental Policy Statement	200-73979
Identification and Application of Environmental Operational Controls	200-73969

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Document Title	Document Number
The Environmental Management Plan for the Medupi Coal-fired Power Station in the Lephalale Area, Limpopo Province – The Construction Phase	200-35208

2.2.2 Informative

Document Title	Document Number
National Environmental Management Act (107/1998)	External
Occupational Health and Safety Act (85/1993)	External
Hazardous Substances Act (15/1973)	External

2.3 Definitions

2.3.1 Term: definition

Term	Definition
Aspect	Element of an Organization's activities, products or services that can interact with the environment
Environmental Incident	Any unplanned event, which could or does result in harm, damage and/or environmental pollution or degradation.e.g. Pollution Of Underground Water or Oil and Chemical Spills
Environmental sensitive area	Sensitive areas are areas that typically contain populations that could be particularly sensitive to a hazardous chemical substance spill or release. Such areas include wetlands, areas that provide habitat for threatened or endangered species. Sensitive areas also include areas where groundwater is used for agricultural or drinking water, such as wellhead protection zones and sole source aquifer recharge areas.
Environmental receptor	Sensitive Environment areas that may be effected, i.e. soil, water, air etc.
Hydrocarbon	An organic compound consisting entirely of hydrogen and carbon. The majority of hydrocarbons found naturally occur in crude oil
Impact	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects.
Leachate	Water that gets polluted when it seeps through waste and this includes effluent from decomposing waste materials.
Principal Contractor (PC)	An employer who performs construction work and includes principal contractors. Contracted companies are specifically viewed as employers

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	in their own right, as per the OHSAct.
Section 30 Incident	Emergency Environmental incident, as described in section 30 of NEMA.
Sub-contractor	An Employer who performs construction work under the direction of a PC.
Waterways	Waterways include streams, culverts, rivers, drainage lines, etc.
WISPA	A web based system that users can access from any workstation and mobile devices. This is accessed through assigned username and password and available at www.pbwispa.co.za

2.4 Abbreviations

Abbreviation or Acronym	Description
DEA	Department of Environmental Affairs
DWS	Department of Water and Sanitation
EMP	Environmental Management Plan
EMS	Environmental Management System
ECO	Environmental Control Officer
HCS	Hazardous Chemical Substance
ISO	International Organisation for Standardisation
NEMA	National Environmental Management Act (Act No. 107 of 1998)
NWA	National Water Act (Act No. of 36 of 1998)
PCs	Principal Contractors
PCAR	Preventive and Corrective Action Request
SPCC-Plan	Spill Prevention, Control and Countermeasures Plan
TM	Team Medupi
WISPA	Wed Integrated System of Processes and Applications

2.5 Roles and Responsibilities

a) Responsible

Those who do the work to achieve the task. There is at least one role with a participation type of responsible, although others can be delegated to assist in the work required.

b) Accountable (also approver or final approving authority)

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The one ultimately answerable for the correct and thorough completion of the deliverable or task, and the one who delegates the work to those responsible. In other words, an accountable must sign off (approve) work that responsible provides. There must be only one accountable specified for each task or deliverable.

c) Consulted (sometimes counsel)

Those whose opinions are sought, typically subject matter experts; and with whom there is two-way communication.

d) Informed

Those who are kept up-to-date on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication.

Table 1: RACI Matrix

Process Step/Activity	TM Project Director	TM Construction Manager	TM Unit Area Manager	TM Contracts Manager	TM Environmental Manager	TM Environmental Practitioners	ECO	PCs Environmental Practitioners
Implementation of the Plan	I	I	I	I	A	R	I	R
Monitoring compliance to the plan	I	C,I	C,I	I	A	R	C,I	R

2.6 Related/Supporting Documents

The following quality records are utilised to record necessary process data required to verify process conformity:

- o · PC's SPCC-Plan
- o · Spill Assessment Register
- o · HCS Storage Facilities Register
- o · Incident management records
- o · Safe disposal certificates of hazardous wastes
- o · Maintenance records
- o · Training and awareness records.

The revision status of Medupi project Quality Record templates is defined in the Medupi QMS Index LRD 200 – 47329 maintained by Medupi Quality Dept.

Retention and storage of records generated as a result of this document shall follow the process defined in the Procedure 200-1680 "Document and Record Management".

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3. Document Content

3.1 Process Map / Flowchart

N/A

3.2 General

The primary environmental impact addressed by this document is the risk of accidental and uncontrolled release of oil, fuel and/or chemicals to the environment that causes environmental and/or human health impacts.

Spills can arise as a result of:

- Transportation or refuelling accidents;
- Improper storage or packaging practices;
- Rupturing of tanks, drums or other storage containers;
- Inadequate repair and maintenance practises;
- Improper handling of hazardous chemical substance (HCS) during loading and/or off-loading; and/or
- Accidents during use.

The measures outlined below are the mitigation requirements to be put in-place by each PC in their own site-specific SPCC-Plan in order to effectively achieve the commitments of the Medupi Site, as well as to eliminate or minimise any adverse environmental impacts resulting from spills due to their activities.

3.3 SPCC Process Description

3.3.1 Spill Impacts Assessment and Spill Assessment Register

The PC shall conduct a Spill Impacts Assessment and complete the Spill Assessment Register (200-80599 as attached).

The following aspects must be considered and included in the Spill Assessment Register:

- Inventory List of all HCS that are used and stored by the PC during their activities and/or on their sites;
- Estimated maximum quantity of the HCS on site at any one time;
- Intended use of the HCS;
- List of MSDS's for all HCS, and specify where these MSDS's can be found;
- Frequency of activity likely to have an environmental impact;
- List of all aspects (sources) of HCS on site that could result in a spill, i.e. plant and machinery that makes use of Hydrocarbons;
- Potential probability and frequency of a spill occurring due to the identified aspects;
- All locations (physical places) in area of operation where spill are likely to occur;
- Potential environmental impact (potentially worse case scenarios) that may occur in the event of a spill; and
- Potential Environmental Receptors, Drainage Pathways and nearby waterways and Environmental Sensitive Areas

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The PCs must complete the Spill Assessment Register and submit it, together with their Site Specific SPCC-Plan, to TM Environmental Department for acceptance. All SPCC-Plans will be made available to the ECO.

3.3.2 Spill Prevention, Control and Countermeasure Plan

The PCs shall develop a site-specific SPCC-Plan, based on the outcome of the Spill Assessment Register, by making use of the SPCC-Plan Template (200-80600 as attached)).

The contents of the PC's site-specific SPCC-Plan shall contain the following:

- A brief description of the PC's Scope of Works;
- A brief description of the PC's Site Locations and boundaries (include all laydown areas and construction areas);
- A description of drainage pathways from the site;
- A PC's Site Map, which indicates the following:
 - Site location and boundaries;
 - Site access roads;
 - Plant parking areas;
 - Hazardous Chemical Substance Stores;
 - Refuelling - workshops- and maintenance areas;
 - Localities where HCS are used on a permanent basis;
 - Drainage pathways from the site;
 - Nearby waterways and sensitive areas, including their distance from HCS storage areas/areas of use.
- HCS, equipment, and decontamination areas (i.e. Potential Spill Sources);
- Pre-existing contamination sources;
- Location of all Spill prevention and response equipment (i.e. Spill Kits);

Responsible personnel involved in SPCC;

- Contact details of all dedicated spill response personnel on site;
- Contact details for external spill response service in the event of a large spill;
- The Spill Risk Assessment and Spill Assessment Register (3200-80599 and HCS Storage Facilities (200-80599));
- A description of pre-existing contaminations, if applicable;
- Clear communication protocol in terms of SPCC;
- Internal and external reporting procedures (Including WISPA Incident Notification);
- Detailed description of spill prevention and response techniques and methods;
- Spill prevention and response training and awareness; and
- Methods of disposing of the hazardous waste material resulting from spill clean-up.
- The PC must develop the Site Specific SPCC-Plan and submit it, together with their Spill Assessment Register to TM Environmental Department for acceptance

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3.3.3 Spill Prevention Measures

- PCs shall establish spill prevention measures to prevent and control the risks of spills, and implement such in their construction activities.
- All mitigation measures must be in accordance with the Medupi Environmental Management Plan, Environmental Authorisations, Applicable Legislation, Standards (SANS) and other requirements.
- The following spill prevention measures are required as best practices and PCs are expected to elaborate on these measures in their SPCC-Plan if they incorporate such measures.

3.3.3.1 Plant/Machinery Maintenance and Inspections

- Regular inspections (preferably daily) is a key element of sound operational management for spill prevention as it provides the early identification of warning signs of hazardous conditions or practices that may lead to a spill.
- A site inspection procedure and the frequency of site inspections conducted by the PCs must also be described in their SPCC-Plan. All site inspections conducted by the PCs must be archived and made available on request.
- The following are considered to be typical indicators of hazardous conditions:
 - Poor container conditions such as excessive rust, dents or puncture marks;
 - Non-segregated, incompatible materials stored in the same area;
 - Chemical storage areas without adequate bunding or secondary containment;
 - Containers stored near moving or vibrating equipment;
 - HCS placed/decanted in inappropriate containers (e.g., corrosives in metal or decanting HCS in soft drink bottle);
 - Unmarked or improperly labelled containers;
 - Containers lacking or having insecure lids;
 - Inappropriate materials handling/transferring operations;
 - Leaking equipment (i.e. fuel, transmission and hydraulic systems); and
 - Drip trays filled with rain water.
- If such conditions are identified, it must be recorded and remediated as soon as possible.
- All machinery found to be a potential source of a future spill must be removed from the construction area and repaired at the dedicated workshops. Vehicles with chronic or continuous leaks must be removed from the construction site and repaired before returning to operations.
- **No leaking of any hazardous chemical substances from storage areas, equipment or vehicles will be tolerated on site.**
- The PC must establish a maintenance schedule of all plant/machinery and equipment that makes use of HCS, or could result in a spill, and include such in their SPCC-Plan.
- All Plant Repair, Maintenance & Cleaning must be done in accordance to the Medupi EMP. Emergency repairs may only be carried out if the environmental impact of moving the vehicle to a more suitable location is considered greater than that posed by conducting repairs in situ. Emergency repairs conducted in situ are only to be done so as to get the vehicle safely to a designated workshop for full repair. Necessary spill prevention and clean-up measures must be complied with during emergency repairs.

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- All maintenance materials, oils, grease, lubricants, antifreeze, etc. shall be stored in designated and adequately bunded areas. The PC shall include a list of all plant and equipment that cannot be returned to the designated workshop for maintenance and repairs, e.g. cranes and crushers.
- During construction, all vehicles and equipment required on-site shall be parked or stored in designated areas at least 35 meters away from rivers, streams, wetlands, known archaeological sites, and any other sensitive environmental resource areas. All plant washing activities must be done at approved designated areas, in accordance to Medupi EMP.
 - The PC must develop a Refuelling Procedure that aims to avoid spillage of HCS as far as possible. This Refuelling Procedure must be described and included in the PC's SPCC-Plan. The PC must also ensure that all refuelling of plant and equipment on site is done by a competent employee that has undergone training in terms of the Refuelling Procedure and the SPCC-Plan.
- **Best practices regarding refuelling of plant and equipment include the following:**
 - Use off-site fuelling sites where practical;
 - Use designated areas for required on-site refuelling.
 - Refuelling areas shall be located away from drainage courses;
 - Avoid "topping off" of fuel tanks;
 - Make use of a funnel while transferring chemical liquids;
 - Use secondary containment devices such as drip trays to catch spills or leaks while refuelling; and
 - Absorbent spill clean-up materials shall be available and located in refuelling areas.

3.3.3.2 Storage and secondary containment practices and structures

- Transportation, storage and handling of HCS must be done in accordance to the Medupi EMP.
- PC must ensure that HCS during transit are secured and measures to prevent and/or minimise pollution are in place.
- The PCs must complete a register of all HCS Storage Facilities (200-80599 as attached) and submit it together with their Site Specific SPCC-Plan to the TM Environmental Department for verification and acceptance.
 - TM Environmental Department will consolidate and verify registers of all HCS Storage Facilities from contractors.
- PCs shall establish and describe in their SPCC-plan the practices and structures that will be used to store, contain and transfer hazardous chemical substances. The description must at least incorporate the following aspects:
 - Hazardous chemical substances will be located and stored on bunded areas and contained on an impervious surface capable of handling the 110 % of the total volume of the hazardous chemicals, on site at any given time so as to prevent spills from escaping to bare soil or into waterways;
 - Where multiple containers are stored in the same bund, the capacity of the bund must be 110% of the largest container, or 25% of the combined volumes;
 - Drip trays (of durable material and in good condition) will be used for all plant/machinery/HCS for the temporary containment of spills and drips, as a precautionary measure;
 - Oil and fuel transfer valves and fittings, fuel hoses, and the like will be regularly inspected and stored to prevent spills onto bare soil or into waterways;
 - Security measures for potential spill sources. Describe the security measures that will be maintained to prevent vandalism of potential spill sources;
 - Describe the methods that will be used to prevent storm-water contact with HCS;

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- Describe the (re)fuelling and/or (re)filling procedure for all equipment;
- Describe methods of managing secondary containment such as drip trays and bund walls during raining season; and
- Number of drip trays that the PC has, as well as where and for what purpose these drip trays are used for. Drip trays must, as a minimum, conform to the following requirements:
 - Made of a strong, rigid and durable material;
 - Needs to be leak-proof and watertight;
 - Moveable for easy placement and emptying; and
 - Identifiable to contractor and plant.

3.3.3.3 Spill Awareness and Training

- PCs must conduct Spill Awareness and Training sessions with all members of their staff.
- The manner in which such awareness training are conducted (i.e. toolbox talks, boardroom presentations, posters, etc.), as well as frequency and content of such awareness and training sessions must be described in the PC's SPCC-Plan.
- All records of awareness session attendance must be archived and available on request.
- Awareness and training topics must include (but is not limited to) the following:
 - PCs must ensure that all its employees are, at the very least, aware of the hazardous conditions bulleted in Section 5.3.3.1 of this document, and that the employees are able to identify such conditions;
 - All employees must know where to locate drip trays and Spill Response Kits, know the purpose of this equipment, and how to use it;
 - All employees must be know how to communicate/report any spill to the PC's Environmental Officer or HSE Manager;
 - Employees that work with Plant, Machinery or HCS that could result in a spill, must be trained/made aware of the relevant procedures, such as handling of HCS, purpose and use of MSDS, hazardous waste disposal, incident management and refuelling procedures, as well as the use of spill clean-up kits and vehicle/plant maintenance,
 - Members of the PC's staff that are part of their Emergency Response Team must be trained to deal with emergency spill conditions, and the PC must describe the content and frequency of such training.

3.3.4 Spill Response Measures

3.3.4.1 Spill Response Equipment

- PCs must describe the contents of their Spill Kits, and identify the locations of these spill kits at their areas of construction activities, as well as their lay-down areas. PCs must ensure that appropriately sized spill kits are maintained in close proximity to hazardous materials and equipment. The Spill Kits must be immediately accessible to all PC employees.
- Appropriate spill response equipment must be located and clearly marked at the following locations:
 - At each PC Lay-down area;
 - At each area where construction activity is conducted (based on identified Spill Aspects);
 - At all fuel and chemical storage facilities;
 - At all re-fuelling points; and

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- All areas of significant risk based on the Spill Assessment Register.
- PCs shall ensure that Spill Kits are fully stocked at all times and regular inspections are conducted on the contents.
- The two main drivers of equipment selection are:
 - Hazardous Chemical type and operating environment: The equipment must be suited to handle all relevant types of HCS and at the same time appropriate for the specific operating environments that may be encountered;
 - Risk profile and requirement: The risk profile would dictate the quantity of equipment stockpile needed for an effective response. This must be in conjunction with site-specific requirements, legislation and applicable standards.
- The recommended equipment includes:
 - Absorbent Pads;
 - Saw-dust;
 - Appropriate Personal Protective Equipment (PPE);
 - Chemical resistant storage vessel;
 - Sandbags;
 - Dry granular absorbent;
 - Shovels made or coated with polyethylene (non-sparking material);
 - Front-end loaders/TLB;
 - Tipper/Dump trucks;
 - Plastic liners;
 - Degreasers;
 - Corrosion resistant pump;
 - Relevant decontamination/neutralization agents; and
 - Warning tape, traffic cones or temporary barricade fencing.

3.3.4.2 Spill Response Strategy

- Responsibility for the response to a spill and the notification of a spill incident that has occurred rests with the PC.
- The spill response strategy will be manual for small operational spills and mechanical recovery for large spills. The PC shall establish protocols and procedures with other PCs and the TM for immediate access to additional spill response and containment equipment in the event of larger spills when the PCs own spill response equipment is inadequate.
- PCs are solely responsible for any spills of HCS in their allocated areas, and the subsequent clean-up, disposal of waste, and restoration of any contaminated areas. Additional resources may be sought from agreed spill response PCs and/or the TM, depending on the specifics of a spill.
- PCs shall describe their spill response procedures in their SPCC-Plan.
- PCs shall ensure that everything possible is done to control and contain HCS spills until appropriate clean-up measures can be taken.

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- The spill response procedures must include a description of the actions that the PCs will take to address a spill, as well as describe the specific on-site spill response equipment that will be used to perform each task.
- If PCs make use of a Sub-contractor for spill response, the contact information of the Sub-contractor must be provided in Table 2 of the SPCC-Plan (Template).
- If a Sub-contractor will be used, the PC must describe the actions that they will take at the spillage site while waiting for the Sub-contractor to respond.

3.3.4.3 Spill Response Measures

- HCS spillages will be prevented by adhering to this plan as well as PCs SPCC-Plan.
- In an event of a HCS spill, the response procedures will include:
 - Isolation of the source of the spill;
 - Containment of the spill;
 - If the contaminated area is accessible to the workforce, the area must immediately be clearly marked or cordoned off to restricted access
 - Removal of potential sources of ignition from within and near the spill area;
 - Contractors must report all HCS spillages as per Medupi Environmental Incident Procedure (200-10506) and all forms including the Spill assessment table and spill assessment feedback form must be completed;
 - Consult the MSDS for special hazards associated with any spilled chemicals;
 - Ensure personnel are wearing the appropriate PPE; and
 - Cleaning up of spill by excavating affected soil area and correct disposal.

- The type of response to be mounted in the event of a spill is determined by the size of the spill. There are four classifications of significance which will require the following clean up response:

- **Insignificant Spill**

- Spills include minor splashes and drips resulting from broken or leaking HCS or hoses, plant, vehicles, storage containers and equipment.
- Small operational-type spills that may occur at or near PC's own facilities as a consequence of its own activities. An individual PC would typically provide resources to respond to this size of spill,

- **Minor:**

- Spills include splashes and drips resulting from broken or leaking HCS or hoses, plant, vehicles, storage containers and equipment.
- Small operational-type spills that may occur at or near PC's own facilities as a consequence of its own activities. An individual PC would typically provide resources to respond to this size of spill,

- **Moderate Spill:**

- Spills that results from ruptured HCS spill pipes or hoses; plant, vehicles, storage containers and equipment failure
- Operational-type spills that may occur at or near PC's own facilities as a consequence of its own activities. Multiple PCs and/or the TM would typically pool resources to respond to this size of spill; and

Major Spill:

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- Spills that can include the loss of containment of large bulk fuel or liquid chemical storage tanks, Rupture of major oil, fuel or liquid chemical transfer pipes and accidents involving fuel and/or liquid chemical transport vehicles.
- A large spill on or in the vicinity of the Medupi Power Station Project where resources from the external company/ industry and possibly government response agencies in the area can be called in on a mutual aid basis and handled as described in the Medupi Emergency Plan.
- These would typically be reported section 30 NEMA and 20 NWA incidents

3.3.4.4 Spill on water bodies and concrete surfaces

- If a spill should reach a water body:
 - Use personnel trained in spill response on water (i.e. able to conduct risk assessments etc);
 - Ensure that a permit to conduct works is acquired (where necessary);
 - · Deploy booms in appropriate configurations to contain the spill;
 - · Deploy skimmers as appropriate; and
 - · Use floating absorbents to remove the pollutant.
 - · Collect samples of contamination upstream and downstream. These must be analysed as soon as practicably possible by an accredited lab. Parameters to be analysed will be determined by TM in consultation with ECO. Once clean-up is completed collect samples to test if treatment was adequately done.
- HCS spills on concrete surfaces need to be cleaned with the same priority as spills on bare soil. Although chemical spills on concrete do not drain into soil, it can be spread by rainwater to pollute the nearby environment. Evaporation rates of chemical spills on concreted surfaces are also high, which pollutes the air and atmosphere with greenhouse gasses and carcinogens that effects human health

3.4 Waste Disposal

- Wastes generated as a result of HCS spill clean-up must be disposed as hazardous waste.
- Contractors removing hazardous waste from Medupi Construction Site must have prior approval from the TM Environmental Department by submitting the Hazardous Waste Removal Checklist (200-112512).
- Waste manifest must be submitted to the TM Environmental Department within 24hrs and the safe disposal certificate for waste removed from site must be submitted within 90 days after the waste removal.

4. Process for Monitoring

4.1 Key Performance Areas and Indicators

The following Key Performance Areas / Indicators (KPA's / KPIs) shall be measured, analysed and reported. The Process Owner shall be accountable, and assign the responsibility at the frequency as indicated below, documented as part of the QMS measurement, analysis and improvement initiative.

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Table 2: KPAs/KPIs

Key Performance Area	Key Performance Indicator	Measure Frequency	Responsibility	Records
Compilation, and Maintenance of PC's Spill Assessments Register and SPCC-Plans.	SPCC-Plan and Spill Assessment Register and HCS Storage Facilities Register in place and accepted by TM Environmental Department.	Annually	Contractors (To be verified by TM EO)	PC's SPCC-Plan and Spill Assessment Register
Document Control	Retain and store documents in accordance with Procedure 200-1680 Document and Record Management".	As records are generated	TM Environmental Department	All documented records generated as a result of this document
Revision of document	Revision requirements in line with Medupi Procedures PPZ 200 5665 "Development and Change of Medupi QMS Documents" and PPZ 200 1680 "Document and Record Management"	Annually or as required	Emile Marell	New revised document

4.2 Document Review and Self-Assessment

4.2.1 Document Self-Assessment

The "Process Owner" identified on the front page of this document along with departmental personnel and the project QMS Engineer shall undertake a "self-check" review of the process defined in this document at six monthly intervals, commencing from the effective date of this document, to check:

- the process / procedure operational integrity
- process efficiency
- the level of stakeholder knowledge and implementation.

Participants and results of the "self-check" review shall be documented by the Process Owner in the "Self-Assessment Checklist" (*QMS Template No. QMS PTZ 200 - 75592*) included as an Appendix to this procedure which shall be issued to medupiga@eskom.co.za by the Process Owner once completed.

Process Owner shall proceed with any revision requirements in line with Medupi Procedures

PPZ 200 5665 "Development and Change of Medupi QMS Documents" and PPZ 200 1680 "Document and Record Management"

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4.2.2 Revision Period

This plan will be reviewed three yearly, or as required

4.3 Training Requirements

PCs are responsible to ensure that all personnel involved in HCS management are made aware of this plan and PCs own SPCC Plan.

5. Acceptance

This document has been seen and accepted by:

Name	Designation
Emile Marell	Environmental Manager
Brenda Mgidlana	Quality Manager
Barry Janse Van Rensburg	Senior Construction Manager

6. Revisions

Rev.	Date YYYY/MM/DD	Author (Name and Designation)	Comment / Change Description
2	2019/05/15	Mumsey Boshomane	Three yearly review, and use of new document template: Template Revision 4
1	2015/09/16	Lebogang Ramono Environmental Practitioner	Annual review
0	2012/08/29	Louis Badenhorst Environmental Practitioner	First Draft

7. Development Team

The following people were involved in the development of this document:

- Mumsey Boshomane
- Mathews Sebonego
- Sakutanya Mamabolo
- Dvohani Mudzielwana
- Calvin Teffo
- Johan Koekemoer

8. Appendices

The following documents are included as appendices to this procedure:

- 200-75592: Document Self-Assessment Checklist;

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**Medupi Spill Prevention, Control and Countermeasures
Management Plan**

Unique Identifier: **PPZ 200 – 80598**
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- 200–80600: SPCC-Plan Template;
- 200–202801: HCS Storage Facilities Register
- 200–80599: Spill Assessment Register.

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Appendix A – Process Self-Assessment Checklist

A.1 Process Self-Assessment Checklist

Discipline: Environment		Applicable Document No.: PPZ 240-80598		Self Assessment Date: / /	
Item No	Ref Section	Self-Assessment Question			Comment
		Compliant	Yes	Part	No
1	3.3.1	Has the Spill Assessment Register been completed? (All the required aspects)			
2	3.3.1	Has a site specific SPCC-Plan been developed?			
3	3.3.3.	Has spill prevention measures been established and implemented?			
4	3.3.3.1	Does the SPCC-Plan describe inspection and maintenance plans of plant and machinery?			
5	3.3.3.1	Has a Refuelling Procedure been developed, and described/included in the SPCC-Plan?			
6	3.3.3.2	Did PCs complete a register of all HCS Storage Facilities (200-80599 as attached) and submit it together with their Site Specific SPCC-Plan to the TM Environmental Department for verification and acceptance?			
7	3.3.3.3	Are spill awareness and training sessions conducted with all members of their staff?			
8	3.3.4.1.	Does PCs describe the contents of their Spill Kits, and identify the locations of these spill kits at their areas of construction activities, as well as their lay-down areas?			
9	3.3.4.1.	Are PCs spill kits fully stocked at all times and regular inspections			

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					conducted on the contents?
10	3.3.4.2.	Is the spill response procedures/strategy described in the SPCC-Plan?			
11	3.3.4.2.	Does the spill response procedure include a description of the actions that will be taken to address a spill, as well as the specific on-site spill response equipment that will be used to perform each task?			
12	3.4.	Is wastes generated as a result of HCS spill clean-up disposed as hazardous waste?			
13	2.6.	Are the following records available:			
		• PC's SPCC-Plan			
		• Spill Assessment Register			
		• HCS Storage Facilities Register			
		• Incident management records			
		• Safe disposal certificates of hazardous wastes			
		• Maintenance records			
		• Training and awareness records.			
		• Training and awareness records.			
		• Training and awareness records.			
Comments:					

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Self-Assessment by:				
Name:		Position:		
Revision Required?		(Yes / No)		
Planned Revision Date:				
Attendees:				