KVGGN SYNERGY

KVGGN SYNERGY PRIVATE LIMITED

MANAGEMENT PROCEDURE

FOR

WASTE STORAGE HANDLING AND

DISPOSAL

REVISION HISTORY

Revision	Date	Description	Prepared	Approved
O	**5-9-2022**	**Issued as per ISO 9001:2015, ISO 14001:2015 & ISO 45001-2018 requirements and IFC Performance Standards**	MR	MD
1	**6-9-2023**	**Reviewed and revised in line with Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, (Amendment 4th April 2016), and Construction and Demolition Waste Management Rules, 2016**	MR	MR

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1. PURPOSE

This waste management plan outlines the procedures for handling and managing hazardous waste, solid waste, e-waste, plastic waste, and used batteries generated at various KVGGN Synergy construction and operational sites, including offices, new project developments, and ongoing operational projects.

2. SCOPE

This procedure applies to all functions, departments, and locations within the organization, as well as KVGGN Synergy's SPVs, including contractors (in relation to labour relations and labour law).

3. RESPONSIBILITY AND AUTHORITY

Implementation: Contractor and site managers

- The Head of QHSE (HO) is responsible for reviewing this plan, auditing its compliance status, and updating it whenever legal requirements are revised or reviewed. The Head of QHSE (HO) will also issue the updated plan for implementation.
- KVGGN Synergy's site managers are responsible for the effective implementation of this plan and ensuring compliance with legal requirements. Site managers will also monitor the compliance of contractors and subcontractors.
- Contractors and subcontractors are responsible for the effective implementation of this plan, ensuring that suitable infrastructure is available for the storage and handling of waste. Waste disposal must be conducted in accordance with legal requirements; hazardous waste, for example, should only be disposed of at authorized hazardous waste disposal sites through approved vendors.

Emergency preparedness and response: Head QHSE, Head of Project Execution, Head of O&M and MD

4. REFERENCE

- Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (Amendment, 4th April 2016)
- Solid Waste Management Rules, 2016
- e-Waste (Management and Handling) Rules, 2011
- Batteries (Management and Handling) Rules, 2001
- Plastic Waste Management Rules, 2016 (Amendment, 2018)
- Bio-Medical Waste Management Rules, 1998, 2016 (Amendment, 2018)
- Construction and Demolition Waste Management Rules, 2016
- IFC Performance Standards
- QHSE Manual – KVGGN Synergy

Exemptions:

The following conventions are exempt from this plan as they are not applicable to KVGGN Synergy's construction and operational sites. However, the plan will be updated in the event of amendments or if these conventions become applicable to KVGGN Synergy's operations:

- 1992 Basel Convention on the Control of Transboundary Movement of Hazardous Waste and Disposal
- 2004 Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- 2004 Stockholm Convention on Persistent Organic Pollutants

5. DEFINITIONS

Internal Training	training imparted by internal employees as faculty for the training.
Direct workers	workers directly engaged in the Organization.
Contracted Workers	workers engaged through third parties (for example contractors, brokers, agents, or intermediaries) who are performing work or providing services directly related to core business processes of the project for a substantial duration
IMS	KVGGN Synergy's Integrated Management System (IMS) combines QMS, EMS, and OH&S to ensure quality, environmental, and safety standards are consistently met.
MD	Managing Director
PMS	Performance management system
QHSE	Quality, Health, Safety & Environment
Waste	Waste refers to materials that are not products or by-products and for which the generator has no further use for production, transformation, or consumption. Explanation: (i) Waste includes materials generated during the extraction of raw materials, processing of raw materials into intermediates and final products, consumption of final products, and other human activities. It excludes residuals that are recycled or reused at the place of generation. (ii) A by-product is a material not intentionally produced but generated during the production process of an intended product and is used as such.

Definitions (Hazardous waste)	
Authorization	It refers to the permission granted for generating, handling, collection, reception, treatment, transport, storage, recycling, reprocessing, recovery, reuse, and disposal of hazardous wastes, as per sub-rule (4) of rule (5).

Disposal	It refers to any operation that does not lead to recycling, recovery, or reuse, and includes physicochemical, biological treatment, incineration, and disposal in a secured landfill.

Hazardous Waste	It refers to any waste that, due to its physical, chemical, reactive, toxic, flammable, explosive, or corrosive characteristics, poses or is likely to pose a danger to health or the environment, either alone or when in contact with other waste or substances. This includes: 1. Waste specified under column (3) of Schedule-1 of the Hazardous Waste Management Rules. 2. Wastes with constituents specified in Schedule-II, if their concentration is equal to or exceeds the limits indicated in the said schedule of the Hazardous Waste Management Rules. 3. Waste specified in Part-A or Part-B of Schedule-III regarding the import or export of such waste, in accordance with Rules 12, 13, and 14, or waste not specified in Part-A or Part-B, if they possess any hazardous characteristics specified in Part-C of the schedule of the Hazardous Waste Management Rules.
Used Oil	It refers to any oil that: • Is derived from crude oil or a mixture containing synthetic oil, including used engine oil, gear oil, hydraulic oil, turbine oil, compressor oil, industrial gear oil, heat transfer oil, transformer oil, spent oil, and their tank bottom sludges; and • Is suitable for reprocessing if it meets the specifications laid down in Part-A of Schedule-V of the Hazardous Waste Management Rules, but does not include waste oil.
Waste Oil	It refers to any oil, including spills of crude oil, emulsion tank bottoms, sludge, and slope oil generated from petroleum refineries, ship installations, which can be used as fuel in furnaces for energy recovery, provided it meets the specifications laid down in Part-B of Schedule-V of the Hazardous Waste Management Rules, either as is or after reprocessing.

Definitions (E-waste)	
E-waste	It refers to waste electrical and electronic equipment, in whole or in part, or rejects from their manufacturing and repair processes, which are intended to be discarded.
Electric and electronic equipment	It refers to equipment that relies on electric currents or electromagnetic fields to function fully.
Bulk Consumer	It refers to bulk users of electrical and electronic equipment, such as Central and State Government Departments, public sector undertakings, banks, educational institutions, multinational organizations, international agencies, and private companies.
Consumers	It refers to any person using electrical and electronic equipment, excluding bulk consumers.
Disposal	It refers to any operation that does not result in recycling, recovery, or reuse, and includes physicochemical or biological treatment, incineration, and disposal in a secured landfill.
Definition (Batteries Management and Handling)	
Battery	It refers to a lead-acid battery, which is a source of electrical energy and contains lead metal.
Bulk consumer	It refers to a consumer, such as Central or State Government Departments, Railways, Defence, Telecom, Posts & Telegraph, State Road Transport Undertakings, State Electricity Boards, and others, who purchase batteries through central "rate" or running contracts placed on behalf of individual departments or user units under their jurisdiction, with a purchase quantity of 100 or more batteries in a year.
Consumer	It refers to a person using lead-acid batteries, excluding bulk consumers.
Dealer	It refers to a person who sells and receives lead-acid batteries or components thereof to and from consumers, other dealers, or retailers on behalf of manufacturers, importers, assemblers, and re-conditioners, or otherwise.
Used batteries	It refers to used, damaged, and old lead-acid batteries or components thereof.

Definition (Plastic Waste Management)	
Plastic	It refers to materials that contain, as an essential ingredient, a high polymer such as polyethylene terephthalate, high-density polyethylene, vinyl, low-density polyethylene, polypropylene, polystyrene resins, multi-materials like acrylonitrile butadiene styrene, polyphenylene oxide, polycarbonate, and polybutylene terephthalate.
Plastic sheet	It refers to a plastic sheet, which is a sheet made from plastic material.
Plastic waste	It refers to any plastic that is discarded after use or once its intended use is over.
Producer	It refers to persons engaged in the manufacture or import of carry bags, multi-layered packaging, plastic sheets, or similar items. This includes industries or individuals using plastic sheets, covers made from plastic sheets, or multi-layered packaging for packaging or wrapping commodities.
Waste generator	It refers to every person, group of persons, or institution, including residential and commercial establishments, Indian Railways, airports, ports, harbors, and defence establishments, that generate plastic waste.
Virgin plastic	It refers to plastic material that has not been used previously and has not been blended with scrap or waste.
Recycling	It refers to the process of transforming segregated plastic waste into a new product or raw material for the production of new products.

Bio-Medical Waste (Management and Handling) Rules	
Bio-medical waste	It refers to any waste generated during the diagnosis, treatment, or immunization of humans or animals, or research activities related to these processes, as well as in the production or testing of biologicals or health camps. This also includes the categories specified in Schedule I appended to these rules.
Occupier	It refers to a person with administrative control over an institution and the premises generating bio-medical waste, which includes hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories, blood banks, healthcare facilities, and clinical establishments, regardless of their system of medicine or the name they are called.

Construction and Demolition Waste Management	
Construction and demolition waste	It refers to waste comprising building materials, debris, and rubble resulting from the construction, remodeling, repair, and demolition of any civil structure.
Application.	The rules apply to all waste generated from the construction, remodeling, repair, and demolition of any civil structure by individuals, organizations, or authorities, including building materials, debris, and rubble.
Construction	It refers to the process of erecting a building, facility, or other structure, or the construction of infrastructure, including alterations to these entities.
Construction and demolition waste"	It refers to waste comprising building materials, debris, and rubble resulting from the construction, remodeling, repair, and demolition of any civil structure.
De-construction	It refers to a planned selective demolition process in which the salvage, reuse, and recycling of the demolished structure are maximized.
Demolition	It refers to the process of breaking down or tearing down buildings and other structures, either manually, using mechanical force (with various equipment), or by implosion using explosives.
Local body	"Rules" means and includes municipal corporations, nagar nigams, municipal councils, nagarpalikas, nagar palika parishads, municipal boards, nagar panchayats, town panchayats, census towns, notified areas, and notified industrial townships, regardless of the name they are called in different states and union territories in India.
Waste generator	It refers to any person, association of persons, or institution, including residential and commercial establishments, Indian Railways, airports, ports, harbors, and defense establishments, who undertake the construction or demolition of any civil structure that generates construction and demolition waste.

Solid Wastes Management	
Solid waste	It refers to solid or semi-solid waste including domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste, street sweepings, silt removed from surface drains, horticulture waste, agricultural and dairy waste, treated bio-medical waste (excluding industrial waste, bio-medical waste, e-waste, battery waste, and radioactive waste), generated in areas under local authorities and other entities.

(a) Prevention (Avoid);

Substituting materials or inputs with less hazardous or toxic materials, or with those there processing generates lower volume waste

- Modify designs and use materials with a longer shelf life and lower maintenance requirements.
- Implement inventory control to reduce waste from outdated materials, off-specification items, damage, or excess stock.
- Segregate waste to prevent contamination of non-hazardous waste with hazardous waste.
- Adopt procurement practices that allow for the return of reusable materials, such as containers.
- Avoid the use of plastic and other materials that require long periods for natural degradation.
- Ensure timely maintenance of plant and equipment.

(b) **Minimization (Reduce):**

- Use technology to reduce paper consumption (printed documents).
- Adopt technologies to reduce natural resource usage, such as water for cleaning.
- Clear vegetation only when necessary.
- Prefer glass or steel water bottles (which can be reused) instead of plastic bottles.

(c) **Reuse:**

- Identify and segregate materials considered waste that can be reused later in the plant (e.g., cables, structures).

(d) **Recycling:**

- Identify and recycle products that can be reintroduced into the manufacturing process or industry activity, either on-site or off-site.
- Identify recyclers in the neighborhood or region of the facility.
- Segregate recyclable waste and maintain its quality during storage and handling.

(e) **Recovery, Utilization, including Co-processing:**

- There is no waste energy in the renewable energy generation process. However, KVGGN Synergy may plan to store excess energy generated from renewable sources in batteries for auxiliary power consumption, as needed (e.g., during night time).

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Waste Categorization;

Indicative Logo					
Example of waste	Food, Vegetation waste (Hard wood may also be part of recyclable waste) etc.	Packaging material, wood, cardboard, metal, Construction and demolition etc.	Medical waste generated from first-aid facility.	Waste Oil, Oil contaminated cotton, Paint drum, Batteries, etc.	e-waste, Solar modules, electrical and electronic items, etc.
Wet	☑		☑	☑	
Dry	☑	☑	☑	☑	☑

KVGGN Synergy has identified various types/categories of waste that may be generated during the construction or operation of its assets or at its head office. The regulated and non-regulated wastes are outlined in the table below.

Regulation and consent / filing return requirement for waste category

Sl. No	Regulation	Indicators	Consent/ NOC required to be obtained	Returns/ documents to be submitted with Regulator
1	Hazardous waste (Management Handling and Transboundary) Rules 2016.	HW	YES	YES
2	Solid Wastes Management Rules, 2016	SW	NO	NO
3	e-waste (Management and Handling) Rules ,2011	EW	NO	YES
4	Batteries (Management and Handling) rule 2001	BMH	NO	YES
5	Plastic Waste Management Rules 2016 (Amendment 2018)	PWM	NO	NO
6	Bio-Medical waste management (Amendment) Rules, 2018	BMW	NO	NO
7	Construction and Demolition Waste Management Rules, 2016 (if generation is ***less than*** 20 tones per day or 299 tones per project in a month)	C&D	NO	NO

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Waste identified within KVGGN Synergy Scope (construction and Operation and Maintenance)

Sl. No	Type of Waste	Regulated Waste Yes(Y), No(N)	Waste Governed Under law	Remarks over disposal
1	Oil Contaminated cotton/ Spill oil	Y	HW	Safe Disposal with Authorized vendor
2	Paint / Chemical/ Pesticides/ Herbicides, container (heavy metal contaminated)	Y	HW	Safe Disposal with Authorized vendor
3	Used Batteries	Y	BMH	To Manufacturer, (Recycle)
4	Used printer cartridges	Y	HW	To Manufacturer or Authorized vendor, (Recycle)
5	Welding rod remains	Y	HW	Safe Disposal with Authorized vendor
6	Damaged Solar modules	Y	EW	To Manufacturer, (Recycle)
7	Plastic waste	Y	PWM/MSW	Recycle
8	Vegetation clearance	Y	SW	Municipality or Pit for natural degradation.
9	Used oil /used transformer oil.	Y	HW	Safe Disposal with Authorized vendor

10	Paper/ cardboards	Y	SW	Recycle
11	Metal / scrap	Y	SW	Recycle
12	Food and Domestic waste	Y	SW	Municipality or Earth pit for composting.
13	Electrical and electronic waste	Y	EW	To Manufacturer or Authorized vendor, (Recycle)
14	Medical waste (eg used cotton, bandage etc.)	Y	BMW	Tie-up with Hospital for disposal
15	Information technology and telecommunication equipment	Y	EW	To Manufacturer or Authorized vendor, (Recycle)
16	Personal Computers (Central processing Unit with Input and Output devices)	Y	EW	To Manufacturer or Authorized vendor, (Recycle)
17	Laptop Computers (Central processing units with input and output devices)	Y	EW	To Manufacturer or Authorized vendor, (Recycle)

18	Notebook Computers. Notepad computers	Y	EW	To Manufacturer or Authorized vendor, (Recycle)
19	Printers including cartridges Copying equipment, Telephone, Cordless Phones, Cellular Phones	Y	EW	To Manufacturer or Authorized vendor, (Recycle)
20	Consumer electrical and electronics, Television sets (including sets based on (Liquid Crystal Display and Light Emitting Diode technology), Refrigerator, Washing Machine, Air Conditioners excluding centralized air conditioning plants	Y	EW	To Manufacturer or Authorized vendor, (Recycle)
21	Construction and demolition waste (if more than 20 tons per day or 300 tons per month)	Y	C&D	Safe disposal in area notified by Local Authority or as defined in approved waste management plan.

6.2 Management of waste

6.2.1 Hazardous Waste Storage Components Description:

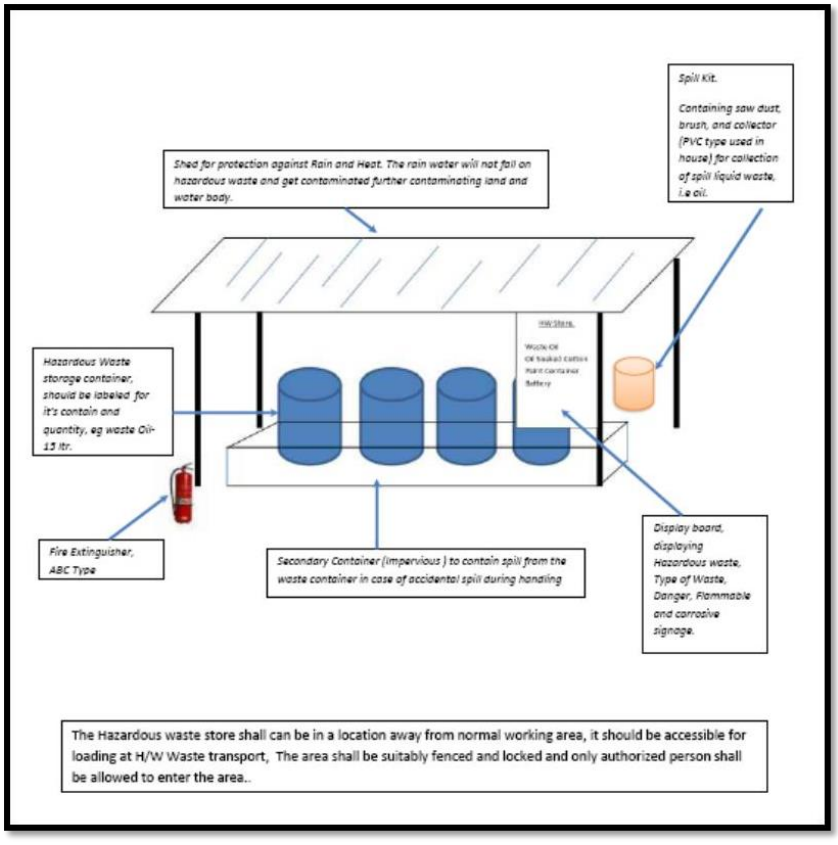
To ensure the safe and environmentally responsible management of hazardous wastes, it is essential to contain contaminants, prevent accidents, and minimize their potential impact on human health and the environment. The following guidelines shall be followed:

1. **Hazardous Waste Storage Container:**
   The container shall be made of a material compatible with the waste, ensuring it does not react with the waste and cause corrosion or damage. The container must be suitable for transportation, equipped with a tight-fitting lid, and clearly labeled. Only identical hazardous wastes should be stored in a container, and waste should not be mixed with other hazardous wastes or domestic waste to minimize waste quantity. The container color should preferably be red.
2. **Secondary Container:**
   The hazardous waste container must be placed within a secondary container. The capacity of this secondary container should be at least 110% of the capacity of the largest waste container stored within it. The secondary container must be impervious, preventing any spills from percolating and contaminating the land or water bodies.
3. **Storage Shed:**

The hazardous waste storage area shall be equipped with a suitable, permanent shed to protect the waste from rain, which could lead to flooding and spills, potentially contaminating water bodies and land. The shed should also shield the waste from direct sunlight and heat, which could cause vaporization, leading to air pollution and fire hazards.

4. **Location of Hazardous Waste Store:**
   The storage area should be located in an isolated zone that is not regularly accessed by workers to minimize exposure risks. The area must be free from live electrical wires and vegetation to reduce fire hazards. Additionally, the storage facility should be well-ventilated and have controlled access to facilitate easy loading and transportation of the waste to an approved vendor.
5. **Fire Extinguishers:**
   Appropriate and sufficient fire extinguishers (ABC type recommended) shall be placed near the hazardous waste storage area to ensure effective firefighting capabilities
6. **Spill Kit:**
   A spill management kit, including sawdust, a brush, and a collection bin, must be placed near the hazardous waste storage area. Modern spill kits can also be provided as an alternative.
7. **Display Board:**
   A display board, as shown in Figure 2, shall be prominently displayed. It must provide information regarding the nature of the hazardous waste, the quantity stored, associated risk signage, a "No Smoking" sign, and mandatory personal protective equipment (PPE) requirements. The Material Safety Data Sheets (MSDS) for all relevant waste types must be readily accessible.

Fig-1 :- Hazardous waste Store Area (components).



6.2.2 Management of Hazardous waste

- The quantity of hazardous waste generated at the KVGGN Synergy site is estimated to be minimal. However, the primary risk of hazardous waste spills arises during operation and maintenance activities (e.g., oil changes from transformers) and during the handling and transportation of hazardous waste.
- Operation and Maintenance:
  During operation and maintenance activities, a spill prevention kit and secondary containers should be used to contain any spilled oil, preventing contamination of land or water bodies.
- Handling/Transportation of Hazardous Waste:
  When handling or transporting hazardous waste, it is essential to use appropriate equipment (e.g., trolleys) to move the containers. The containers should be made of materials suitable for handling hazardous waste. Sufficient manpower should be provided to ensure the containers do not fall during transportation.
- Oil-Soaked Cotton:
  Oil-soaked cotton must be stored in a container with a secure lid to prevent the contaminated waste from being blown away by the wind.
- Personal Protective Equipment (PPE):
  Appropriate PPE, such as chemical-resistant gloves, aprons, eye protection, and safety footwear, must be worn when handling hazardous waste.
- Painting Work:
  During painting activities, the potential for land contamination is high. A barrier, such as PVC sheeting or tarpaulin, should be placed between the material being painted and the ground to contain any paint spills.
- Construction Work (Welding):
  Welding rods, which contain high levels of lead, present a hazard through their buds. These welding rod buds must not be disposed of directly on the ground. Instead, they should be collected in a container and disposed of appropriately—either by returning them to the manufacturer or sending them to an approved hazardous waste vendor.

Though the Hazardous waste generation is very less at KVGGN Synergy site, major risk and control measures identified are:

Risks	Controls
• Spill from transformer.	• Use of Secondary container • Use of Spill prevention kit
• Spill from Waste container.	• **Storage in Secondary Container:** Waste containers must be placed in secondary containers for additional containment. • **Waste Container Specifications:** Containers should be made of compatible material with a secure lid. • **Transportation and Shifting:** Waste should be transported using a trolley and a buddy system for safety.

• Contamination of land and water body if the storage area is flooded by rain.	• **Shed for Hazardous Waste Storage:** A shed must be provided for the hazardous waste storage area. • **Secondary Container Maintenance:** Secondary containers should be regularly inspected for cracks and repaired as necessary.
• Fire in hazardous waste storage area.	• **Fire Extinguishers:** Fire extinguishers must be available in the storage area. • **Electrical Installations:** The storage area should be free of open electrical installations. • **Ventilation:** The storage room must be properly ventilated. • **General Waste:** General waste should not be stored near hazardous waste containers.
	• **Hazardous Waste Storage Area:** General waste must not be stored near the hazardous waste storage area. • **Earthing of Metal Containers:** Metal containers must be properly earthed. • **Smoking Restrictions:** Smoking shall be prohibited in the hazardous waste storage area.
• Hazardous waste oil spill over handler while shifting waste oil.	• **Trolley/Buddy System:** The trolley and buddy system must be used for handling waste. • **Personal Protective Equipment (PPE):** Handlers must wear adequate PPE. • **Eyewash and Safety Shower:** Eyewash stations and safety showers must be provided.
• Paint spill/ fall on the ground.	• **Painting Barrier:** A barrier, such as tarpaulin, shall be placed between the material being painted and the land.
• Oil-Soaked Cotton and Plastic Waste:.	• Shall be stored in container with proper lid. • Storage of plastic waste in closed container

• Construction and Demolition waste getting mixed with Hazardous waste	• Segregation and storage in designated place of construction and demolition waste.

Legal Requirement for Hazardous waste Management

KVGGN Synergy shall be responsible for the safe and environmentally sound handling of hazardous waste generated at its establishment.
The hazardous waste generated at KVGGN Synergy's establishment shall either be sent or sold to a recycler, re-processor, or re-user registered or authorized under the applicable regulations, or disposed of at an authorized disposal facility.
Hazardous waste transported from KVGGN Synergy's establishment to a recycler for recycling, reuse, or reprocessing, or to an authorized disposal facility, shall be transported in accordance with the provisions of the Hazardous Waste Management Rules.
KVGGN Synergy, or any person acting on its behalf, who intends to have hazardous waste treated and disposed of by the operator of a treatment, storage, and disposal facility, shall provide the operator with the information required by the state pollution control board.
KVGGN Synergy, or its contractor, shall take all necessary steps when handling hazardous waste to:
a. Contain contaminants, prevent accidents, and minimize their consequences on human health and the environment; and
b. Provide personnel working on-site with the training, equipment, and information necessary to ensure their safety.
c **Authorization Requirement:**
Every person engaged in the generation, processing, treatment, packaging, storage, transportation, use, collection, destruction, conversion, sale, transfer, or similar activities involving hazardous waste shall be required to obtain authorization from the State Pollution Control Board.
d. **Authorized Facilities for Hazardous Waste:**
Hazardous waste shall only be collected, treated, recycled, re-processed, stored, or disposed of in facilities authorized by the State Pollution Control Board for these purposes.
e. **Application for Authorization:**
Every person engaged in the generation, processing, treatment, packaging, storage, transportation, use, collection, destruction, conversion, sale, transfer, or similar activities involving hazardous waste, or the occupier of the facility, shall submit an application in Form-1 to the State Pollution Control Board for authorization within sixty days of the commencement of these rules.
f. **Existing Authorizations:**
A person authorized under the Hazardous Waste (Management and Handling) Rules, 1989, prior to the enactment of these rules, shall not be required to reapply for authorization until the expiry of the existing authorization.
g. **Granting Authorization:**
Upon receipt of a complete application for authorization, the State Pollution Control Board may, after conducting the necessary inquiries and ensuring that the applicant possesses the appropriate facilities, technical capabilities, and equipment for safe hazardous waste handling, grant authorization in Form 2 within 120 days. The authorization will be valid for five years, subject to conditions as specified.
h. **Refusal of Authorization:**
The State Pollution Control Board may, after providing the applicant with a reasonable opportunity to be heard, refuse to grant authorization.
i. **Recordkeeping and Annual Return:**
Every person authorized under these rules shall maintain a record of hazardous waste handled in

Form 3 and submit an annual return, detailing the information in Form 4, to the State Pollution Control Board by June 30th of the following financial year.

j. **Application for Authorization Renewal:**

An application for the renewal of authorization must be submitted in Form-1 before the expiration of the current authorization. The State Pollution Control Board will review the renewal application on its merits, ensuring there have been no violations of the Act, the rules, or the conditions specified in the original authorization.

k. **Waste Reduction and Compliance:**

The occupier or operator of the facility shall take necessary steps to reduce and prevent the generation of hazardous waste, promote recycling and reuse, and comply with the conditions outlined in the authorization.

l. **Inspection and Register Maintenance:**

The State Pollution Control Board shall maintain a register containing details of the conditions imposed for hazardous waste management under these rules. This register shall be available for inspection during office hours by any interested or affected person, or a person authorized by them.

Storage of Hazardous Waste

The occupier, recycler, re-processor, re-user, and operators of facilities may store hazardous waste for a period not exceeding ninety days. They shall maintain records of the sale, transfer, storage, recycling, and reprocessing of such waste and make these records available for inspection.

Provided that the State Pollution Control Board may extend the said period in the following cases:

a) For small generators producing up to ten tons per annum;
b) For recyclers, re-processors, and facility operators, up to six months of their annual capacity;
c) For generators who do not have access to any treatment, storage, or disposal facility in the concerned state;
d) For waste that needs to be specifically stored for the development of a recycling or reuse process;
e) The regulatory authorities may allow the occupier/generator to store hazardous waste on-site in a maximum quantity of 10,000 kgs or a truckload, whichever is less, for a maximum period of 90 days;
f) If an occupier/generator generates less than 1,000 kgs of hazardous waste per month, they may be considered a small quantity generator and allowed to store waste on-site for a maximum period of 180 days. In any case, the quantity of waste should not exceed 6,000 kgs at any given point in time;
g) The regulatory authorities may provide an extension of the storage period to the occupier on a case-by-case basis;
h) An occupier/generator who generates less than 1,000 kgs of hazardous waste per month and who transports waste more than 500 km for off-site storage, treatment, and/or disposal may be allowed to store hazardous waste on-site for a maximum period of 270 days, at the discretion of regulatory authorities. In any case, the quantity of waste should not exceed 10,000 kgs at any given point in time.

Packaging, Labeling, and Transport of Hazardous Wastes

1. The occupier or operator of a facility shall ensure that hazardous wastes are packaged based on their composition in a manner suitable for handling, storage, and transport. The packaging and labeling shall be easily visible and capable of withstanding physical conditions and climatic factors.
2. Packaging, labeling, and transport of hazardous wastes shall comply with the provisions of the rules made by the Central Government under the Motor Vehicles Act, 1988, and other guidelines issued from time to time.
3. All hazardous waste containers shall bear a general label as specified in Form 8.
4. The occupier shall prepare six copies of the manifest in Form 9, with the color code indicated below (all six copies to be signed by the transporter):

6.2.3 Municipal Solid Waste or Domestic Waste

The municipal solid waste generated at KVGGN Synergy's sites may include, but is not limited to, the following:

- Food Waste
- Construction Debris
- Leaves and bushes (vegetation) from periodic vegetation clearing
- Waste paper, cardboard, plastic, and other recyclable waste
- Wooden waste (from packaging)
- Domestic Sewage

6.2.3.1 Collection of Solid Waste

Littering of solid waste shall be prohibited. To prevent littering and ensure compliance, the following measures shall be implemented:

- Waste bins shall be used to collect solid waste, including food waste (organic waste) and recyclable materials (paper, plastic, etc.). Hazardous and biomedical waste shall not be mixed with these wastes.
- Separate bins shall be provided for organic (food waste) and inorganic (recyclable) waste.
- Construction or demolition waste and debris shall be collected separately and disposed of in accordance with applicable norms or any relevant stakeholder requirements.
- Waste (including garbage and dry leaves) shall not be burned.
- Stray animals shall be restricted from accessing waste storage areas.

6.2.3.2 Storage of Solid Waste

- Storage facilities shall be established based on the quantity and type of waste generated.
- The storage facilities shall be designed so that the waste is not exposed to the open atmosphere (except for metal scrap) and shall be aesthetically acceptable and user-friendly.
- Storage facilities or bins shall be designed for easy handling, transfer, and transportation of waste. Bins for storing biodegradable waste shall be painted green, those for recyclable waste shall be white, and those for other types of waste shall be black, in accordance with the Solid Waste Management Rules, 2016.

6.2.3.3 Disposal of Solid Waste

- Solid waste shall be handed over to a waste collector authorized by the relevant authorities.
- Food waste can be handed over to the waste collector or used as landfill material for manure production.
- Recyclable waste, such as paper, cardboard, and metal scrap, can be sold to recyclers.
- Leaves shall not be burned. Instead, they can be used as landfill material, ultimately producing manure as the end product.
- Sewage shall be treated in a septic tank and disposed of through a soak pit.
- Construction debris, primarily a stockpile of soil, can be used as landfill. However, local authority regulations shall be considered before disposing of construction debris and its constituents, subject to conditions set by stakeholders. Dust generation from construction stockpiles shall be controlled through various mechanisms, such as covering, water sprinkling, and compacting.

4. E-Waste

- As a bulk consumer of electrical and electronic equipment (primarily due to solar PV modules), KVGGN Synergy will ensure that any e-waste generated is channeled to authorized collection centers, registered dismantlers, or recyclers, or is returned through the take-back services provided by the producer.
- KVGGN Synergy shall maintain records of the e-waste generated in Form 2 and make these records available for inspection by the State Pollution Control Board or the relevant Pollution Control Committee.
- KVGGN Synergy shall identify electrical and electronic items (company-owned property).
- End-of-life or discarded products shall be stored at a designated location, separate from other waste.
- The manufacturer or supplier of the product shall be identified.
- Products that have reached the end of their life or need to be disposed of shall be handed over to the manufacturer, supplier, or collection agencies recommended by the manufacturer.
-

Responsibility of Producer(Manufacturing Company)under legal requirement *(For reference)*

- The producer of electrical and electronic equipment listed in Schedule-I shall be responsible for:
    - Collecting e-waste generated during the manufacturing of electrical and electronic equipment and ensuring it is channeled for recycling and disposal.
    - Collecting e-waste generated from the "end-of-life" stage of their products, in line with the principle of "Extended Producer Responsibility." The producer shall ensure that such e-waste is sent to registered dismantlers or recyclers and, where necessary, authorize collection agencies for this purpose.
    - Setting up collection centers or take-back systems, either individually or collectively.
    - Financing and organizing a system to cover the costs involved in the environmentally sound management of e-waste generated from the end-of-life of its own products, as well as historical waste available from the date these rules come into force. The financing arrangement for this system shall be transparent. The producer may choose to establish this system individually or by joining a collective scheme.
    - Providing contact details, such as addresses, telephone numbers, and helpline numbers, of authorized collection centers to consumers or bulk consumers to facilitate the return of used electrical and electronic equipment.
    - Creating awareness through publications, advertisements, posters, or any other means of communication, as well as providing information booklets with the equipment. The awareness efforts shall include:
        - Information on hazardous constituents as specified in Sub-rule 1 of Rule 13 of the electrical and electronic equipment.
        - Information on the hazards associated with improper handling, accidental breakage, damage, and/or improper recycling of e-waste.
        - Instructions for handling the equipment after use, including the "Do's and Don'ts."

Affixing a visible, legible, and indelible symbol (as specified below) on the products and information booklets to prevent e-waste from being disposed of in garbage bins intended for general waste disposal.
Obtaining authorization from the concerned State Pollution Control Board or Pollution Control Committee in accordance with the procedures outlined in Rule 9.
Maintaining records in Form-2 for the e-waste handled and making such records available for scrutiny by the State Pollution Control Boards or the relevant committees.
Filing annual returns in Form-3 with the State Pollution Control Board or the concerned Pollution Control Committee, on or before the 30th day of June following the financial year to which the return relates.

6.2.5 Batteries Management and Handling.

- Identify used batteries.
- Store used batteries in the hazardous waste storage area or a designated area, ensuring they are not mixed with other waste.
- Ensure that used batteries are not disposed of in any manner other than being deposited with the dealer, manufacturer, registered recycler, importer, re-conditioner, or at the designated collection centers.
- File a half-yearly return in Form VIII to the State Pollution Control Board.
- KVGGN Synergy shall auction used batteries only to registered recyclers.
- KVGGN Synergy shall ensure that used batteries are not disposed of in any manner other than being deposited with the dealer, manufacturer, importer, assembler, registered recycler, re-conditioner, or at the designated collection centres.

Responsibility of Dealer (Manufacturing Company) under Legal Requirements (For Reference)

- It shall be the responsibility of the dealer to ensure that used batteries are collected back in accordance with the schedule for new batteries sold.
- Provide an appropriate discount for every used battery returned by the consumer.
- Ensure that the used batteries collected are of the same type and specifications as the new batteries sold.
- File half-yearly returns of the sale of new batteries and the buy-back of old batteries to the manufacturer in Form V, by the 31st of May and 30th of November each year.
- Ensure the safe transportation of collected batteries to the designated collection centers or registered recyclers.
- Ensure that no damage is caused to the environment during the storage and transportation of used batteries.

6.2.6 Plastic Waste Management

- Plastic waste shall be collected and stored in a designated area.
- Ensure the provision of waste collection bins.
- Ensure that plastic waste is not burned in the open.
- Create awareness about the proper disposal of plastic waste.
- Take steps to minimize the use of plastic.
- Hand over plastic waste at the source to authorized waste processing or disposal facilities/centers, either directly or through an authorized waste collection agency, as prescribed by law.

6.2.7 Bio Medical Waste

- KVGGN Synergy will provide first aid only within its area of control; therefore, the generation of biomedical waste, as defined under the law, is considered negligible.
- Expired OTC drugs and ointments from the first aid box shall be returned to the manufacturer or the source of purchase.
- If bandages are used and are contaminated, they shall be disposed of at the nearby hospital where the injured person will be further treated.
- Dressing and other related activities that may generate biomedical waste shall not be conducted at KVGGN Synergy premises.
- In the event that any biomedical waste is generated, it shall be disposed of at the nearby biomedical

treatment facility or handed over to the nearest hospital where the injured person is being treated.

- KVGGN Synergy or its representatives shall maintain a first aid register that records the usage of bandages and other items, documenting potential sources of biomedical waste.

6.2.8 Construction and Demolition Waste.

The EPC (Contractor) of KVGGN Synergy or its SPV shall, prima facie, be responsible for the collection, segregation of concrete, soil, and other materials, and storage of construction and demolition waste generated, as directed or notified by the concerned local authority in accordance with the Construction and Demolition Waste Rules 2016.

- he EPC (Contractor) of KVGGN Synergy or its SPV shall ensure that other waste (such as solid waste) does not get mixed with construction and demolition waste and is stored and disposed of separately.
- The EPC (Contractor) of KVGGN Synergy or its SPV, who generate 20 tons or more in one day or 300 tons per project in a month, shall segregate the waste into four streams: concrete, soil, steel, wood and plastics, bricks, and mortar. They must submit a waste management plan and obtain the appropriate approvals from the local authority before starting construction, demolition, or remodeling work. They must also keep the concerned authorities informed about the relevant activities, from the planning stage to the implementation stage, on a project-by-project basis.
- The EPC (Contractor) of KVGGN Synergy or its SPV (waste generator) shall keep the construction and demolition waste within the premises or deposit the waste at collection centers established by the local body or hand it over to authorized processing facilities for construction and demolition waste. They must ensure that there is no littering or deposition of waste that could obstruct traffic, public access, or drains.
- The EPC (Contractor) of KVGGN Synergy or its SPV (waste generator) shall pay the relevant charges for collection, transportation, processing, and disposal as notified by the concerned authorities.
- The EPC (Contractor) of KVGGN Synergy or its SPV (waste generators) who generate 20 tons or more in one day or 300 tons per project in a month shall pay for the processing and disposal of the construction and demolition waste generated by them, in addition to the payment for storage, collection, and transportation. The rate shall be fixed by the concerned local authority or any other authority designated by the State Government.

7. DOCUMENTATION

All relevant records, including training, waste generation, storage, disposal, and returns, shall be maintained.