

1. OBJECTIVE:

To define the general conditions for operations carried out at AYDEM YENİLEBİLİR ENERJİ A.Ş and interact with the environment.

2. SCOPE:

It covers all operational processes and renewable energy plants of AYDEM YENİLEBİLİR ENERJİ A.Ş.

3. RESPONSIBILITIES:

OHS, Environment and IMS Manager, Environmental Relations Manager, Environmental Relations Specialist, Process Owners, Process Supervisors, Plant Supervisors, Administrative Affairs Supervisors and all employees are responsible for the implementation of this procedure.

4. DEFINITIONS:

- **Receiving Environment:** is the environment such as lakes, streams, coastal, marine waters and ground water where waste water is discharged or indirectly flows into such.
- **Packaging:** are the products made of any material, non-recyclable and used for raw materials, processed goods, transportation, protection, storage and sale of a product from the manufacturer to the consumers within the framework of the criteria included in Annex-1
- **Analysis Firms:** These are the institutions and organizations that have obtained a qualification certificate by the Ministry of Environment and Urbanization.
- **Waste Oil:** Oil products used in gasoline engine, diesel engine, gearbox and differential, transmission, grease and other special vehicle oils and hydraulic system, turbine and compressor, skid, open-closed gear, circulation, metal cutting and processing, metal drawing, textile, heat treatment, heat transfer, insulation and protector, insulation, transformer, mold, steam cylinder, pneumatic system protector, food and pharmaceutical industry, paper machine, bearing and other special industrial oils and industrial greases, used thickener, protective oils, cleaner and similar preparations and oil products that are not suitable for use.
- **Waste:** It is defined as solid, liquid or gaseous substances generated at the end of all production and consumption activities that may cause indirect or direct damage and affect the potential of the environment by changing the natural composition and properties of the receiving environments that they contaminate with their physical, chemical and bacteriological properties
- **Waste water:** Domestic wastewater from the waters used to meet the daily needs of the plant
- **Disposal:** It means all processes including composting, incineration to save energy and/or carry out sanitary landfill and contribute to the economy after temporary storage of solid wastes in places such as houses and workplaces where they are produced; collection, transportation, and recovery from these places.
- **Waste Vegetable Oil:** Used frying oils, oils from oil retainers of various plants and vegetable oils whose use date is expired.
- **Environmental Consultancy Firms:** These are the organizations that procure services on environmental management and obtain environmental permits, licenses and qualifications.
- **Environmental Officer:**
The person who is responsible for necessary permits, licences and notifications of all businesses related to the environment to the Ministry according to the environmental legislation and cause the necessary arrangements to be made is called the environmental officer.
- **Environment Folder:** It is the folder where received documents of all works related to environmental legislation and records are kept separately.

- **Domestic wastewater:** Wastewater originating from residential areas and service sectors such as schools, hospitals and hotels, where mostly domestic activities and people's daily life activities take place.
- **Filter:** These are air or oil filters removed from the used construction machinery or vehicles that provide transportation to the site and have completed their economic life.
- **Temporary Waste Storage Area (TWSA):** It is the area within the facility of the manufacturer or if there is no suitable place within the facility, an suitable area, where the waste is safely stored by the waste producer before it is transported to the intermediate storage, recycling and final disposal facilities or used again at the facility
- **Temporary Site:** These are places where mechanical or structural / construction maintenance is performed in any structure of the power plant (Regulator, Transmission channel / tunnel, loading pool etc.).
- **Contaminated Waste:** Oily and painted cotton waste, etc. cloths, packages that interact with hazardous waste, etc.
- **Negativity:** These are unfavorable developments that occur when an operation or service fails to meet pre-determined conditions.
- **End-of-life Tires (ELT):** These are the original or coated tires but removed from the vehicle as they cannot be used as a tire on the vehicle after they are found to have completed their useful life
- **Hazardous Waste:** Waste marked with letter (A) in the Annex IV-of the Management Regulation.
- **Non-hazardous waste:** Waste not falling under the definition of hazardous waste.
- **Medical Waste:** Infectious waste, pathological waste and sharp object waste.

5. IMPLEMENTATION:

5.1. Environmental Aspects and Impact Assessment

Defining the environmental aspects that may occur in the head office and power plants of AYDEM YENİLENEBİLİR ENERJİ A.Ş., evaluating the impact size, and periodically reviewing the assessments are carried out as specified in the *“Environmental Impact Assessment Procedure (CVR.PRS.001)”*.

5.2. Assessment of Compliance with Legal Requirements

Assessment of compliance with legal and other requirements regarding Environmental Management Systems in AYDEM YENİLEBİLİR ENERJİ A.Ş., is carried out as specified in *“Procedure for Assessment of Conformity (KYS.PRS.006)”*.

5.3. Assessment Environmental Status

Environmental Relations Manager and Environmental Relations Specialist will calculate;

- Recyclable waste generated per capita (6 months),
- Hazardous waste generated per unit MWh produced (Annual)
- Number of environmental complaints (Annual)

in *“Environmental Targets Follow-up Form (CVR.FRM.009)”* and recorded in *“Targets and Performance Indicators (KYS.FRM.004)”*.

Plant Supervisors and Administrative Affairs Supervisor will record,

- Electricity Generation (MWh) (monthly)
- Electricity Consumption (MWh) (monthly)
- Natural Gas (m³) (monthly)
- Diesel (lt) (monthly)
- Other Fuel (lt) (monthly)
- Cooling water (m³) (monthly)

- Drinking water (m³) (monthly)
- Utility water (m³) (monthly)

in **“Natural Resources Consumption Amount Table (CVR.FRM.012)”**.

Energy Management Officer will calculate;

- Electricity Consumption (in TEP-Tons of Oil equivalent) (monthly)
- Natural Gas Consumption (in TEP-Tons of Oil equivalent) (monthly)
- Diesel Consumption (monthly),
- LPG Consumption (monthly),
- Gasoline Consumption (monthly),

and record in **“Energy Users Form (ENY.FRM.001)”**.

The results are reported to the General Manager, OHS, Environment and IMS Manager. This report is regarded as circuit status for 2019 and taken as reference point.

5.4. Environmental Targets and Performance Indicators

Environmental targets of AYDEM YENİLEBİLİR ENERJİ A.Ş. are set by the General Manager and Environmental Relations Manager by taking into consideration the results of environmental impact assessment, compliance with legal and other requirements, and are defined in **“Targets and Performance Indicators (KYS.FRM.004)”** and monitored and shared with the QDMS document management module.

Planning is performed at **YGG** meetings and recorded in the **“Environmental Targets Planning Form (KYS.FRM.012)”**

5.5. Communication

Internal and external communication methods on environmental issues are provided by OHS, Environment and IMS Manager, Environmental Relations Manager, Environmental Relations Specialist and Information Technology Process Owner.

Internal communication ways at AYDEM YENİLEBİLİR ENERJİ A.Ş.;

- Telephone,
- Web page,
- Radio,
- E-mail,
- QDMS Software,
- Common Network,
- Management Review Meetings,
- Bulletin boards
- Trainings
- EnPort
- Ecbs (Integrated Environment Information System)

External Communication Methods of AYDEM YENİLENEBİLİR ENERJİ A.Ş. ;

- Environmental aspects and environmental impact assessments and compliance with legal and other requirements is under the responsibility of “Environmental Relations Manager and Environmental Relations Specialist”.

- Operations within the scope of emergencies are under the responsibility of “Environmental Relations Manager, Environmental Relations Specialist and Emergency Response Teams”.
- Communication with legal institutions, periodic correspondences and reporting are under the responsibility of “Environmental Relations Manager, Environmental Relations Specialist”.
- Review of the policy and targets is under the responsibility of the “General Manager, OHS Environment and IMS Manager, IMS Director”.
- In the event of any feedback (suggestion, warning, complaint, etc.) received from the related parties (third parties) is under the responsibility of “Plant Supervisors, Environmental Relations Manager and Environmental Relations Specialist”
 - Communication, periodic correspondence and reporting with the waste management and analysis service suppliers are the responsibility of the “Environmental Relations Manager and Environmental Relations Specialist”.

5.6. Complaints

Any complaints from related parties (neighbors, non-governmental organizations etc.) or governmental agencies environment are recorded in or “**Related Party Complaint Monitoring Form (KYS.FRM.013)**” by the Environmental Relations Manager and Environmental Relations Specialist and the IMS Manager is informed. By inquiring the main causes of the complaints, actions to prevent the recurrence of the complaint are carried out according to the “**Corrective Action Procedure (KYS.PRS.003)**”.

5.7. Water Pollution Management

- The domestic wastewater of construction sites and facilities with a population of less than 84 people is collected in a leak-proof septic tank to be built in accordance with the provisions of the Regulation on Septic Tanks to be built in places where sewage system is not available, published in the Official Gazette, dated 19/3/1971 and numbered 13783 and directed to wastewater facilities via sewage truck in agreement with the nearest municipality
- Calculation for a septic tank is made according to the formula below.
If it is assumed that the average per capita wastewater generation is 217 lt / day (TUIK and provincial bank data) in a facility where a total of 12 people working in double shifts per day (taken as 6 people per day),
Total $6 * 217 \text{ lt / day} = 1.302 \text{ m}^3/\text{day}$ waste water is generated daily.
The volume of the septic tanks must be calculated depending on how often the septic tank is emptied; $1.302 \text{ m}^3 / \text{day} * 30 \text{ days} = 39.06 \text{ m}^3$.
- The wastewater sources that collect the domestic wastewater in a leak-proof cesspool and deliver it to the wastewater infrastructure facilities via the sewage truck must keep the protocol they have obtained with the Waste Water Management and the documents they have as a result of the wastewater disposal with the sewage truck and declare them to the officers during the inspections.
- It is necessary to establish domestic package treatment plants for domestic wastewater in construction sites and facilities with a population of over 84 people. Domestic wastewater should be discharged to the receiving environment after the discharge criteria are met.

5.8. Waste Management

5.8.1. Hazardous Waste

- Procedures for hazardous waste are carried out according to “**Instructions for Waste (CVR.TLM.001)**”.
- Spill kits should be available in storages of chemical substances, hazardous liquid wastes and waste oils etc. and at all points where chemicals are at risk of spillage, leakage, and spread. If waste oil or liquid hazardous wastes are spilled, it is necessary to respond with the sawdust or emergency spill kit.

- The construction site and plant supervisors/superintendents are responsible for recording the hazardous wastes that occur in temporary sites and facilities with the **“Existing Waste Amount Form (CVR.FRM.002)”**. The completed “Waste Information Form” should be submitted to the "Environmental Relations Manager".

5.8.2. Recyclable Waste

- Processes regarding recyclable wastes should be done according to the **“Instructions for Waste (CVR.TLM.001)”**.
- All packaging wastes (paper, glass, plastic and composite waste) should be collected separately in appropriate compartments in the Recycling Bins placed in Temporary Site, plant and office.
- Packaging waste from the offices should be collected in recycling bins labeled according to their waste class.
- Each personnel in the production units is responsible for the regular collection of waste generated due to the activity for which they are responsible.
- Scrap related operations should be carried out in accordance with the **“Scrap Instructions (CVR.TLM.003)”**.

5.8.3. Domestic Waste

- Domestic waste will be disposed in garbage containers placed in designated areas in the facilities. It will be disposed into the garbage containers placed in the kitchens in the offices.
- Processes related to domestic wastes should be done according to the **“Instructions for Waste (CVR.TLM.001)”**.

5.8.4. Waste Storage

- All hazardous or non-hazardous wastes in solid and liquid form should be collected regularly in the temporary waste storage area to be delivered to licensed recycling or disposal facilities within the scope of regulations, without harming the environment. How to design GADS is included in the **“Temporary Waste Storage Site Preparation Instructions (CVR.TLM.002)”**.
- The amount of waste collected and monitored in the GADS should be notified by e-mail to the Environmental Relations Manager with the **“Existing Waste Amount Form (CVR.FRM.002)”**.

5.8.5. Sending Waste to Licensed Companies

- The Environmental Relations Manager is responsible for sending hazardous waste generated at temporary sites and facilities and recorded in **“Existing Waste Amount Form (CVR.FRM.002)”** to licensed recycling or disposal facilities.
- Recovery, disposal at and/or sending the waste for disposal of waste other than the licensed facilities; disposal into the soil, seas, lakes, streams and similar receiving environments, filling, burning, burial and storage are forbidden.

5.9. Management of Environmental Permits

- a) **Obtaining Environmental Permit:** In the event of any process change etc. in temporary sites and facilities are notified to the OHS, Environment and IMS Department at the head office of AYDEM YENİLEBİLİR ENERJİ A.Ş. The process is carried out by the OHS, Environment and IMS Department.
- b) **Measurement and Analysis:** The measurement and analysis processes required within the scope of environmental permit/ Environmental Legislation are carried out by the Environmental Relations Manager.
- c) **Recording the Documents:** The documents generated following the procedures related to environmental legislation should be kept in a separate “Environment Folder” and should be kept for 5 years.

5.10. Management of Chemicals and Hazardous Material

- **Material Safety Data Sheets (MSDS)** related to hazardous materials are provided by Purchase Department. Relevant power plants that store and use hazardous materials must keep these forms where the product is used and apply the environmental rules specified in these forms.

- OHS, Environment and IMS Department, OHS Manager, Environmental Relations Manager, Environmental Relations Specialist, OHS Documentation Specialist and Plant Supervisor, are responsible for by raising the awareness of the employees about the hazards and their environmental effects that may arise from the material and displaying the relevant signs visibly.
- Requirements for storing hazardous materials more safely are described in **“Working with Chemical Substances and Storage Instructions (ISG.TLM.012)”**.

5.11. Site Inspections (Audits)

Environmental controls are carried out in terms of legal legislation, receiving environment, waste generated, current status and information flow. Environmental site inspections are performed by the OSH Life Safety Committee, consisting of technical managers and established under the Chairmanship of the General Manager, every month at regular intervals and the results are recorded in the **“Environmental Site Inspection Form (CVR.FRM.003)** and sent to the Environmental Relations Manager. Nonconformities found at the end of inspections are recorded in the **“Environmental Nonconformity Form (CVR.FRM.004)”** and if necessary, **“Corrective Action Form (KYS.FRM.003)”** is initiated.

Within the scope of the IMS transition process, monthly inspections at the power plants will be performed in December 2019, by a consulting firm based on the contract terms. The works will be reported by the consultant company. **“Corrective Action Form (KYS.FRM.003)”** will be initiated for non-conformities in the report.

5.12. Environmental Accident

All employees are responsible for informing the department manager and are responsible for implementing the **“Emergency Response Procedure (OHS.PRS.006)”** as soon as they realize environmental accidents and emergencies in the facility, temporary site or office.

5.13. General Rules for Staff to follow

All staff is required to follow the rules in the documents below.

- Management Manual,
- Procedures,
- EMS Process Identification,
- Job Definitions,
- Related Instructions,

The staff working in AYDEM YENİLENEBİLİR ENERJİ A.Ş., are obliged to learn and know the relevant rules, procedures, **“EMS Process Identification (CVR.ST.001)”** and instructions. Stating that not knowing such does not remove their responsibility..

5.14. Trainings

The trainings to be provided to the employees are determined by the Environmental Relations Manager and Environmental Relations Specialist at the beginning of each year and notified to the Human Resources Officer by e-mail and included in **“Annual Training Plan (IK.FRM.015)”** by the HR Officer.

The trainings are planned by the Human Resources Officer and submitted to the approval of the General Manager. The approved training plan is communicated to Process Owners and Supervisors.

Environmental trainings are provided to new employees or employees by the Environmental Relations Officer and Environmental Relations Specialist. The training results are recorded in the **“Training Participation Form (IK.FRM.017)”**.

Any training requests related to the environment, other than the existing ones, are evaluated by the Human Resources and Environmental Officer, and it is ensured that appropriate training is provided / received.

The trainings to be taken within the scope of the environment are given below.

Training on Environment:

- Main issues related to legal legislation on environment
- Waste sorting methods
- Waste disposal methods
- Issues to be considered in the environmental aspects that may occur during and after the operation
- Basic measures to be taken when working with chemicals
- Methods for storing chemical materials
- Chemical handling rules and disposal of chemical wastes
- Precautions to be taken in order not to spill chemical materials and leak in the environment
- Accidentally spillage procedure

Implementation and recording of the scheduled trainings are carried out as specified in the **Human Resources Process Identification (İK.ST.001)**.

6. ENVIRONMENTAL IMPROVEMENT ACTIVITIES:

The activities to be carried out in order to achieve the objectives related to the Environmental Management System are determined by the participation of the Environmental Relations Manager and the relevant Process Owners and recorded in the **“Planning for Achieving the Targets (KYS.FRM.012)”**. The monitoring and evaluation of the planned activities are carried out by the Environmental Relations Manager and the IMS Manager.

7. REFERENCE DOCUMENTS :

- CVR.PRS.001_ Environmental Impact Assessment Procedure
- KYS.PRS.003_ Corrective Action Form
- KYS.PRS.006_ Procedure for Assessment of Conformity
- İSG.PRS.006_ Emergency Response Procedure
- CVR.ST.001_ EMS Process Identification
- İK.ST.001_ Human Resources Process Identification
- CVR.TLM.001_ Instructions for Waste
- CVR.TLM.002_ Temporary Waste Storage Site Preparation Instructions
- CVR.TLM.003_ Scrap Instructions
- CVR.FRM.002_ Existing Waste Amount Form
- CVR.FRM.003_ Environmental Site Inspection Form
- CVR.FRM.004_ Environmental Nonconformity Form
- CVR.FRM.005_ Environmental Accident Form
- CVR.FRM.009_ Environmental Targets Monitoring Form
- İSG.TLM.012_ Instructions for working with Chemicals and Storage
- KYS.FRM.004_ Targets and Performance Indicators
- KYS.FRM.012_ Planning Form for Achieving the Targets
- KYS.FRM.013_ Related Party Complaint Monitoring Form
- İK.FRM.017_ Training Participation Form
- İK.FRM.015_ Annual Training Plan

