

Standard Operating Procedure (SOP) for Licensing of Waste Electrical & Electronic Equipment (WEEE) Service Providers in the Emirate of Abu Dhabi

CWM.SOP.PR/03



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DEFINITIONS

Tadweer (CWM) - Centre of Waste Management for managing waste in the Emirate of Abu Dhabi as established under Decree No 17 of 2008 establishing the Centre of Waste Management – Abu Dhabi

Waste Producers -This includes but not limited to industries, workshops, service centers, maintenance shops, and offices.

WEEE Waste Traders (WEEET) - WEEE Trader is the entity responsible for solely trading WEEEs (without further processing or dismantling)

WEEE Licensed Facilities (WEEERF)- It is defined as the Licensed Tadweer facility for I receiving and managing WEEE waste.

ABBREVIATIONS

•	AD	Abu Dhabi.
•	ADCCI	Abu Dhabi Chamber of Commerce and Industry.
•	CFC's	Chlorofluorocarbons.
•	CWM	Centre of waste Management.
•	EAD	Environmental Agency Abu Dhabi.
•	GPS	Global Positioning System.
•	NOC	No Objection certificate.
•	OSHAD-SF Work.	Abu Dhabi Occupational, Safety and Health Centre-System Frame
•	PCB's	Poly Chlorinated Biphenyls).
•	PCN's	Poly Chlorinated Naphthalene.
•	PPE	Personal Protective Equipment.
•	SOP	Standard Operating Procedure.
•	UAE	United Arab Emirates.
•	WEEE	Waste Electrical and Electronic Equipment.
•	WEEERF	Waste Electrical and Electronic Equipment Recycling Facilities
•	WEEET	Waste Electrical and Electronic Equipment Traders.
•	WP	Waste Producer.

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1. **Purpose**

The Centre of Waste Management, Abu Dhabi (CWM) - Tadweer has developed this Standard Operating Procedure (SOP) to set forth the framework for the collection, transportation, trading and recycling of Waste Electrical and Electronic Equipment (WEEE) in Abu Dhabi Emirate.

This procedure describes:

- a) The framework and formalized process for licensing of WEEE service providers in the Emirate of Abu Dhabi;
- b) Ensure safe, effective and efficient collection and transportation systems of WEEE;
- c) Promote eco-friendly and sustainable / green technologies for recycling WEEE;
- d) Tracking the WEEE transportation activities via GPS to ensure that CWM (Tadweer)'s requirements are complied with.

1.1 What are the categories of WEEE?

There are 10 broad categories of WEEE, namely:

- a) Large household appliances e.g. fridges, cookers, microwaves, washing machines and dishwashers;
- b) Small household appliances e.g. vacuum cleaners, irons, toasters and clocks;
- c) IT and telecommunications equipment e.g. personal computers, copying equipment, telephones and pocket calculators;
- d) Consumer equipment e.g. radios, televisions, camcorders and musical instruments;
- e) Lighting equipment e.g. straight and compact fluorescent tubes and high intensity discharge lamps;
- f) Electrical and electronic tools e.g. drills, saws and sewing machines, electric lawnmowers;
- g) Toys, leisure and sports equipment e.g. electric trains, games consoles and running machines;
- h) Medical devices e.g. (non-infected) dialysis machines, analyzers, medical freezers and cardiology equipment;
- i) Monitoring and control equipment e.g. smoke detectors, thermostats and heating regulators; and
- i) Automatic dispensers e.g. hot drink dispensers and money dispensers.

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1.2 What are the health risks of WEEE?

Electrical and electronic equipment contains a wide variety of materials and components, including some that are considered dangerous. These components contain a wide range of materials including environmentally problematic ones such as CFC's (Chlorofluorocarbons), PCB's (polychlorinated biphenyls), PCN's (polychlorinated naphthalene) and brominated flame retardants. WEEE can also contain toxic heavy metals, such as lead, chromium, nickel, cadmium or mercury.

The degree of hazard posed to workers and the environment varies greatly depending on the individuals involved and the nature of operations. What is known is that the pollution generated by e-waste processing brings about toxic or genotoxic effects on the human body, threatening the health of workers and people around.

This SOP will be reviewed periodically and the changed version will be published on Tadweer official webpage and all concerned parties will be notified accordingly.

2. Scope

This procedure applies to all WEEE producers (excluding residential waste producers) irrespective of their size or quantity of waste generated by them, including temporary storage, collection, and transportation and recycling of WEEE within the Emirate of Abu Dhabi.

The scope comprises the requirement for the WEEE producers, licensing requirements for traders and recycling facilities of WEEE as well as violations & fines for the following four key players in this sector:

- 1. Waste producers
- 2. Licensed WEEE Traders (WEEETs); and
- 3. Licensed recycling facilities for WEEE inside Abu Dhabi Emirate.

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3. Requirements for No Objection Certificate for Waste Producers

This section highlights the roles and responsibilities of waste producers group during the WEEE Implementation plan and is as follows, which is further detailed in the section below:

3.1 Waste Producers (WP) General Requirements

WEEE producers shall commit to the following:

- Full responsibility of their WEEE waste, which includes on site storage, collection, transportation and safe management by either licensed WEEET and/or licensed WEEERF within UAE;
- Have a valid contract with Tadweer's Licensed WEEET or WEEERF for proper management of WEEE;
- Provide proper temporary storage of the WEEE in their premises;
- Complete the waste manifest as per CWM (Tadweer)'s procedure;
- Comply with all requirements as per the SOP for Licensing of Hazardous waste Service providers in the Emirate of Abu Dhabi No. CWM.SOP.PR/01.

3.2 NOC Issuance

3.2.1 New NOC Issuance

WPs (including small producers) shall submit the following documents in order to obtain new NOC.

- 1. Completed CWM (Tadweer)'s NOC application form;
- Administrative documents including (commercial license, signature authorization, power of attorney, Abu Dhabi Chamber of Commerce and Industry (ADCCI) certificate);
- 3. Copy of contract with a CWM (Tadweer)'s Licensed WEEET or WEEERF;

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Process for Issuing NEW NOC for WPs Waste Producer Customer Service Administrative Start **Submit application** Verify submitted to obtain NOC along application as Pay the payment with administrative well as voucher and technical requirements requirements Issue END **Issue NOC** receipt voucher

Figure 3-1 below illustrates the process followed for obtaining a new NOC Figure 3-1 The Mechanism of issuing NOC for NEW Waste Producers

3.2.2 Renewal of existing NOC

WPs shall submit the following documents in order to renew NOC.

- 1. Completed CWM (Tadweer)'s NOC renewal application form;
- 2. Administrative documents including (commercial license, signature authorization through power of attorney, Abu Dhabi Chamber of Commerce and Industry (ADCCI) membership certificate);
- 3. Annual waste reduction action reports including WEEE as a waste stream (including small waste (WEEE) producers as applicable);
- Copy of contract with a CWM (Tadweer)'s Licensed WEEET and/or WEEERF (Registered Electronically via Electronic services system);
- 5. Record of E-manifests to demonstrate that all WEEE has been handed over to Licensed WEEET and/or WEEERF, during the last 12 months.

Figure 3-2 below illustrates the mechanism that shall be followed by WPs to renew their NOC annually.

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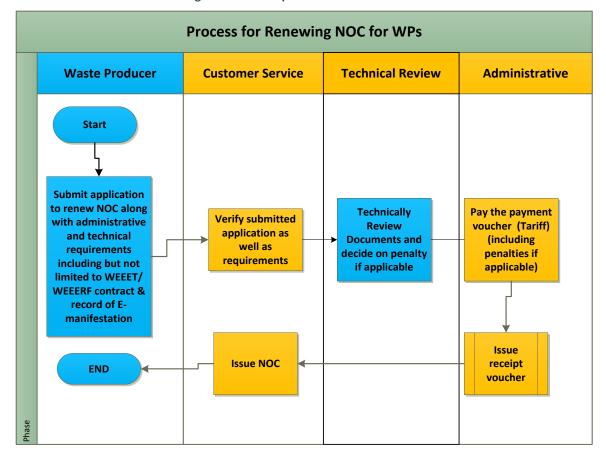


Figure 3-2 Waste producer mechanism to Renewal of NOC

4. WEEE General Licensing Requirements for Traders

4.1 General Requirements

Entities that wish to work in the field of trading (WEEET) WEEE shall have to obtain specific License from the Center of Waste Management (CWM – Tadweer). Following are the general requirements to obtain such licenses:

- Shall submit completed CWM (Tadweer)'s WEEET license application form;
- 2. Shall submit administrative documents including (commercial / industrial license, signature authorization through power of attorney, Abu Dhabi Chamber of Commerce and Industry (ADCCI) membership certificate, copy of national ID of the owner, attested list of employees, copy of tenancy contract & location map of the facility and certificate of Civil Defence);
- 3. Shall maintain proper storage facility supported by secondary containment;

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- 4. Shall install and maintain a weigh bridge at their facility and get it calibrated by Abu Dhabi Quality and Conformity Council. The weighbridge shall be linked to CWM (Tadweer)'s system including e-manifestation and should always be accessible by CWM (Tadweer)'s personnel and / or inspection team;
- 5. Shall install refrigerant gas collection system (if applicable) and waste oil collection system (if applicable);
- 6. Shall Maintain a fleet of WEEE collection vehicles that are individually registered and Licensed by CWM Tadweer for WEEE transportation;
- 7. Shall not transport WEEE out of Abu Dhabi, without proper permit to do so as per SOP for export of waste outside the Emirate No. CWM.SOP.PR/02;
- 8. Maintain Records of all vehicle movements (incoming / outgoing) at their facilities;
- 9. Shall maintain full cycle of e-manifestation from the point of generation till the recycling facility and validate the quantities of incoming and outgoing WEEE waste; and
- 10. WEEETs shall be responsible to attract WEEE waste producers, inside or outside Emirate of Abu Dhabi to their facilities through legitimate market practices.

4.2 Waste Transportation Fleet Requirements

The WEEE collection and transportation fleets shall comply with following:

- All vehicles registered for WEEE must be equipped with GPS as per CWM (Tadweer) License system;
- Shall not transport WEEE out of Emirate of Abu Dhabi, without Tadweer's permit as per SOP for export of waste outside the Emirate No. CWM.SOP.PR/02;
- Drivers must have training certificates, namely defensive driving & emergency preparedness training (to be submitted);
- At all times during operations, vehicles shall be properly maintained, kept clean and in good working condition complying with 'The General Director of Abu Dhabi Police's Drivers & Vehicles Licensing Department' requirements;
- Ensure the proper containment of WEEE during its transportation
- The vehicles shall be equipped with Class A fire extinguisher for solid materials and Class B fire extinguisher for flammable liquids;

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- WEEE shall not be mixed with any other type of waste during its collection or transportation, even at their facility other than processing as part of recycling; and
- Drivers shall use required PPE not limited to helmet (hard hat), safety gloves, safety boots, eyes protection, coverall and reflective vest, etc.

4.3 Storage Requirements

All entities (WEEE producers, traders and recycling facilities) shall store the used electronics in appropriate place that:

- Protects the used electronics from adverse atmospheric conditions;
- It must be secured for unauthorized access;
- It must be clearly labelled containers and /or storage areas;
- Impermeable surfaces for appropriate areas with appropriate spillage collection facilities, and where appropriate, decanters and degreasers;
- Weatherproof covering for appropriate areas;
- Appropriate storage for disassembled spare parts;
- Appropriate containers for storage of batteries, capacitors containing PCBs or PCTS, and other hazardous waste; and
- Comply with hazardous waste storage requirements, as per SOP for Licensing of Hazardous waste Service providers in the Emirate of Abu Dhabi CWM (Tadweer)- CWM.SOP.PR/01.

4.4 WEEE Recycling Facilities

4.4.1 General Requirements

WEEE Licensed facility (ies) in the Emirate of Abu Dhabi shall commit to the following:

- The WEEERF shall obtain an environmental permit from EAD;
- Comply with all requirements as per CWM (Tadweer) SOP for Licensing of Hazardous waste Service providers in the Emirate of Abu Dhabi CWM (Tadweer)- CWM.SOP.PR/01;
- The WEEERF Shall install refrigerant gas collection system (if applicable) and waste oil collection system (if applicable);
- Entities must install a weighbridge at their facility. The weighbridge has to be compatible and linked to CWM's system and should always be accessible by CWM's personnel and / or inspection team. This will fulfil monitoring of

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incoming and outgoing weights data and help facilitate data establishing, accessing and recovery; and

• Manifest completion process in-line with CWM (Tadweer) requirements.

4.4.2 WEEE Recycling Facilities Licensing Requirements

Following are specific requirements which will be reviewed and evaluated by CWM (Tadweer) for granting WEEERF permit:

1. Company Profile:

- a. A description of the company's profile (Company's existence, staff qualifications)
- b. A description of the company's previous experiences in WEEE recycling projects (Worldwide, MENA Region, Locally if applicable)
- 2. Feasibility Study: A Project concise feasibility study (Not more than 50 pages) that includes but not limited to, the following:
 - a. Conceptual design showing layout arrangement, civil works, utilities, labour accommodation, etc.
 - b. Provide a detailed description of the various technologies and the selected technology to be followed.
 - c. Operation & Maintenance plan.
 - d. Process flow chart: it shall include details of process inputs and outputs and also the receiving facility (ies) for the produced materials/wastes (recyclables, hazardous and non-hazardous waste, etc.)
 - e. Organizational and resource plan.
- 3. Market study: includes but not limited to, the entity's approach on securing waste streams, expected quantities to be collected daily / monthly and processed, etc. (Not more than 20 pages).
- 4. Work Program: showing the detailed program of the project and the time required for its commissioning including permitting / licensing from relevant authorities.
- 5. WEEERF should comply with OSHAD-SF rules and regulations for Health and Safety requirements with respect to storage and processing of WEEE waste at their facilities.

4.4.3 WEEERF Licensing Process

Following are the steps elaborating the process of establishing and licensing a WEEERF:

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- 1. Upon review and approval of the administrative and technical submittals CWM (Tadweer) will issue an initial permit, which would allow the investor to proceed with other relevant permits including the industrial licence, environmental permit, building permit, etc. and establish the recycling facility.
- 2. After construction of the facility, the company shall officially apply to CWM (Tadweer) for a final License. The application for final WEEE Recycling Facility permit shall include:
 - a. Completed CWM (Tadweer)'s final license application form;
 - b. Administrative documents including (signature authorization, power of attorney, Abu Dhabi Chamber of Commerce and Industry (ADCCI) certificate);
 - c. Permanent Industrial License including Environmental Permit;
 - d. Abu Dhabi Civil Defence Certificate
- 3. Upon review of the final License application, CWM (Tadweer)'s technical team shall inspect the WEEERF to ensure its compliance with the initial submission and if found compliant to the requirements, shall issue the **Final** License to operate the WEEERF;

4.5 Licensing Fee Structure

All WEEETs and WEEERFs shall be granted a relevant License after fulfilling the requirements as explained above along with required application fee. Once the applicant has technically fulfilled all requirements including the onsite inspection compliance, the applicant will be informed to deposit the appropriate Licensing fee as the approved applicable fee structure for Hazardous waste as published on Tadweer's licensing official webpage.

5. Inspections & Violations

5.1 Inspection Requirements

Inspection shall be performed at all stages of WEEE management process, covering all involved entities namely waste producers, traders (WEEET) and WEEE Recycling facilities (WEEERF), to ensure compliance with CWM (Tadweer)'s legal requirements, technical guidelines and other requirements in order to foster good management practices.

CWM (Tadweer) shall inspect the WEEET & WEEERF facilities at any point in time to ensure compliance with CWM (Tadweer) requirements. They shall adhere to all technical specs set out by CWM (Tadweer) in its License. They have to comply with all administrative requirements including having a valid CWM (Tadweer) license, calibrated WEEE weighing system, and E-manifest endorsement and recording system.

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Inspection of the various entities will be carried out as per the inspection checklists in the SOP for Licensing of Hazardous waste Service providers in the Emirate of Abu Dhabi (No. CWM.SOP.PR/01) as well as Annexure 1 of this SOP.

The frequency of inspection is as outlined in Table 5-1 below. However, in case of any unforeseen events, CWM (Tadweer) reserves the right to inspect entities as many times as needed to ensure that the Regulator's requirements are fully met.

Type of entity

Waste Producers (WPs)

WEEE Waste Traders (WEEET)

At least once a year

WEEE Licensed facilities (WEEERF)

At least once a year

Table 5-1 Inspection frequency

5.2 Violations & Fines

- Non-compliance to any requirements of this procedure shall be considered as a violation of this procedure and liable for enforcement / judicial action. Additionally, any of the following actions shall also be considered as violation, Noncompliance with UAE Federal regulatory requirements, Abu Dhabi regulatory requirements including EAD and CWM (Tadweer) requirements;
- Disposal of WEEE in any place other than handing over to a Licensed WEEET or Licensed WEEERF shall be considered as illegal dumping and shall be liable for enforcement / judicial action including but not limited to revoking the issued license;
- 3. Using services of or contract with unlicensed entities for collection / transportation of WEEE shall be considered as a violation of this procedure and liable for enforcement / judicial action.

All entities including waste producers, WEEETs and WEEERFs shall be legally obliged to comply with the requirements laid down in this procedure and failing to do so shall be liable for enforcement / judicial action as per the permitting and enforcement policy issued by EAD, which is published on Tadweer website at http://licensing.tadweer.ae/ar/Pages/default.aspx

Any Non-Compliance identified will lead to legal actions including but not limited to suspension or revoking of any issued Licences and/or permits.

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6. Document Control

The document considered uncontrolled when printed or not stamped "CONTROLLED".

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7. References

- 1. UAE Federal Law No. 24 of 1999, Protection and Development of the Environment.
- 2. Federal Regulation for Handling Hazardous Materials, Hazardous Wastes and Medical Wastes, issued by Cabinet Decree No. 37 of 2001;
- 3. Law No (21) for the year 2005 on waste management in the Emirate of Abu Dhabi.
- 4. Decree 2G24 of 2009 for tariff system of the waste in the Emirates of Abu Dhabi.
- 5. Decree No 1/2010 for Waste Tracking System.
- 6. Decree No 17 of 2008 establishing the Centre of Waste Management Abu Dhabi.
- 7. Decree No 42 of 2009 requirements of the Abu Dhabi Emirate Environment, Health and Safety Management System (EHSMS) Regulatory Framework.
- 8. Waste Classification Policy (EAD-EQ-PR-P-01).
- 9. Waste Planning Policy (EAD-EQ-PR-P-02)
- 10. Licensing and Enforcement Policy for Waste Sector (EAD-EQ-PR-P-03)
- 11. Waste Collection, Segregation, Transfer and Tracking Policy (EAD-EQ-PR-P-04)
- 12. Waste Reuse, Recycling, Resource Recovery, Waste to Energy, Treatment and Disposal Policy (EAD-EQ-PR-P-05)
- 13. Waste Classification Technical Guideline (EAD-EQ-PR-TG-01).
- 14. Technical Guideline on Duty of Care in Waste Management in the Emirate of Abu Dhabi (EAD-EQ-PR-TG-xx).
- 15. Standard operating Procedure for Licensing of Hazardous waste Service providers in the Emirate of Abu Dhabi CWM.SOP.PR/01.

8. Annexures

Annexure 1: Inspection Checklists

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Annexure 1: Inspection Checklists

WEEE Traders and Recyclers

S/N	Checklist item	Compliance / Comments			
Administrative documents					
1	Valid CWM (Tadweer) License				
2	Valid Commercial License				
3	Environmental Agency Operation Permit available				
4	Civil Defense approval of Fire protection System				
Technical Requirements					
5	Operation Manual / Management Plan available				
6	Sector regulatory Authority's EHS MS Registration / Audit Report				
7	Storage Requirements				
	Ventilation				
	Emergency Exit & Lighting				
	Illumination Level				
	Lifting Equipment / Calibration				
	Adequate safety and PPE available				
8	Weighing system connected to CWM (Tadweer) and calibrated				
9	Proper refrigerant gas collection system and waste oil collection system in				
	place				
10	Segregation methodology and level of adherence				
11	Environmental Monitoring Measures				
12	Compliance to E manifest				
13	Use the checklist for HW treatment facilities in addition to above				

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