



ENVIRONMENTAL ASPECTS AND IMPACTS REGISTER

Team: Leroy
Area : All
Date: Oct-25

ESD 002 A

| Serial # | State the activity | State the concern | State the potential effect/s that the concern could produce | What does NEMA require? (NATIONAL ENVIRONMENTAL MANAGEMENT ACT) | Here it will be indicated whether the impact is destructive or benign. It would be indicated as: Local : Extending only as far as the site boundaries, with a value of one (1). Immediate : Extending within a 2 kilometer radius of the site, with a value of two (2). Regional : On regional scale, with a value of three (3). National : Inside the boundaries of South Africa, with a value of four (4), or International : Outside the boundaries of South Africa, with a value of five (5). | | Here it will be indicated whether the lifetime of the impact is temporary or permanent. Temporary : Impact continuing for not longer than one day, with a value of one (1). Short term : Impact continuing for not longer than one week, with a value of two (2). Medium term : Impact continuing for not longer than one month, with a value of three (3). Long term : Impact continuing for longer than one year, with a value of five (5). | | Mitigation refers to any legislation, procedures and work instructions that are in place in order to prevent an impact from occurring. This value will be subtracted from the total. | | After evaluation, impacts will be classified into three categories: High : Procedures, work instructions and/or engineering preventative measures in place with a significance value of between eleven (11) and sixteen (16). Medium : Those impacts with a significance value of between six (6) and ten (10). Low : Those impacts with a significance value of between one (1) and five (5). | | Who shall ensure that the necessary actions are effectively & efficiently implemented & managed? | By when must the controls be in effect? | What is the status of the required actions in approximate percentage? | Re-assess activity after the necessary actions have been successfully implemented. | | | | | | |
|----------|--|--|---|---|---|---------------------|---|------------------------|--|------------|--|------------------------------|--|---|---|--|-----------------------|------------------------|-------------|------------|-------------------------------------|--|
| | | | | | Legal Requirement | Severity 1 (Extent) | Severity 2 (Duration) | Severity 3 (Intensity) | Probability | Mitigation | Significant Rating (S1+S2+S3+P)-M | Actions Required | Responsibility | Target Date | Status | Severity 1 (Extent) | Severity 2 (Duration) | Severity 3 (Intensity) | Probability | Mitigation | Rating after project (S1+S2+S3+P)-M | |
| 1 | Fueling | Spills | Ground contamination | Environmental Regualtions GNR2281 | 1 | 5 | 3 | 4 | 2 | 11.00 | Upgraded fuel area, installation of oil trap to capture spills. Upgrade fuel dispenser to improve safety and reduce spillage | Management and fuel operator | Ongoing | 90% | 1 | 2 | 2 | 4 | 2 | 7.00 | | |
| 2 | Compressor | Incorrect storage / leaks | Ground contamination | | 1 | 3 | 3 | 3 | 3 | 7.00 | Compressor in Compressor house. Regular maintenance and pressure testing | Management | Done | 100% | 1 | 2 | 2 | 3 | 3 | 5.00 | | |
| 3 | Printing | Paper waste, | Pollution | | 1 | 3 | 2 | 2 | 2 | 6.00 | Waste management | Admin manager | Ongoing | 100% | | | | | | 0.00 | | |
| 4 | General Waste | Bad Housekeeping | Air pollution, ground contamination, hygiene | | 1 | 5 | 4 | 4 | 2 | 12.00 | Waste management company appointed | Management | Ongoing | 100% | 1 | 1 | 1 | 4 | 2 | 5.00 | | |
| 5 | Water consumption | Water waste | Ground contamination | | 1 | 2 | 2 | 2 | 2 | 5.00 | None | All | Ongoing | 100% | | | | | | 0.00 | | |
| 6 | Fire extinguishers | Product inside extinguishers (Foam) | Ground contamination, Air pollution | | 1 | 2 | 2 | 2 | 2 | 5.00 | None | Fire fighters | on event | 100% | | | | | | 0.00 | | |
| 7 | Vegetation | Overgrown weeds, grass | Fire hazards, Foreign weeds inhabitation | | 2 | 2 | 2 | 2 | 2 | 6.00 | Regular maintanence | Management | Ongoing | 100% | | | | | | 0.00 | | |
| 8 | Cleaning chemicals | Incorrect storage | Fire hazard, Ground contamination, health impact | Hazardous chemical substances regulation - GNR1179 | 2 | 3 | 3 | 3 | 3 | 8.00 | Dedicated storage areas | Cleaner | Ongoing | 100% | | | | | | 0.00 | | |
| 9 | Ablution facilities | Sewerage, water wastage | Hygiene, ground contamination, air pollution | act no 107 of 1998 | 1 | 2 | 2 | 2 | 2 | 5.00 | Installation of septic tank | All | Ongoing | 100% | | | | | | 0.00 | | |
| 10 | Diesel driven machinery/ Fuel consumption | Diesel usage | Air pollution | act no 39 of 2004 | 2 | 1 | 1 | 4 | 3 | 5.00 | Regular maintanence | Management | Ongoing | 100% | | | | | | 0.00 | | |
| 11 | Electricity Consumption | Electricity usage | Resource depletion | | 1 | 5 | 1 | 4 | 4 | 7.00 | To install energy saving lighting | Management | Complete | 100% | 1 | 2 | 1 | 2 | 2 | 4.00 | | |
| 12 | Neighbouring activities, washing of vehicles | Waste water run-off into storm water drain | Water pollution | act 36 pf 1998 | 1 | 1 | 1 | 4 | 4 | 3.00 | None | Neighbour | Ongoing | 100% | | | | | | 0.00 | | |
| 13 | Carbon emissions/ Idling of vehicles | Driving, unloading | Air pollution | act no 39 of 2004 | 1 | 1 | 1 | 4 | 4 | 3.00 | Vehicles switchrd off whilst loading/ off-loading | Drivers | Ongoing | 100% | | | | | | 0.00 | | |
| 14 | Air-Con Gas | Air con usage | Air pollution | act no 39 of 2004 | 1 | 1 | 1 | 1 | 2 | 2.00 | Regular maintenance /upgrade units | Management | Ongoing / complete | 100% | 1 | 1 | 1 | 1 | 2 | 2.00 | | |
| 15 | Generator | Diesel usage | Ground contamination | | 1 | 1 | 3 | 1 | 2 | 4.00 | Regular maintanence | Management | Ongoing | 100% | | | | | | | | |