



Environmental Aspects and Impacts Register Template

19 Apr 2024 / Phil Depp, Environmental Manager

Complete

Score	0 / 0 (0%)	Flagged items	0	Actions	0
Organization	EcoTech Solutions Ltd.				
Location	Philadelphia, PA, USA (39.9525839, -75.1652215)				
Created on	19.04.2024 12:00 PST				
Prepared by	Phil Depp, Environmental Manager				

Environmental Aspects and Impacts

Environmental Aspects and Impacts

Environmental Aspects and Impacts 1

Aspect ID

EA 0001

Aspect Description

Solar Panel Production

Potential Impacts

Potential Impacts 1

Impact Description

Air Emissions - Emissions of volatile organic compounds (VOCs) during manufacturing process

Likelihood (1 = not very likely, 5 = very likely) 3

Severity (1 = not very severe, 5 = very severe) 4

Significance Score (Likelihood x Severity) 12

Control Measures

Installation of air pollution control devices, regular maintenance, and employee training on emission reduction techniques

Legislation/Standards

Compliance with EPA regulations on air quality

See attached PDF for the updated EPA regulations.

[applicable_epa_regulations_and_description.pdf](#)

Potential Impacts 2

Impact Description

Water Consumption - High water consumption for cooling equipment and cleaning processes

Likelihood (1 = not very likely, 5 = very likely) 2

Severity (1 = not very severe, 5 = very severe) 5

Significance Score (Likelihood x Severity) 10

Control Measures

Implement water recycling systems, optimize equipment for reduced water usage, and promote water conservation practices among employees

Legislation/Standards

Adherence to local water usage regulations

Environmental Aspects and Impacts 2

Aspect ID

EA 0002

Aspect Description

Waste Management

Potential Impacts

Potential Impacts 1

Impact Description

Waste Generation - Generation of manufacturing waste such as packaging materials and defective products

Likelihood (1 = not very likely, 5 = very likely) 4

Severity (1 = not very severe, 5 = very severe) 2

Significance Score (Likelihood x Severity) 8

Control Measures

Implement waste reduction strategies, recycle materials where possible, and conduct regular waste audits to identify opportunities for improvement

Legislation/Standards

Compliance with waste management regulations set by environmental agencies

Potential Impacts 2

Impact Description

Noise Pollution - Noise emissions from machinery and equipment used in manufacturing processes

Likelihood (1 = not very likely, 5 = very likely) 3

Severity (1 = not very severe, 5 = very severe) 3

Significance Score (Likelihood x Severity) 9

Control Measures

Install soundproofing equipment, schedule noisy tasks during off-peak hours, and provide hearing protection to employees working in noisy areas

Legislation/Standards

Compliance with occupational health and safety regulations regarding noise exposure limits

Environmental Aspects and Impacts 3

Aspect ID

EA 0003

Aspect Description

Energy Consumption

Potential Impacts

Potential Impacts 1

Impact Description

Greenhouse Gas Emissions - Emissions of carbon dioxide (CO₂) from energy-intensive manufacturing processes

Likelihood (1 = not very likely, 5 = very likely) 5

Severity (1 = not very severe, 5 = very severe) 4

Significance Score (Likelihood x Severity) 20

Control Measures

Implement energy-efficient technologies, conduct energy audits, and promote energy conservation practices among employees

Legislation/Standards

Adherence to carbon emissions regulations and renewable energy targets

Potential Impacts 2

Impact Description

Resource Depletion - Depletion of natural resources such as rare earth metals used in manufacturing components

Likelihood (1 = not very likely, 5 = very likely) 3

Severity (1 = not very severe, 5 = very severe) 5

Control Measures

Explore alternative materials with lower environmental impact, implement recycling programs, and collaborate with suppliers to source sustainable materials

Legislation/Standards

Compliance with regulations on responsible sourcing of raw materials

Completion

Key Findings and Comments

Overall, the assessment identified significant environmental aspects related to air emissions, water consumption, waste management, noise pollution, energy consumption, and resource depletion. Control measures have been proposed to mitigate these impacts and ensure compliance with relevant legislation and standards.

Recommendations and Next Steps

We should prioritize implementing control measures, monitor environmental performance indicators regularly, and conduct periodic reviews to identify further improvement opportunities.

Sign-off



Phil Depp, Environmental Manager
19.04.2024 13:05 PST

Media summary

File summary

[applicable_epa_regulations_and_description.pdf](#)