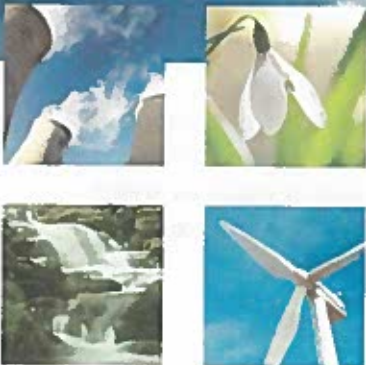




## Annex F: Accident Management Plan



**ACCIDENT MANAGEMENT PLAN**  
**Renewable Asset Ltd**  
**DOC REF: RA-E09**

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## 2 RISK MAGNITUDE ESTIMATIONS

The Accident Management Plan (Table 2.2 overleaf) has adopted a risk assessment approach to each potential hazard by combining the probability and magnitude of the potential risk to give an estimation of the risk prior to any mitigation measures. The risk management measures, which are designed to reduce the likelihood of occurrence, are then detailed followed by an estimation of the actual risk post-mitigation (Residual Risk Rating).

The DEFRA guide to risk assessment<sup>1</sup> indicates the approach of subjectively classifying the magnitude of potential consequences into four categories depending upon the degree of the impact that the potential risk could have and the context in which the risk is being assessed. The classification is used as a guide in this Risk Assessment.

The four categories are as follows:

- **Severe:** Possible irreparable damage to environmental resources;
- **Moderate:** Possible damage to environmental resources which are limited within a regional context;
- **Mild:** Possible effects might be transient damage to environmental resources which are commonplace on a regional basis and alternative sources are readily available;
- **Negligible:** The effects are negligible or might cause very slight temporary deterioration in the current environmental resource quality.

The matrix shown below considers the probability of the potential risk against the magnitude of the potential impact, thereby giving an estimation of the resulting likelihood of the risk occurring.

| Probability of potential Risk | Magnitude of Potential Impact |            |            |            |
|-------------------------------|-------------------------------|------------|------------|------------|
|                               | Severe                        | Moderate   | Mild       | Negligible |
| High                          | High                          | High       | Medium/Low | Near Zero  |
| Medium                        | High                          | Medium     | Low        | Near Zero  |
| Low                           | Medium                        | Medium     | Low        | Near Zero  |
| Negligible                    | Medium                        | Medium/Low | Low        | Near Zero  |

The qualitative risk assessment for the Accident Management Plan has been based on the matrix outlined above.

The final stage of the risk assessment is the judgement of the severity of the residual risk following implementation of the mitigation measures.

The entire plant has been subject to HAZOP and has been designed to fail safe.

<sup>1</sup> A Guide to Risk Assessment and the Risk Management for Environmental Protection, 1995.

|  |   |   |               |               |            |
|--|---|---|---------------|---------------|------------|
|  | <p>The site could be subject to intentional vandalism and damage by intruders/ trespassers who could cause damage or harm to the plant and equipments, spills and leaks to tanks.</p> | <p>Medium:<br/>The site is located within Flood Zone 1 (low risk).<br/>Medium</p> | <p>Low</p>    | <p>Medium</p> | <p>Low</p> |
| <p>3 - Flooding</p>  |   |   | <p>Low</p>    | <p>Medium</p> | <p>Low</p> |
| <p>4 - Fire in gasification plant:</p>                             |   |   | <p>Severe</p> | <p>Medium</p> | <p>Low</p> |
| <p>Plant malfunction;</p>  |   |   |               |               |            |
| <p>Electrical equipment that could provide an ignition source;</p> |   |   |               |               |            |
| <p>Waste products / raw materials that may support combustion.</p> |   |   |               |               |            |



of the plant could result in short term build up of waste in the reception area or the incomplete treatment of waste.

The result of operator error could result in the plant not functioning efficiently.

- Should the above storage capacity be exceeded, incoming waste will be diverted to landfill as per current/historical practice.

*The above capacity measures allow waste to be received while equipment repairs are affected.*

- All equipment is subject to a Planned and Preventative Maintenance Programme (PPM), to minimise unplanned failures (RA-E08 Infrastructure Monitoring and Management Programme)
- The plant also has in place a number of Emergency Shutdown Controls to ensure safe shut down in emergency.