**ENVIRONMENTAL DIMENSION IMPACT ANALYSIS PROCEDURE**

1. **OBJECTIVE:**

To specify required methods in order to define the environmental aspects that may occur in the processes of AYDEM YENİLENEBİLİR ENERJİ A.Ş., in terms of the environment and to assess the size of impact and review this assessment periodically.

# SCOPE:

It covers the assessment of environmental risks in the processes and in plants of AYDEM YENİLEBİLİR ENERJİ A.Ş.

# RESPONSIBILITIES:

OSH, Environment and IMS Manager, Environmental Relations Director, Environmental Relations Specialist and Process Supervisors/Plant Supervisors are responsible for implementation of this procedure.

# DEFINITIONS:

* **Environment:** The environment where an organization conducts its operations and air, water, soil, natural resources, flora, fauna and people interrelated to each other.
* **Environmental Aspect:** An element of an organization’s activities, products or services that interact or may interact with the environment.
* **Environmental Impact:** Any positive or negative change that an organization causes, either in part or in full.
* **Normal:** Ordinary, natural, usual, regular, and customary.
* **Abnormal:** Unusual, irregular, non-normal, non-customary.
* **Urgent:** Something to be performed without delay.
* **Significant:** Important, crucial, fundamental.
* **Insignificant:** Unimportant, no value, trivial.

# IMPLEMENTATION:

## Environmental Impact Assessment:

Environmental impacts of the operations of AYDEM YENİLEBİLİR ENERJİ A.Ş., and their results are assessed by OSH and IMS Manager, Environmental Relations Director, Environmental Relations Specialist and Process Supervisors/Plant Supervisors taking into direct or indirect impacts into consideration. In addition, company identifies and evaluates its potential impacts on biodiversity (effects on population's dynamics, effects on ecosystems, soil erosion etc.) Company implements the necessary actions as a result of the biodiversity monitoring and evaluations.

In assessing the impact the criteria below will be taken as the basis and it is determined whether each impact is of significance in terms of environment is recorded in the ***“Environmental Impact Assessment Form (CVR.FRM.001)”***.

## Assessment of Environmental Risks:

Depending on the possibility of occurrence of the environmental dimension and occurrence, the severity of the environmental impact is assessed and the environmental risk is calculated. The calculation method is carried out as follows

**Environmental Risk =** Possibility of Environmental Impact \* Severity of Environmental Impact

**Possibility of Environmental Impact;** is assessed considering Section A of the Environmental Risk Assessment Table in 5.3.

**Severity of Environmental Impact;** is assessed considering Section B of the Environmental Risk Assessment Table in 5.3.

## Environmental Impact Assessment Table

|  |
| --- |
| **A. Possibility of Environmental Impact** |
| **1** | **Very unlikely:** Very unlikely to happen; occurs due to natural phenomenon |
| **2** | **Unlikely:** Occurs due to process change and large scale system changes |
| **3** | **Possible:** Occurs due to lack of training/awareness, sensitivity |
| **4** | **Likely:** Repeated once in every week. |
| **5** | **Almost certain :** Occurs in normal operating conditions. |

|  |
| --- |
| **B. Severity of Environmental Impact** |
| **1** | **Incidental:** No impact on environment and health. |
| **2** | **Minor:** Minor and instant impact on environment. |
| **3** | **Serious:** Reversible impact, timely response. |
| **4** | **Major:** Long term impact on environment. |
| **5** | **Catastrophic:** Long term serious impact on environment and requires the response of a qualified team. |

* 1. **Severity of Impact**

It is calculated by taking into consideration 5.3. Environmental Impact Assessment Table as below;

Risk Score = Possibility of Environmental Impact x Severity of Environmental Impact

The calculated Risk value scores are associated with the risk levels shown below, and are recorded in the ***“Environmental Impact Assessment Form (CVR.FRM.001)”.*** The form approved by the General Manager is communicated to the owners of the relevant processes.

|  |
| --- |
| **SEVERITY IMPACT POSSIBILITY MATRIX** |
| **POSSIBILITY/ IMPACT** | **1****INCIDENTAL** | **2****MINOR** | **3****SERIOUS** | **4****MAJOR** | **5****CATASTROPHIC** |
| **1****VERY LOW** | Very Low 1 | Low 2 | Low 3 | Low 4 | Low 5 |
| **2****LOW** | Low 2 | Low 4 | Low 6 | Medium 8 | Medium 10 |
| **3****MEDIUM** | Low 3 | Low 6 | Medium 9 | Medium 12 | High 15 |
| **4****HIGH** | Low 4 | Medium 8 | Medium 12 | High 16 | High 20 |
| **5****VERY HIGH** | Low 5 | Medium 10 | High 15 | High 20 | Intolerable 25 |

|  |  |  |
| --- | --- | --- |
| **Risk Score** | **Risk Level** | **Action to be taken** |
| 1 | Insignificant | Requires no action. |
| 2-6 | Low Impact | Control activities, monitoring, and measurement activities are reviewed by the **HSE and Sustainability Manager, HSE and Sustainability Specialist, HSE and Sustainability Assistant Specialist, and Operations Chief**. A period of one year is given to reduce the risk level. |
| 8-10 | Moderate Impac | Control activities, monitoring, and measurement activities are reviewed by the **HSE and Sustainability Manager, HSE and Sustainability Specialist, HSE and Sustainability Assistant Specialist**, **and Operations Chief**. If there is a possibility of reducing the environmental risk level to a low-risk level, the necessary measures are planned by the **HSE and Sustainability Manager, HSE and Sustainability Specialist, HSE and Sustainability Assistant Specialist, and Operations Chief**, taking into account available resources. If deemed necessary, corrective actions are initiated to control the relevant hazard through the QDMS/Corrective Action Module or the "**Corrective Action Form (KYS.FRM.003).**" A period of nine months is given to reduce the risk level. |
| 15-20 | High Impact | To reduce and control the risk posed by environmental impact, the QDMS/Corrective Action Module or the "**Corrective Action Form (KYS.FRM.003)**" is urgently initiated by the **HSE and Sustainability Manager, HSE and Sustainability Specialist, HSE and Sustainability Assistant Specialist, and Operations Chief.** A period of six months is given to reduce the risk level. |
| 25 | Intolerable | If necessary, operations will be halted to reduce and control the risk posed by environmental impact, and the QDMS/Corrective Action Module or the "**Corrective Action Form (KYS.FRM.003)"** is urgently initiated by the **HSE and Sustainability Manager, HSE and Sustainability Specialist, HSE and Sustainability Assistant Specialist, and Operations Chief**. A period of three months is given to reduce the risk level. |

### **5.5. Determination of Significant Environmental Aspects**

Activities with a Risk Level of medium or above impact assessment are considered Significant Environmental Aspects. Activities considered as Significant Environmental Aspects are specifically indicated in the "**Environmental Aspect Impact Analysis Form (CVR.FRM.001)**" and are monitored accordingly.

### **5.6. Review**

The "**Environmental Aspect Impact Analysis Form (CVR.FRM.001)**" is reviewed by the HSE and Sustainability Manager, HSE and Sustainability Specialist, and HSE and Sustainability Assistant Specialist in the following cases:

* If there are planned or new developments including changes in activities, products, or services,
* If there are changes in environmental aspects and impacts,
* If there are changes in legal regulations,
* In the event of any accident or emergency situation,
* If there are changes in processes,
* Even if the above conditions do not occur, the form is updated once a year, considering any improvements made.

If there is any change during the evaluations, the form is revised by the HSE and Sustainability Specialist and the HSE and Sustainability Assistant Specialist and submitted for approval by the HSE and Sustainability Manager.

Significant Environmental Aspects are reviewed annually by the HSE and Sustainability Assistant Specialist and HSE and Sustainability Specialist, and the relevant section of the "**Environmental Aspect Impact Analysis Form (CVR.FRM.001)"** table is revised and submitted for approval by the HSE and Sustainability Manager.

### **6. RELATED DOCUMENTS**

* CVR.FRM.001\_Environmental Aspect Impact Analysis Form
* KYS.FRM.003\_Corrective Action Form