



Team: Leroy

Area : All

Date: Oct-25

ESD 002 A

ENVIRONMENTAL ASPECTS AND IMPACTS REGISTER

| # | Resources/ Process/ Activity | Aspects (Cause) | Impacts (Effect) | Legal Requirement | Severity 1 (Extent) | Severity 2 (Duration) | Severity 3 (Intensity) | Probability | Mitigation | Significant Rating (S1+S2+S3+P)-M | Actions Required/Controls | 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 | Potential for diesel spills/leaks | Soil and groundwater contamination 5 | Environmental Regulations GNR2281 | 1 | 5 | 3 | 4 | 2 | 11.00 | Maintenance of bunded areas; spill kit availability; staff training on spill response. | Management and fuel operator | Ongoing | 100% | 1 | 2 | 2 | 4 | 2 | 7.00 |
| 2 | Compressor | Leaks in lines / Compressor failure | Energy waste; Ground contamination | NEMA (Act 107 of 1998) | 1 | 3 | 3 | 3 | 3 | 7.00 | Regular maintenance and pressure testing | Management | Done | 100% | 1 | 2 | 2 | 3 | 3 | 5.00 |
| 3 | Printing | Paper waste, | Pollution | Waste Act (Act 59 of 2008) | 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 | Waste Act (Act 59 of 2008) | 1 | 5 | 4 | 4 | 2 | 12.00 | Waste management company appointed. Waste bin to be collected when full | Management | Ongoing | 100% | 1 | 1 | 1 | 4 | 2 | 5.00 |
| 5 | Water consumption | Water waste | Ground contamination | National Water Act (Act 36 of 1998) | 1 | 2 | 2 | 2 | 2 | 5.00 | None | All | Ongoing | 100% | | | | | | 0.00 |
| 6 | Fire extinguishers | Release of foam/chemicals from extinguishers | Ground contamination, Air pollution | NEMA (Act 107 of 1998) | 1 | 2 | 2 | 2 | 2 | 5.00 | Annual servicing of extinguishers; secondary containment in storage areas. | SHEQ manager | Yearly | 100% | | | | | | 0.00 |
| 7 | Vegetation | Overgrown weeds, grass | Fire hazards, Foreign weeds inhabitation | NEMA (Act 107 of 1998) | 2 | 2 | 2 | 2 | 2 | 6.00 | Regular maintenance | Yard 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 | Cleaners | Ongoing | 100% | | | | | | 0.00 |
| 9 | Ablution facilities | Sewerage, water wastage | Hygiene, ground contamination, air pollution | NEMA (Act 107 of 1998) | 1 | 2 | 2 | 2 | 2 | 5.00 | Installation of septic tank | Cleaners | Ongoing | 100% | | | | | | 0.00 |
| 10 | Diesel driven machinery/ Fuel consumption | Diesel usage | Air pollution | Air Quality Act (Act 39 of 2004) | 2 | 1 | 1 | 4 | 3 | 5.00 | Regular maintenance | Fleet Management | Ongoing | 100% | | | | | | 0.00 |
| 11 | Electricity Consumption | Electricity usage | Resource depletion | NEMA (Act 107 of 1998) | 1 | 5 | 1 | 4 | 4 | 7.00 | Installation of energy- efficient LED lighting and automated timers. | Yard 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 | National Water Act (Act 36 of 1998) | 1 | 1 | 1 | 4 | 4 | 3.00 | Use of oil-water separators; | Neighbour | Ongoing | 100% | | | | | | 0.00 |
| 13 | Carbon emissions/ Idling of vehicles | Driving, unloading | Air pollution | Air Quality Act (Act 39 of 2004) | 1 | 1 | 1 | 4 | 4 | 3.00 | Vehicles switchrd off whilst loading/ off-loading. Monitor Idling | Fleet Management | Ongoing | 100% | | | | | | 0.00 |
| 14 | Air-Con Gas | Air con usage | Air pollution | Air Quality Act (Act 39 of 2004) ²² | 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 | NEMA (Act 107 of 1998) | 1 | 1 | 3 | 1 | 2 | 4.00 | Regular maintenance | Yard Management | Ongoing / complete | 100% | | | | | | |