

| ENVIRONMENTAL MANAGEMENT PROGRAMME          |   |        |              |   |                |   |
|---|---|--------|--------------|---|----------------|---|
| LINE CONSTRUCTION                           |   |        |              |   |                |   |
| ACTIVITY                                    | ASPECT  | IMPACT | SIGNIFICANCE | RELEVANT LEGISLATION                    | RESPONSIBILITY | REMARKS   |
| Induction Training                          | Educate staff before they commence work on the content of the EMP         |        |              | ISO14000                                | ECO            |   |
| <b>SITE ESTABLISHMENT</b>                   |   |        |              |   |                | 3.7, 3.8, 3.9, 4.7, 4.9, 4.6, 5.4                 |
| <i>Set up living quarters</i>               |   |        |              |   |                |   |
| Obtain campsite                             | Negotiate with landowner  | Yes    | Medium       | NEMA & Env Cons Act                     | Contractor     | Contractor to obtain landowner special conditions |
| Clear and level area                        | Damage to protected / endangered vegetation                               | Yes    | High         | NEM: Biodiversity Act, Cons of Agri Res | Contractor     |   |
|   | Damage to topsoil / waste concrete  | Yes    | Low          | Soil Conservation Act                   | Contractor     |   |
| Erect temporary houses and tents            | Waste material / littering  | Yes    | Low          | NEMA & Env Cons Act                     | Contractor     |   |
| <i>Set up ablution facilities</i>           |   |        |              |   |                |   |
| Install drainage system for toilets         | Health risk / spreading of measles and pollution of soil and ground water | Yes    | Medium       | National Health Act                     | Contractor     |   |
| Install drain for waste water               | Ground water pollution  | Yes    | High         | National Water Act                      | Contractor     |   |
| Install water supply                        | Disturbance of topsoil and vegetation                                     | Yes    | Low          | Soil Conservation Act                   | Contractor     |   |
| <i>Set up kitchen facilities</i>            |   |        |              |   |                |   |
| Install drainage system for waste water     | Pollution of ground water   | Yes    | High         | National Water Act                      | Contractor     |   |
| Install collection system for waste oil     | Soil pollution  | Yes    | High         | NEMA & Env Cons Act                     | Contractor     |   |
| <i>Set up waste collection system</i>       |   |        |              |   |                |   |
| Install waste collection bins               | Waste foodstuff and food containers                                       | Yes    | Medium       | NEMA & Env Cons Act                     | Contractor     |   |
| <b>SITE ESTABLISHMENT</b>                   |   |        |              |   |                | 3.7, 3.8, 3.9, 4.7, 4.9, 4.6, 5.4                 |
| <i>Store area</i>                           |   |        |              |   |                |   |
| <i>Install fencing:</i>                     |   |        |              |   |                |   |
| Dig holes                                   | Disturbance of topsoil  | Yes    | Low          | Soil Conservation Act                   | Contractor     |   |
| Insert poles and concrete                   | Waste concrete  | Yes    | Low          | NEMA & Env Cons Act                     | Contractor     |   |
| Erect fence                                 | Wire offcuts  | Yes    | Low          | NEMA & Env Cons Act                     | Contractor     |   |
| Grading / clearing area                     | Damage to protected / endangered vegetation                               | Yes    | High         | NEM: Biodiversity Act, Cons Of Agri Res | Contractor     |   |
| Install site office                         | Waste concrete if slab is required  | Yes    | Low          | NEMA & Env Cons Act                     | Contractor     |   |
| Create fire break                           | Damage to protected / endangered vegetation                               | Yes    | High         | Biodiversity Act, Cons of Agri Res      | Contractor     |   |
| <b>SITE ESTABLISHMENT</b>                   |   |        |              |   |                | 3.7, 3.8, 3.9, 4.7, 4.9, 4.6, 5.4                 |
| <i>Workshop area</i>                        |   |        |              |   |                |   |
| <i>Install workshop area</i>                |   |        |              |   |                |   |
| Cast concrete slabs for buildings           | Waste concrete  | Yes    | Low          | NEMA & Env Cons Act                     | Contractor     |   |
| Concrete bunded area for servicing vehicles | Waste concrete  | Yes    | Low          | NEMA & Env Cons Act                     | Contractor     |   |
| Erect store for oil, lubricants and parts   | Waste packaging   | Yes    | Low          | NEMA & Env Cons Act                     | Contractor     |   |
| <b>SITE ESTABLISHMENT</b>                   |   |        |              |   |                | 3.7, 3.8, 3.9, 4.7, 4.9, 4.6, 5.4                 |
| <i>Assembly area</i>                        |   |        |              |   |                |   |
| Levelling and clearing of area              | Damage to protected / endangered vegetation                               | Yes    | High         | NEM: Biodiversity Act, Cons of Agri Res | Contractor     |   |
| Install concrete floor for work area        | Damage to topsoil / waste concrete  | Yes    | Low          | Soil Conservation Act                   | Contractor     |   |
| Install waste collection area               | Rubble and waste material   | Yes    | Low          | NEMA & Env Cons Act                     | Contractor     |   |
| <b>MATERIAL DELIVERY</b>                    |   |        |              |   |                |   |
| <i>Store area</i>                           |   |        |              |   |                |   |
| Trucks delivering material                  | Oil spills  | Yes    | Low          | National Water Act                      | Contractor     |   |
|   | Waste material containers / packaging                                     | Yes    | Low          | NEMA & Env Cons Act                     | Contractor     |   |

|   |   |     |        |   |            |                         |
|---|---|-----|--------|---|------------|-------------------------|
| <b>SERVICING OF VEHICLES</b>                        |   |     |        |   |            | 4.1, 4.6, 5.4.          |
| <i>Workshop area</i>                                |   |     |        |   |            |                         |
| Draining oil and removing filters                   | Oil spills                                      | Yes | Low    | National Water Act                      | Contractor |                         |
| <i>On site</i>                                      |   |     |        |   |            |                         |
| Emergency repairs due to breakages                  | Oil spills and lubricant or fuel spills         | Yes | High   | National Water Act                      | Contractor |                         |
| <b>TOWER PEGGING</b>                                |   |     |        |   |            |                         |
| <i>On site</i>                                      |   |     |        |   |            |                         |
| Vehicle driving in veld                             | Damage to protected / endangered vegetation     | Yes | High   | NEM:Biodiversity Act, Cons of Agri Res  | Contractor |                         |
|   | Damage to heritage sites                        | Yes | High   | National Heritage Resource Act          | Contractor |                         |
|   | Oil spills                                      | Yes | Low    | Water Act                               | Contractor |                         |
| Surveyor pegging towers                             | Littering of packaging & pegging materials      | Yes | Low    | NEMA & Env Cons Act                     | Contractor |                         |
| Cooking food on site / smoking                      | Veld fires                                      | Yes | Medium |   | Contractor |                         |
|   | Littering of food packaging & pegging materials | Yes | Low    | NEMA & Env Cons Act                     | Contractor |                         |
| Use veld for toilet                                 | Health risk / spreading of measles              | Yes | High   | National Health Act                     | Contractor |                         |
| Site clearing for pegging purposes                  | Damage to protected / endangered vegetation     | Yes | High   | NEM:Biodiversity Act, Cons of Agri Res  | Contractor |                         |
| <b>BUSH CLEARING FOR CONSTRUCTION</b>               |   |     |        |   |            | 4.7, 4.9, 5.1, 5.2, 6.3 |
| <i>On servitude</i>                                 |   |     |        |   |            |                         |
| People cutting vegetation by hand                   | Damage to protected / endangered vegetation     | Yes | High   | NEM: Biodiversity Act, Cons of Agri Res | Contractor |                         |
|   | Fuel spills                                     | Yes | High   | National Water Act                      | Contractor |                         |
| Use veld for toilet                                 | Health risk / spreading of measles              | Yes | High   | National Health Act                     | Contractor |                         |
| Cooking food on site / smoking                      | Veld fires                                      | Yes | Medium |   | Contractor |                         |
|   | Littering of food packaging                     | Yes | Low    | NEMA & Env Cons Act                     | Contractor |                         |
| Bulldozer clearing vegetation                       | Damage to protected / endangered vegetation     | Yes | High   | NEM:Biodiversity Act, Cons of Agri Res  | Contractor |                         |
|   | Damage to heritage sites                        | Yes | High   | National Heritage Resource Act          | Contractor |                         |
|   | Disturbance of topsoil                          | Yes | High   | Soil Conservation Act                   | Contractor |                         |
| Emergency repairs due to breakages                  | Oil spills and lubricant or fuel spills         | Yes | High   | National Water Act                      | Contractor |                         |
| Clearing of vegetation on river banks               | Erosion   | Yes | High   | Soil Conservation Act                   | Contractor |                         |
| Excessive clearing of servitude                     | Erosion and invader plants                      | Yes | High   | Soil Conservation Act                   | Contractor |                         |
|   | Damage to protected / endangered vegetation     | Yes | High   | NEM:Biodiversity Act, Cons of Agri Res  | Contractor |                         |
| <b>GATE INSTALLATION</b>                            |   |     |        |   |            | 4.8, 5.1, 5.2, 5.4.     |
| <i>On servitude</i>                                 |   |     |        |   |            |                         |
| Flattening of fences to gain access                 | Damage to fences                                | Yes | Low    | Fencing Act                             | Contractor |                         |
| Dig holes   | Disturbance of topsoil                          | Yes | Low    | Soil Conservation Act                   | Contractor |                         |
| Insert gate and pour concrete                       | Waste concrete                                  | Yes | Low    | NEMA & Env Cons Act                     | Contractor |                         |
| Tying off fence and straining fence wires           | Wire offcuts and broken fences                  | Yes | Low    | Fencing Act                             | Contractor |                         |
| Tying off fence and straining fence wires           | Damage to electrical fencing                    | Yes | Low    | Fencing Act                             | Contractor |                         |
| Installation of concrete sill in Vermin proof fence | Waste concrete                                  | Yes | Low    | NEMA & Env Cons Act                     | Contractor |                         |
| Use veld for toilet                                 | Health risk / spreading of measles              | Yes | High   | National Health Act                     | Contractor |                         |
| Cooking food on site / smoking                      | Veld fires                                      | Yes | Medium |   | Contractor |                         |
|   | Littering of food packaging                     | Yes | Low    | NEMA & Env Cons Act                     | Contractor |                         |

| <b>ACCESS ROAD CONSTRUCTION</b>          |   |     |           |   |                    | 4.5, 4.4, 4.3, 4.2, 5.1, 5.2 |
|--|---|-----|-----------|---|--------------------|------------------------------|
| <i>On servitude</i>                      |   |     |           |   |                    |                              |
| Negotiate access with landowners         | Agreed access used                          | Yes | High      |   | Contractor / Eskom |                              |
| Mark access roads                        | Agreed access used                          | Yes | High      |   | Contractor / Eskom |                              |
|  | Speed limits adhered to                     | Yes | High      |   | Contractor         |                              |
| Vehicles driving off servitude road      | Damage to protected / endangered vegetation | Yes | High      | NEM:Biodiversity Act , Cons of Agri Res | Contractor         |                              |
|  | Illegal use of private roads                | Yes | Medium    |   | Contractor         |                              |
|  | Damage to drifts and bridges                | Yes | Medium    |   | Contractor         |                              |
|  | Damage to irrigation lines                  | Yes | High      |   | Contractor         |                              |
| Bulldozer blading access roads           | Damage to protected / endangered vegetation | Yes | High      | NEM:Biodiversity Act, Cons of Agri Res  | Contractor         |                              |
|  | Damage to heritage sites                    | Yes | High      | National Heritage Resource Act          | Contractor         |                              |
|  | Damage to private roads                     | Yes | Low       |   | Contractor         |                              |
|  | Causing erodable areas                      | Yes | High      | Soil Conservation Act                   | Contractor         |                              |
| Cooking food on site / smoking           | Veld fires                                  | Yes | Medium    |   | Contractor         |                              |
|  | Littering of food packaging                 | Yes | Low       | NEMA & Env Cons Act                     | Contractor         |                              |
| Use veld for toilet                      | Health risk / spreading of measles          | Yes | High      | National Health Act                     | Contractor         |                              |
| Blading of access roads through dongas   | Erosion and loss of topsoil                 | Yes | High      | Soil Conservation Act                   | Contractor         |                              |
| Construction of drifts / donga crossings | Erosion / impedece of water flow            | Yes | High      | National Water Act                      | Contractor         |                              |
| Road construction on slopes              | Erosion and loss of topsoil                 | Yes | High      | Soil Conservation Act                   | Contractor         |                              |
| Installation of diversion berms          | Prevention of erosion                       | Yes | Very High | National Water Act / Soil Cons Act      | Contractor         |                              |
| <b>FOUNDATION EXCAVATION</b>             |   |     |           |   |                    | 4.12, 4.7, 5.1, 5.2          |
| <i>On servitude</i>                      |   |     |           |   |                    |                              |
| Transport of personnel to site           | Trucks breaking and spilling oil            | Yes | High      | National Water Act                      | Contractor         |                              |
| Driving off servitude roads              | Damage to protected / endangered vegetation | Yes | High      | NEM:Biodiversity Act, Cons of Agri Res  | Contractor         |                              |
| Excavation of foundation                 | Disturbance of topsoil and vegetation       | Yes | Low       | Soil Conservation Act                   | Contractor         |                              |
|  | Loss of topsoil with seedbank               | Yes | Medium    | Soil Conservation Act                   | Contractor         |                              |
| Drilling of foundation                   | Damage to heritage sites                    | Yes | High      | National Heritage Resource Act          | Contractor         |                              |
|  | Noise and dust pollution                    | Yes | Low       | NEMA & Env Cons Act                     | Contractor         |                              |
| Installation of steel re-inforcing       | Waste material                              | Yes | Low       | NEMA & Env Cons Act                     | Contractor         |                              |
| Casting of concrete                      | Waste concrete                              | Yes | Low       | NEMA & Env Cons Act                     | Contractor         |                              |
| Washing of concrete truck on site        | Waste concrete                              | Yes | Low       | NEMA & Env Cons Act                     | Contractor         |                              |
| Cooking food on site / smoking           | Veld fires                                  | Yes | Medium    |   | Contractor         |                              |
|  | Littering of food packaging                 | Yes | Low       | NEMA & Env Cons Act                     | Contractor         |                              |
| Use veld for toilet                      | Health risk / spreading of measles          | Yes | High      | National Health Act                     | Contractor         |                              |
| Leaving gates open / unlocked            | Stock losses                                | Yes | High      |   | Contractor         |                              |

|   |   |     |           |  |                    |                      |
|---|---|-----|-----------|--|--------------------|----------------------|
| <b>TOWER ASSEMBLY AND ERECTION</b>              |   |     |           |  |                    | 4.12, 5.1, 5.2, 5.4, |
| <i>On servitude</i>                             |   |     |           |  |                    |                      |
| Transport of personnel and material to site     | Trucks breaking and spilling oil                      | Yes | High      | National Water Act                       | Contractor         |                      |
|   | Damage to heritage sites                              | Yes | High      | National Heritage Resource Act           | Contractor         |                      |
| Making fires in winter due to cold weather      | Veld fires  | Yes | Medium    |  | Contractor         |                      |
| Cooking food on site / smoking                  | Veld fires  | Yes | Medium    |  | Contractor         |                      |
|   | Damage to protected / endangered vegetation           | Yes | High      | NEM:Biodiversity Act, Cons of Agri Res   | Contractor         |                      |
|   | Littering of food packaging                           | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
| Use veld for toilet                             | Health risk / spreading of measles                    | Yes | High      | National Health Act                      | Contractor         |                      |
| Assembling of towers                            | Waste bolts and nuts                                  | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
| Punching and painting of nuts                   | Paint spillages                                       | Yes | Low       | National Water Act                       | Contractor         |                      |
| Erection of towers with crane                   | Trucks / crane breaking and spilling oil / lubricants | Yes | High      | National Water Act                       | Contractor         |                      |
| Erection of towers with helicopter              | Noise and dust pollution                              | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
|   | Fuel spillages during re-fuelling                     | Yes | High      | National Water Act                       | Contractor         |                      |
| Emergency repairs due to breakages              | Oil spills and lubricant or fuel spills               | Yes | High      | National Water Act                       | Contractor         |                      |
|   | Waste parts and packaging                             | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
| Dressing of towers with hardware and insulators | Insulator breakage littering glass shards in veld     | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
| Discarding packaging material on site           | Waste material littering in veld                      | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
| Leaving gates open / unlocked                   | Stock losses  | Yes | High      |  | Contractor         |                      |
| <b>STRINGING OPERATIONS</b>                     |   |     |           |  |                    | 4.13, 4.15           |
| <i>On servitude</i>                             |   |     |           |  |                    |                      |
| Clearing of drum, tensioner and winch stations  | Damage to protected / endangered vegetation           | Yes | High      | NEM:Biodiversity Act, Cons of Afagri Res | Contractor         |                      |
|   | Damage to heritage sites                              | Yes | High      | National Heritage Resource Act           | Contractor         |                      |
| Making fires in winter due to cold weather      | Veld fires  | Yes | Medium    |  | Contractor         |                      |
| Cooking food on site / smoking                  | Veld fires  | Yes | Medium    |  | Contractor         |                      |
|   | Littering of food packaging                           | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
| Use veld for toilet                             | Health risk / spreading of measles                    | Yes | High      | National Health Act                      | Contractor         |                      |
| Transport of personnel and material to site     | Trucks breaking and spilling oil                      | Yes | High      | National Water Act                       | Contractor         |                      |
| Using bulldozer for tension purposes            | Damage to protected / endangered vegetation           | Yes | High      | NEM:Biodiversity Act, Cons of Afagri Res | Contractor         |                      |
|   | Disturbance of topsoil and vegetation                 | Yes | Low       | Soil Conservation Act                    | Contractor         |                      |
|   | Damage to heritage sites                              | Yes | High      | National Heritage Resource Act           | Contractor         |                      |
| Creating fire breaks around drum stations       | Damage to protected / endangered vegetation           | Yes | High      | NEM:Biodiversity Act, Cons of Afagri Res | Contractor         |                      |
|   | Disturbance of topsoil and vegetation                 | Yes | Low       | Soil Conservation Act                    | Contractor         |                      |
|   | Damage to heritage sites                              | Yes | High      | National Heritage Resource Act           | Contractor         |                      |
| Jointing and crimping of conductors             | Waste material littering in veld                      | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
| Discarding wooden cable drum material on site   | Waste material littering in veld                      | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
| No protection for fences during stringing       | Damage to fences                                      | Yes | Low       | Fencing Act                              | Contractor         |                      |
| Tractor pulling out pilot wire                  | Damage to protected / endangered vegetation           | Yes | High      | NEM:Biodiversity Act, Cons of Afagri Res | Contractor         |                      |
|   | Damage to heritage sites                              | Yes | High      | National Heritage Resource Act           | Contractor         |                      |
| Leaving gates open / unlocked                   | Stock losses  | Yes | High      |  | Contractor         |                      |
| <b>REHABILITATION OF SERVITUDE</b>              |   |     |           |  |                    | 4.6, 5.1, 5.2, 5.4,  |
| <i>On servitude</i>                             |   |     |           |  |                    |                      |
| Transport of personnel and material to site     | Trucks breaking and spilling oil                      | Yes | High      | National Water Act                       | Contractor         |                      |
| Making fires in winter due to cold weather      | Veld fires  | Yes | Medium    |  | Contractor         |                      |
| Cooking food on site / smoking                  | Veld fires  | Yes | Medium    |  | Contractor         |                      |
|   | Littering of food packaging                           | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
| Use veld for toilet                             | Health risk / spreading of measles                    | Yes | High      | National Health Act                      | Contractor         |                      |
| Installation of diversion berms                 | Prevention of erosion                                 | Yes | Very High | Soil Conservation Act                    | Contractor         |                      |
| Fixing of fences                                | Waste material littering in veld                      | Yes | Low       | NEMA & Env Cons Act                      | Contractor         |                      |
| Re-seeding of barren areas                      | Wrong seed used                                       | Yes | Medium    | NEM:Biodiversity Act                     | Contractor         |                      |
| Leaving gates open / unlocked                   | Stock losses  | Yes | High      |  | Contractor         |                      |
| Picking up all rubble and litter                | Servitude left clean and neat                         | Yes | Very High | NEMA & Env Cons Act                      | Contractor         |                      |
| Installing locks on all servitude gates         | Unauthorised access prevented                         | Yes | High      |  | Contractor         |                      |
| Settling of all outstanding claims              | Landowners happy                                      | Yes | Very High |  | Contractor / Eskom |                      |
| Signing off all landowners                      | Servitude ready for handover to Grid                  | Yes | Very High |  | Contractor / Eskom |                      |