| Ref. | Identification of Aspects | | | | Determination of Significance of Impacts | | | | | | | | | Impact Rationale | | | Objectives & Targets | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Category/Aspect | Inputs, Activities & Outputs | | Quantity, Volume, Period | Legal Requirement | | Compliance Obligation | Company Policy | | Interested Party Concerns | Pollution Prevention Potential | Potential to Impact the Environment | | Impact  [S = Significant, N = Not significant] | | | Objective  [C = Control, M = Monitor, I = Improve] | | | | Target |
| 1 | Energy usage | Site-wide | | 50 kW/PA | N/a | | N/a | Medium | | Low | Low | Low | | **N** | Low volume usage | | **M** | Ensure no increase | | | No increase above 50 kW/PA |
| 2 | Use of VOCs | Fabrication | | 500 l/PA | High | | High | Medium | | High | High | High | | **S** | High volume usage | | **I** | Reduce volume of VOCs, use alternatives | | | Reduction of VOCs use by 50% |
| 3 | Contaminated scrap | Fabrication | | 5 Tonnes/PA | N/a | | N/a | Medium | | Medium | High | Medium | | **S** | High volume | | **I** | Segregate contaminants from other scrap | | | Reduce by 20% |
| 4 | Exhaust emissions | Delivery/Transport | | 1000 kg/PA | N/a | | High | High | | High | Medium | High | | **S** | Co2 emissions | | **C** | Drivers to turn off engine when static | | | Reduce by 10% |
| 5 |  |  | |  |  | |  |  | |  |  |  | |  |  | |  |  | | |  |
| 6 |  |  | |  |  | |  |  | |  |  |  | |  |  | |  |  | | |  |
| 7 |  |  | |  |  | |  |  | |  |  |  | |  |  | |  |  | | |  |
| 8 |  |  | |  |  | |  |  | |  |  |  | |  |  | |  |  | | |  |
| 9 |  |  | |  |  | |  |  | |  |  |  | |  |  | |  |  | | |  |
| **CONSIDER THE HIERARCHY OF CONTROLS: (Elimination, Substitution, Engineering Controls & Administrative Controls)** | | | | | | | | | | | | | | | | | | | | | |
| **Prepared by:** (Print Name) | | |  | | | **Approved by:** (Print Name) | | |  | | | | **Approval Signature:** | | |  | | | **Date:** |  | |

Risk criticality (Table S1) is calculated by multiplying the likelihood (Table S2) by the consequences of risk (Table S3). The resulting score (Table S4) is then used to prioritise the appropriate level of action.

**Impact Criticality (S1)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Likelihood of Occurrence (L) | Consequence Rating | | | | |
| Catastrophic | Major | Moderate | Minor | Negligible |
| Almost Certain | 25 | 20 | 15 | 10 | 5 |
| Likely | 20 | 16 | 12 | 8 | 4 |
| Possible | 15 | 12 | 9 | 6 | 3 |
| Unlikely | 10 | 8 | 6 | 4 | 2 |
| Rare | 5 | 4 | 3 | 2 | 1 |

**Likelihood (S2)**

| Score | Likelihood | Description | Percentage | Probability |
| --- | --- | --- | --- | --- |
| 1 | Rare | May only occur in exceptional circumstances | <0.1% | 1 in 1,000 |
| 2 | Unlikely | Could occur during a specified time period | 1% | 1 in 100 |
| 3 | Possible | Might occur within a given time period | 10% | 1 in 10 |
| 4 | Likely | Will probably occur in most circumstances | 50% | 1 in 2 |
| 5 | Almost Certain | Expected to occur in most circumstances | >95% | 1 in 1 |

**Consequences (S3)**

| Score | Impact | Environmental Impact |
| --- | --- | --- |
| 1 | Negligible | Slight, no potential risk of environmental impact |
| 2 | Minor | Minimal environmental impact |
| 3 | Moderate | Significant environmental impact |
| 4 | Major | Major significant environmental impact that can be controlled |
| 5 | Catastrophic | A severe significant environmental impact that cannot be controlled |

**Impact Exposure Score (S4)**

| Score | Colour | Management Control Action (MCA) |
| --- | --- | --- |
| 1 to 4 | Very Low | Activities in this category present minimal levels of impact or risk and are unlikely to occur, proceed with these activities as planned and monitor against objectives. |
| 5 to 8 | Low | Activities in this category present minor levels of impact or risk. The application of risk management strategies to reduce the impact or risk is advised. Consider ways of modifying the process or implementing controls to reduce the impacts and risks to as low as reasonably practicable (ALARP). |
| 9 to 12 | Medium | Activities in this category present serious and unacceptable levels of impact or risk. Consider ways of modifying the process and implementing controls to reduce the impacts and risks to as low as reasonably practicable (ALARP). Additional control measures and monitoring may be required. |
| 13 to 15 | High | Activities in this category present high levels of impact or risk and should not be allowed to proceed without very careful planning. Consider consulting specialists. The company should evaluate whether the activity is actually necessary in the first place or whether alternative processes are available. |
| 16 to 25 | Very High | Activities in this category present extreme levels of impact or risk, such as loss of life or breach of legislation and must not be undertaken. |