

**TABLE OF RESIDUAL ENVIRONMENTAL ISSUES**  
**CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)**  
**PROJECT BRAVO (COAL-FIRED POWER STATION IN THE WITBANK AREA)**

| Aspect   | Source/ Origin  | Actions   | Documentation  | Responsibilities  | Program   |
|--|---|---|--|---|---|
| <p>All linear infrastructure, viz.</p> <ul style="list-style-type: none"> <li>• coal conveyer</li> <li>• railway line</li> <li>• water pipeline</li> <li>• access and service roads</li> </ul> | <ul style="list-style-type: none"> <li>• EIR</li> <li>• RoD</li> <li>• Project Bravo Construction Environmental Management Plan (CEMP)</li> <li>• SANS codes</li> <li>• Preliminary route design plans</li> </ul> | <ul style="list-style-type: none"> <li>• Site inspections to be undertaken by specialists</li> <li>• Constraints associated with finalized alignments to be identified, viz. wetland delineation, heritage resources</li> <li>• Finalisation of route alignment plans, to be submitted to DEAT</li> <li>• Appropriate mitigation requirements to be identified</li> </ul> | <ul style="list-style-type: none"> <li>• Specialist reporting, e.g. search and rescue of significant plant species, protection and management of heritage resources (graves, structures etc)</li> <li>• PESs for inclusion in Tender Document</li> </ul> | <ul style="list-style-type: none"> <li>• Eskom</li> <li>• Relevant specialists, viz. freshwater ecologist, heritage practitioner</li> </ul> | <ul style="list-style-type: none"> <li>• Appropriate season re vegetation as identified in EIR and RoD</li> <li>• Submission to DEAT</li> <li>• Prior to finalization of Tender Document</li> </ul> |
| <p>Terrace preparation and construction, including coal stockyard and ash dump, i.e. bulk earthworks</p>   | <ul style="list-style-type: none"> <li>• EIR</li> <li>• RoD</li> <li>• Project Bravo CEMP</li> <li>• SANS codes</li> <li>• Preliminary site design and layout plans</li> </ul>                                    | <ul style="list-style-type: none"> <li>• Site inspections to be undertaken by specialists</li> <li>• Constraints associated with finalised site design and layout plans to be identified, viz.</li> </ul>   | <ul style="list-style-type: none"> <li>• Specialist reporting, e.g. search and rescue of significant plant species, protection and management of heritage resources (graves, structures etc)</li> </ul>  | <ul style="list-style-type: none"> <li>• Eskom</li> <li>• Relevant specialists, viz. freshwater ecologist, heritage practitioner</li> </ul> | <ul style="list-style-type: none"> <li>• Appropriate season re vegetation as identified in EIR and RoD</li> <li>• Submission to DEAT</li> <li>• Prior to finalization of Tender Document</li> </ul> |

| Aspect      | Source/ Origin   | Actions  | Documentation  | Responsibilities   | Program  |
|-------------|--|--|--|--|--|
|             | <ul style="list-style-type: none"> <li>Terrain contour plan</li> <li>Preliminary drainage structure plans</li> </ul>   | <ul style="list-style-type: none"> <li>wetland delineation, heritage resources</li> <li>Finalisation of site design and layout plans</li> <li>Finalisation of drainage structure plans</li> <li>Appropriate mitigation requirements to be identified</li> </ul>  | <ul style="list-style-type: none"> <li>PESs for inclusion in Tender Document</li> </ul>  |  |  |
| Foundations | <ul style="list-style-type: none"> <li>EIR</li> <li>RoD</li> <li>Project Bravo CEMP</li> <li>SANS codes</li> <li>Preliminary site design and layout plans</li> <li>Geological and substrate conditions</li> <li>Preliminary foundations plans</li> </ul> | <ul style="list-style-type: none"> <li>Constraints associated with finalised foundations plans to be identified, viz. geological and substrate conditions</li> <li>Finalisation of site design and layout plans</li> <li>Finalisation of drainage structure plans</li> <li>Appropriate mitigation requirements to be identified</li> </ul> | <ul style="list-style-type: none"> <li>Reporting on geological and substrate design requirements</li> <li>PESs for inclusion in Tender Document</li> </ul> | <ul style="list-style-type: none"> <li>Eskom</li> <li>Relevant foundations design specialists</li> </ul> | <ul style="list-style-type: none"> <li>Submission to DEAT</li> <li>Prior to finalization of Tender Document</li> </ul> |
| Structures  | <ul style="list-style-type: none"> <li>EIR</li> <li>RoD</li> </ul>   | <ul style="list-style-type: none"> <li>Confirm design response to prescribed</li> </ul>  | <ul style="list-style-type: none"> <li>Reporting on design response to prescribed</li> </ul>   | <ul style="list-style-type: none"> <li>Eskom</li> <li>Relevant</li> </ul>                                | <ul style="list-style-type: none"> <li>Prior to finalization of Tender Document</li> </ul>                             |

| Aspect             | Source/ Origin   | Actions  | Documentation  | Responsibilities   | Program   |
|--------------------|--|--|--|--|---|
|                    | <ul style="list-style-type: none"> <li>Project Bravo CEMP</li> <li>SANS codes</li> <li>Preliminary design plans for power block, turbine generator areas, air cooled condensers, boiler area, chimney, water treatment, air quality control, compressor buildings etc</li> </ul>   | <ul style="list-style-type: none"> <li>mitigatory measures</li> <li>Finalisation of design plans for structures</li> </ul>   | <ul style="list-style-type: none"> <li>mitigatory measures</li> <li>PESs for inclusion in Tender Document</li> </ul>   | <ul style="list-style-type: none"> <li>engineering design specialists</li> </ul>   |   |
| Site establishment | <ul style="list-style-type: none"> <li>EIR</li> <li>RoD</li> <li>Project Bravo CEMP</li> <li>SANS codes</li> <li>Preliminary site design and layout plans, defining construction facilities i.e. offices, depots, material storage and handling, first aid station, personnel facilities, security infrastructure, workshops, construction utilities,</li> </ul> | <ul style="list-style-type: none"> <li>Site inspections to be undertaken by specialists</li> <li>Constraints associated with finalised construction facilities plans, viz. wetland delineation, heritage resources</li> <li>Finalisation of construction facilities plans</li> <li>Appropriate mitigation requirements to be identified</li> </ul> | <ul style="list-style-type: none"> <li>Specialist reporting, e.g. search and rescue of significant plant species, protection and management of heritage resources (graves, structures etc)</li> <li>PESs for inclusion in Tender Document</li> </ul> | <ul style="list-style-type: none"> <li>Eskom</li> <li>Relevant specialists, viz. freshwater ecologist, heritage practitioner</li> <li>Relevant construction facilities design specialists</li> </ul> | <ul style="list-style-type: none"> <li>Appropriate season re vegetation as identified in EIR and RoD</li> <li>Submission to DEAT</li> <li>Prior to finalization of Tender Document</li> </ul> |

| Aspect                       | Source/ Origin  | Actions  | Documentation  | Responsibilities  | Program   |
|------------------------------|---|--|--|---|---|
|                              | communications facilities etc   |  |  |   |   |
| Batching plant               | <ul style="list-style-type: none"> <li>EIR</li> <li>RoD</li> <li>Project Bravo CEMP</li> <li>SANS codes</li> <li>Preliminary concrete supply design and layout plans</li> </ul>   | <ul style="list-style-type: none"> <li>Site inspections to be undertaken by specialists</li> <li>Constraints associated with finalised concrete supply design and layout plans</li> <li>Finalisation of concrete supply design and layout plans</li> <li>Appropriate mitigation requirements to be identified</li> </ul> | <ul style="list-style-type: none"> <li>Specialist reporting, e.g. search and rescue of significant plant species, protection and management of heritage resources (graves, structures etc)</li> <li>PESs for inclusion in Tender Document</li> </ul> | <ul style="list-style-type: none"> <li>Eskom</li> <li>Relevant specialists, viz. freshwater ecologist, heritage practitioner</li> <li>Relevant concrete supply design and layout specialists</li> </ul> | <ul style="list-style-type: none"> <li>Appropriate season re-vegetation as identified in EIR and RoD</li> <li>Submission to DEAT</li> <li>Prior to finalization of Tender Document</li> </ul> |
| Groundwater                  | <ul style="list-style-type: none"> <li>EIR</li> <li>RoD</li> <li>Project Bravo CEMP</li> <li>Preliminary site design and layout plans</li> <li>Geological and substrate conditions</li> <li>Preliminary drainage structure plans</li> </ul> | <ul style="list-style-type: none"> <li>Constraints associated with groundwater conditions to be identified, viz. borehole monitoring</li> <li>Finalisation of drainage structure plans</li> <li>Appropriate mitigation requirements to be identified</li> </ul>  | <ul style="list-style-type: none"> <li>Reporting on groundwater conditions</li> <li>PESs for inclusion in Tender Document</li> </ul>   | <ul style="list-style-type: none"> <li>Eskom</li> <li>Relevant engineering design specialists</li> </ul>  | <ul style="list-style-type: none"> <li>Submission to DEAT</li> <li>Prior to finalization of Tender Document</li> </ul>  |
| Major Hazardous Installation | <ul style="list-style-type: none"> <li>EIR</li> <li>RoD</li> </ul>  | <ul style="list-style-type: none"> <li>Site inspections to be undertaken</li> </ul>  | <ul style="list-style-type: none"> <li>Specialist reporting on hazardous installations</li> </ul>  | <ul style="list-style-type: none"> <li>Eskom</li> <li>Relevant MHI</li> </ul>   | <ul style="list-style-type: none"> <li>Submission to DEAT</li> <li>Prior to finalization of</li> </ul>  |

| Aspect | Source/ Origin   | Actions  | Documentation   | Responsibilities  | Program         |
|--------|--|--|---|---|-----------------|
| (MHI)  | <ul style="list-style-type: none"> <li>• Project Bravo CEMP</li> <li>• SANS codes</li> <li>• Preliminary site design and layout plans</li> <li>• Preliminary design plans for power block, turbine generator areas, air cooled condensers, boiler area, chimney, water treatment, air quality control, compressor buildings etc</li> </ul> | <ul style="list-style-type: none"> <li>by specialists</li> <li>• Constraints associated with hazardous installations to be identified</li> <li>• Finalisation of design plans</li> <li>• Appropriate mitigation requirements to be identified</li> </ul> | <ul style="list-style-type: none"> <li>implications</li> <li>• PESs for inclusion in Tender Document</li> </ul> | <ul style="list-style-type: none"> <li>specialist</li> <li>• Relevant engineering design specialists</li> </ul> | Tender Document |