# **Chapter 2401-31 SOLID WASTE MANAGEMENT REGULATIONS**

	GENERAL REQUIREMENTS		
2401-31-01	Authority		
2401-31-02	Purpose		
2401-31-03	Definitions		
	ON-SITE SOLID WASTE MANAGEMENT		
	(DOMESTIC / COMMERCIAL / GOVT. FACILITIES)		
2401-31-04	Solid Waste Management Responsibility		
2401-31-05	General Storage Requirements		
2401-31-06	Waste Containers and Bins		
2401-31-07	Food Wastes		
2401-31-08	Existing and New Buildings and Facilities		
2401-31-09	Bulky Wastes		
2401-31-10	Self-transport		
2401-31-11	On-Site Stockpiles or Accumulations during Period between Collection, and		
	Collection Frequency		
	SOLID WASTE MANAGEMENT PLANS REQUIRED		
2401-31-12	Solid Waste Management Plans for National, State, and Commercial Facilities		
	SOLID WASTE COLLECTION SERVICE PROVIDERS		
2401-31-13	Collection Safety		
2401-31-14	Collection Equipment		
2401-31-15	Collection Operations		
	GOVERNMENT LANDFILLS – NATIONAL / STATE		
2401-31-16	Infrastructure Requirements		
2401-31-17	Operational requirements		
2401-31-18	Mandatory Requirements		
2401-31-19	Discretionary Requirements		
2401-31-20	Solid Waste Disposal Requirements		
2401-31-21	Reclamation Facilities Standards		
2401-31-22	Incineration Standards		
2401-31-23	Transfer Station Standards		
2401-31-24	Closure Plans		
	UNAUTHORIZED DUMPING		
2401-31-25	Prohibited Deposits and Accumulations		
	LITTER CONTROL		
2401-31-26	Prohibition		
	HAZARDOUS WASTES		
2401-31-27	Hazardous Waste Disposal Standards		
2401-31-28	Persistent Organic Pollutants (POPs)		
2401-31-29	Lead Acid Batteries		
2401-31-30	Waste Oil		
2401-31-31	Infectious and Pathogenic Wastes		
2401-31-32	Dewatered Sludge		
2401-31-33	Other Hazardous Wastes		

#### SOLID WASTE DISPOSAL FACILITY PERMIT SYSTEM

2401-31-34	Permit Required
2401-31-35	Application Review
2401-31-36	Duration of Permit
2401-31-37	Permit Conditions
2401-31-38	<b>Termination of Permitted Operations</b>
2401-31-39	Performance Bond
2401-31-40	Emergency Procedures
	ENFORCEMENT
2401-31-41	Enforcement and Compliance
	MISCELLANEOUS PROVISIONS
2401-31-42	Severability
2401-31-43	Effective Date and Repealer

### **GENERAL REQUIREMENTS**

### 2401-31-01 Authority

These regulations are promulgated by the Republic of Palau Environmental Quality Protection Board pursuant to the authority granted by Republic of Palau Public Law No. 1-58. These regulations shall have the force and effect of law.

(Effective August 21, 2021)

# 2401-31-02 Purpose

The purpose of these regulations is to establish minimum standards governing the design, construction, installation, operation, and maintenance of solid waste storage, collection and disposal systems. Such standards are intended to:

- (A) Prevent pollution of the drinking and recreational waters of the Republic of Palau.
- (B) Prevent air and land pollution.
- (C) Prevent the spread of disease and the creation of nuisance.
- (D) Protect public health and safety.
- (E) Conserve natural resources and;
- (F) Preserve and enhance the beauty and quality of the environment.

(Effective August 21, 2021)

# **2401-31-03 Definitions**

As used herein, unless the context otherwise requires, the term:

- (A) "All-Weather Access Road" means a roadway designed, constructed, and maintained to accommodate vehicular traffic under all meteorological conditions.
- (B) "Automobile Graveyard" means any establishment or place of business which is maintained, used or operated for storing, keeping, buying, or selling wrecked, scrapped, ruined or dismantled motor vehicles or motor vehicle parts.
- (C) "Baling" means the mechanical process of compression or binding of solid waste materials into bales.

- (D) "Basel Convention" means the international treaty to control transboundary movements and/or disposal of hazardous waste, specifically to prevent transfer of hazardous waste from developed to less developed countries. See http://www.basel.int/
- (E) "Board" or "EQPB" means the Republic of Palau Environmental Quality Protection Board or its authorized representative.
- (F) "Bulky Waste" means large items of solid waste such as household appliances, furniture, motor vehicles, tires, construction equipment, boats, trees, branches, stumps, and other oversize wastes which large size prevents or complicates their handling by normal solid waste collection, processing, or disposal methods.
- (G) "Chairman of Palau Environmental Quality Protection Board" or "Chairman" means the Chairman personally or the Chairman's duly authorized representative.
- (H) "Collection" means the act of removing solid waste from a location.
- (I) "Food Waste" means the organic residues generated by the handling, storage, sale, preparation, cooking, and serving of foods.
- (J) "Generation" means the act or process of producing solid waste.
- (K) "Hazardous Waste" means any waste or combination of wastes which due to their chemical nature pose a substantial present or potential hazard to human health or the environment because such wastes are non-degradable or persistent in nature, or because they may otherwise cause or tend to cause detrimental cumulative effects to human health and the environment. Hazardous wastes are classified on the basis of their biological, chemical, and physical properties. Hazardous wastes are defined as being toxic, reactive, ignitable, corrosive, infectious, or radioactive, or any combination of these characteristics.
- (L) "Incineration" means the destruction of solid waste by burning in a combustion chamber designed for the purpose wherein solid waste is essentially reduced to ash, carbon dioxide and water vapor.
- (M) "Incinerator" means an engineered combustion device specifically designed for volume reduction, by controlled burning of combustible solid waste.
- (N) "Infectious Waste" means any biological waste or waste that has a biological component that has the potential to be pathogenic to humans including:
  - (1) Equipment, instruments, utensils, and fomites of a disposable nature from the rooms of patients who are suspected to have or have been diagnosed as having a communicable disease and must, therefore, be isolated as required by public health agencies;
  - (2) Laboratory wastes, such as pathological specimens (such as tissues, blood, excreta, and secretions obtained from patients or laboratory animals) and disposable fomites (any substance that may harbor or transmit pathogenic organism) attendant thereto;
  - (3) Surgical operating room specimens and disposable fomites attendant thereto, and similar disposable materials;
  - (4) Waste from quarantine locations removed prior to the termination of the specified quarantine period.
- (O) "Landfill" means a land area used for the disposal of solid wastes.
- (P) "Leachate" means water that has percolated through a solid waste accumulation and contains dissolved or suspended chemical constituents from the solid waste.
- (Q) "Lift" means a compacted layer of solid waste and its overlying earth or quarried coral cover in a landfill.

- (R) "Milling" means the mechanical process of shaping solid materials by grinding, crushing, chipping, or shredding.
- (S) "Permit" means a written authorization issued by the Board, bearing the signature of the Chairman, which by its conditions may authorize the permittee to construct, install, modify, or operate specified solid waste disposal facilities, conduct specified solid waste disposal activities or engage in the management of solid waste in accordance with specified limitations.
- (T) "Person" means the Republic of Palau, a state, a political subdivision, a public or private institution, corporation, partnership, joint venture, association, firm, or company organized or existing under the laws of the Republic or of any state or country, a lessee or other occupant of property, or an individual, acting singly or as a group.
- (U) "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant.
- (V) "Pollutant" means one or more substances or forms of energy which when present in the air, land, or water, are or may be harmful or injurious to human health or the environment, or which may unreasonably interfere with the enjoyment by people of life or property.
- (W) "Public Litter Receptacle" means a container provided for the public, as a convenience, for the sanitary placement of solid waste.
- (X) "Reclamation Facility" means a facility, including automobile graveyards, in which solid waste is stored dismantled or reprocessed into a new product in such a manner that the original products lose their identity.
- (Y) "Rubbish" means a general term for solid wastes and ashes, taken from residences, commercial establishments, and institutions.
- (Z) "Salvaging" means the authorized removal of material from a solid waste disposal facility.
- (AA) "Scavenging" means the unauthorized removal of material from a solid waste disposal facility.
- (BB) "Shredding" means the mechanical process of material size reduction by cutting.
- (CC) "Sludge" means the accumulated semi-liquid suspension of settled solids deposited from waste-waters or other fluids in tanks or basins. It does not include solids or dissolved material in domestic sewage or other significant pollutants in water resources, such as silt, dissolved materials in irrigation return flows, or other common water pollutants.
- (DD) "Solid Waste" means garbage, refuse, and other discarded solid materials resulting from residential, commercial or government operations, or from community activities, but does not include solid or dissolved material in domestic sewage, or other substances in water sources, such as silt, dissolved or suspended solids in wastewater effluents, dissolved materials in irrigation return flows, or other common water pollutants. Solid wastes also include liquid waste materials of waste oil, as well as pesticides, paints, solvents, and hazardous waste.
- (EE) "Solid Waste Disposal Facility" means an intermediate facility, transfer station, landfill, composting plant, recycling or reclamation facility or any site used for the reduction, consolidation, conversion, processing or disposal of solid waste.
- (FF) "Stockholm Convention" means the international treaty to protect human health and the environment from Persistent Organic Pollutants (POPs). POPs remain intact in the environment for long periods, become widely distributed geographically, and can accumulate in the fatty tissue of humans and wildlife. Exposure to POPs can lead to serious

- health effects including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease, and damages to the central and peripheral nervous system. See http://chm.pops.int/
- (GG) "Storage" means the interim containment of solid waste after generation and prior to final disposal.
- (HH) "Transfer Station" means a supplemental temporary solid waste storage facility used as an adjunct to solid waste route collection vehicles. Such a facility may be fixed or mobile and may include re-compaction of solid waste.
- (II) "Treatment" means any activity or processing designed to change the physical form or chemical composition of wastes.
- (JJ) "Vector" means a carrier that is capable of transmitting pathogens from one organism to another.
- (KK) "Working Face" means that portion of the landfill in which solid waste is deposited and compacted prior to the placement of a soil cover.

### **ON-SITE SOLID WASTE MANAGEMENT**

# (DOMESTIC / COMMERCIAL / GOVT. FACILITIES)

# 2401-31-04 Solid Waste Management Responsibility

- (A) The aesthetic, non-hazardous and sanitary storage of solid waste is the responsibility of the person owning, operating or managing the property, premise, business establishment or industry where the solid waste is generated and temporarily accumulated.
- (B) A person owning, operating or managing a property, premise, business establishment or industry has the responsibility of removing accumulated solid waste to an approved disposal facility. Contractual or other agreements for the removal of accumulated solid waste shall not relieve a person of this primary responsibility.
- (C) Solid waste shall be removed to an approved solid waste disposal facility, prior to creating nuisance conditions.
- (D) A person sponsoring any public activity, including but not limited to, recreational, sporting, or entertainment events, is responsible for the collection, storage, transportation and disposal of all solid waste generated as a result of the event. Solid waste from such events shall be disposed of in an approved solid waste disposal facility.
- (E) The disposal of animal carcasses is the responsibility of the land owner or land occupant upon whose land the animal carcass is found to be creating a nuisance. On-site disposal of the carcass shall be by immediate burial, covered by at least two (2) feet of compacted earth, incineration, or by other method approved by the Board.
- (F) A person providing a solid waste receptacle for use by customers or the public shall maintain the receptacle in a sanitary condition so as to prevent the propagation of flies, odors, and overflowing conditions.

(Effective August 21, 2021)

# 2401-31-05 General Storage Requirements

- (A) All solid waste shall be stored in such a manner that it does not constitute a fire, health, or safety hazard or provide food or harborage for vectors.
- (B) All solid waste shall be contained or bundled so as to not result in spillage.
- (C) Any occupant, operator or owner of any business or institution shall ensure that containers of sufficient volume and number are provided to adequately manage the solid waste generated. The containers shall be maintained and serviced so that there is no littering or overflowing of waste and to prevent the attraction and harborage of vectors.
- (D) The owner of a building being constructed, reconditioned or repaired shall be responsible for the proper collection and disposal of all waste generated by such work activities at a permitted landfill.

(Effective August 21, 2021)

#### 2401-31-06 Waste Containers and Bins

- (A) Containers shall be of an adequate size and of sufficient numbers to contain all solid waste generated on site including but not limited to food wastes and rubbish that a residence or other establishment generates in the period of time between collections.
- (B) Reusable waste containers which are emptied manually shall not exceed 75 pounds when filled or have a capacity of more than 55 gallons in volume and shall be capable of being serviced without the collector coming into physical contact with the solid waste.
- (C) Reusable waste containers shall be constructed of corrosion resistant metal or other material which will not absorb water, grease, or oil.
- (D) Reusable containers shall be leak-proof, including sides, seams, and bottoms, and be durable enough to withstand anticipated usage without rusting, cracking, or deforming in a manner that would impair serviceability.
- (E) The interior of the reusable container shall be smooth without interior projections or rough seams which would make it difficult to clean or interfere with emptying.
- (F) The exterior of the reusable container should be safe for handling with no cracks or jagged edges.
- (G) Containers shall have covers which are tight-fitting to resist the intrusion of water and vectors, and should be equipped with suitable handle(s).
- (H) Containers shall be stored on a firm, level, well-drained surface which is large enough to accommodate all of the containers and which is maintained in a clean, spillage-free condition.

(Approved for Promulgation May 27, 2021)

# **2401-31-07** Food Wastes

All solid waste containing food wastes shall be securely stored in covered or closed containers which are:

- (A) Nonabsorbent;
- (B) Leakproof;
- (C) Durable;
- (D) Easily cleanable (if reusable); and,
- (E) Designed for safe handling.

# 2401-31-08 Existing and New Buildings and Facilities

- (A) All existing and new buildings and other facilities which are constructed or modified shall have storage facilities to accommodate the volume of solid waste generated at the building or facility.
- (B) Storage facilities must be designed and constructed to be easily cleaned and maintained, and allow for efficient and safe collection.
- (C) Commercial development including businesses and resorts shall include facilities to provide for waste segregation for recycling purposes.

(Effective August 21, 2021)

# **2401-31-09** Bulky Wastes

- (A) Temporary storage of bulky wastes prior to collection and removal to an approved disposal site or facility shall include, but is not limited to, removing all doors from large household appliances, covering items to reduce vector harborage, and preventing accumulation of other solid wastes and water in and around the bulky waste items.
- (B) Removal of bulky wastes from a residence to a state or national landfill is the responsibility of the person who generated the waste.
- (C) The national Division of Solid Waste Management, or authorized representative or contractors, will survey and identify all scrap vehicles/metals in Babeldaob and Koror and designate an area in Babeldoab for stockpiling and processing scrap vehicles/metals.
- (D) Tires must be transported to an EQPB approved shredding facility. Tires may be staged at the national landfill and then transferred to the shredding facility.

(Effective August 21, 2021)

#### **2401-31-10** Self-transport

A person may self-transport solid waste only to an approved solid waste transfer or disposal facility and must have permission from the facility owner/operator. Self-transport of solid waste shall be in accordance with all applicable solid waste transport criteria, standards, and limitations as specified in these regulations.

(Effective August 21, 2021)

# 2401-31-11 On-Site Stockpiles or Accumulations during Period between Collection, and Collection Frequency

For the period between collection, stockpiles or accumulations of solid wastes shall be managed in a manner that prevents the movement of wastes beyond the immediate and restricted limits of the accumulation. Containers, location, and condition of stockpiles and accumulation shall be in accordance with all applicable sections of these regulations.

- (A) Solid wastes shall be collected with a frequency sufficient to inhibit the propagation or attraction of vectors and the creation of nuisance.
- (B) Solid wastes which contain food wastes shall be collected at a minimum of once during each week.
- (C) Bulky wastes shall be collected at a minimum of once each month.

#### SOLID WASTE MANAGEMENT PLANS REQUIRED

**2401-31-12 Solid Waste Management Plans for National, State, and Commercial Facilities** Solid waste management plans are guides for reducing, re-using, recycling, handling, and disposing of solid waste during long-term facilities operations and for detailing all types of waste and their origins, the steps taken to reduce the quantity of waste, and plans for removing and eliminating waste. These plans are implemented and complied with by management and operations staff and provide guidelines for keeping waste at a minimum.

- (A) A Solid Waste Management Plan is required for all national and state landfills, whether operated by a government entity or a contractor-operator, and for all commercial facilities or operations that generate solid waste and require an EQPB permit to construct and operate. Any commercial facility operation that does not require an EQPB permit to construct or operate, is not required to prepare a Solid Waste Management Plan, but is required to comply with all applicable sections of these regulations.
- (B) Any person who intends to apply for an EQPB permit for a project that will generate solid waste shall provide a Solid Waste Management Plan for Board review and approval. Solid Waste Management plans shall be required for each state transfer station and landfill regardless of their use of public and or individual lands.
- (C) Each Solid Waste Management Plan shall include but not limited to:
  - (1) A description of the solid waste generators (community, facility or activity) covered by the plan;
  - (2) An assessment of the types of wastes generated by the community, facility or activity including volume and tonnage;
  - (3) The type of facility to be used for solid waste disposal;
  - (4) A map showing location of site;
  - (5) The proximity of the waste management site to water bodies;
  - (6) The types of roads available;
  - (7) A list of equipment available for solid waste management;
  - (8) The method of collection, transport and disposal;
  - (9) Operation and maintenance procedures;
  - (10) An estimate of yearly operational budget;
  - (11) An estimate of future needs;
  - (12) Procedures for planning and design for future facilities.

(Effective August 21, 2021)

#### SOLID WASTE COLLECTION SERVICE PROVIDERS

#### 2401-31-13 Collection Safety

(A) Collection systems, including such components as containers, vehicles, and transfer equipment, shall be maintained and operated in such a manner as to protect the health and safety of personnel associated with the operations.

- (B) All solid waste personnel shall receive instructions and training in safe container and waste handling techniques, and in the proper operation of collection transfer and transport equipment.
- (C) Personal protective equipment such as gloves, safety glasses, respirators, and footwear shall be used by collection personnel, as appropriate.

#### 2401-31-14 Collection Equipment

- (A) The equipment used in the collection and transportation of solid waste shall be constructed, operated, and maintained in such a manner as to minimize health and safety hazards to solid waste management personnel and the public, and to prevent the propagation or attraction of vectors and the creation of nuisance.
- (B) Collection vehicles shall be maintained and serviced according to original equipment manufacturer's recommendations, and receive periodic vehicle safety checks, including, but not limited to, inspection of brakes, windshield wipers, taillights, backup lights, audible reverse warning devices, tires, and hydraulic systems.
- (C) Any vehicles carrying solid wastes, including rubbish, food waste, bulky wastes, and construction debris shall use restraining devices necessary to prevent the possibility of litter, spillage, or leakage of collected waste.
- (D) When any operational or mechanical defect or irregularity is known, identified, or obvious, collection and transport equipment shall be immediately removed from service, and any irregularities in the equipment shall be repaired before the vehicle is returned into service.
- (E) Collection vehicles shall be maintained in a clean condition and shall be cleaned thoroughly at least once each week.

(Effective August 21, 2021)

#### 2401-31-15 Collection Operations

- (A) The collection of solid wastes shall be conducted in a safe, efficient manner, strictly obeying all applicable traffic and other laws.
- (B) Collection frequency shall be in accordance with Section 2401-31-011 of these regulations
- (C) Collection services operator shall be responsible for:
  - (1) Immediately cleaning up all spillage caused by the operator's activities;
  - (2) Replacing the container covers and returning the containers to the location from which they were taken;
  - (3) Protecting private and public property from damage resulting from all operations;
  - (4) Creating no undue disturbance of the peace or quiet in residential areas in and through which operations are undertaken;
  - (5) Records shall be maintained detailing all costs (capital, operating, maintenance) associated with the collection system. These records shall be used for scheduling maintenance and replacement, for budgeting, and for systems evaluation and comparison;
  - (6) The collection system shall be reviewed on a regular schedule to assure that environmentally adequate, economical, and efficient service is maintained. EQPB may use the collection services records to determine an appropriate course of action in response to complaints or for enforcement purposes.

- (D) The residential user of collection services shall be responsible for:
  - (1) On the designated collection day bundles and solid waste containers shall be placed at a location readily accessible to collection personnel;
  - (2) The container stands, or any device used to hold waste containers shall be kept clean and in good repair;
  - (3) The containers shall not allow the entry of vectors through the bottom, sides or top;
  - (4) Bundles shall not weigh more than fifty (50) pounds nor be more than four (4) feet in greatest dimension;
  - (5) The user is held responsible for keeping the area around the containers free of litter;
  - (6) The area where containers are set out for collection shall be clear of hazards to the collection personnel including animals that may harass or harm the collection personnel, and which must be restrained.
- (E) Commercial or institutional users of collection services shall be responsible for:
  - (1) All containers shall be kept clean and maintained in an area readily accessible to and easily maneuvered by collection personnel and vehicles;
  - (2) Wherever necessary, proper signs shall be clearly posted that prohibit blockage of access to the containers by collection personnel and vehicles. Compliance shall be the responsibility of the operator of the business or institution;
  - (3) A sufficient number of containers must be provided for the amount to solid waste generated and the area around the containers shall be cleaned regularly and kept free of litter:
  - (4) The area near the containers shall be kept clear of hazards to the collection personnel or vehicles;
  - (5) Waste shall not be allowed to accumulate above the top of the container.

#### GOVERNMENT LANDFILLS – NATIONAL / STATE

# **2401-31-16** Infrastructure Requirements

- (A) Planning, design, and construction of a government landfill must consider all infrastructure requirements included in established engineering standards of practice for landfills. Categories of infrastructure include but are not limited to, access roads, drainage, retaining walls and other slope stabilization measures, buildings, stockpile containment, liners, leachate collection and treatment, signage, and security fencing.
- (B) The Board may from time-to-time revise facility standards as the Board deems necessary. Such standards and revisions shall include procedures to ensure suitability of the site and the proper operation of the solid waste disposal facility.
- (C) The landfill owner or contractor-operator shall prepare an engineering design for a proposed landfill as part of the technical submittal requirements for a permit application. The engineering design submittal shall be of sufficient detail and quality to allow EQPB and other review agencies to determine compliance with regulations and adherence to accepted standards of practice.

(Effective August 21, 2021)

#### 2401-31-17 Operational requirements

(A) Operation and maintenance of any solid waste disposal facility requiring a permit under the Solid Waste Management Regulations shall be in accordance with the rules and regulations of the Board and the terms and conditions of any permit issued.

(Effective August 21, 2021)

#### 2401-31-18 Mandatory Requirements

A permittee shall be required to:

- (A) Provide a permanent sign posted at the facility entrance identifying the facility, the days and hours of operations, the name of the operator, and other information relevant to the operation of the facility.
- (B) Provide an all-weather access road negotiable by loaded collection vehicles from the public road to the working surface of the landfill.
- (C) Provide adequate equipment and necessary measures to extinguish fires.
- (D) Provide for effective methods and adequate storage of all solid waste so as to prevent the attraction, harborage, or breeding of vectors and to eliminate conditions harmful to human health or which create safety hazards, odors, unsightliness and other public nuisance.
- (E) Provide for effective control of windblown materials and dust control.
- (F) Provide controlled access to the facility in the form of fences and gates that shall be kept locked when an attendant is not on duty.

(Effective August 21, 2021)

# **2401-31-19** Discretionary Requirements

A permittee may be required to:

- (A) Install leachate and/or groundwater monitoring wells.
- (B) Submit results of monitoring analysis for the detection of pollution or contamination resulting or tending to result from the operation of the facility, in accordance with methods and procedures acceptable to the Board at specified locations and intervals.
- (C) Submit annual reports itemizing the type and quantity of solid waste disposed and times of facility operations.

(Effective August 21, 2021)

#### 2401-31-20 Solid Waste Disposal Requirements

The disposal of solid waste on land shall comply with the following requirements:

- (A) Deposited solid waste shall be located down-gradient of subsurface groundwater flow from any area anticipated to be used as a drinking water source to prevent contamination of the water.
- (B) Adequate measures shall be provided to manage surface water flow at the landfill site such that the flow of off-site drainage over a landfill will be minimized.
- (C) Solid waste shall be deposited in a sanitary manner to prevent waste materials, leachate, or eroded soil particles from entering ground or surface waters without receiving the best practicable treatment or control.
- (D) Salvaging or reclamation of materials shall be controlled at the facility to prevent interference with the prompt sanitary disposal of solid waste and the creation of any health hazard.

- (E) Scavenging is prohibited.
- (F) Live, domestic animals are prohibited within the landfill.
- (G) The working face of a landfill shall be limited to as small an area as practicable and designed to confine windblown solid waste, which shall be collected and returned to the working face.
- (H) All equipment provided for the operation of a landfill shall be adequate in number and performance capability to continuously operate the landfill in a safe and sanitary manner.
- (I) Solid waste shall be spread in shallow layers (lift) not exceeding a depth of two (2) feet before compaction; completed lifts shall not cumulatively be greater than eight (8) feet in vertical depth; and at least one (1) foot of compacted intermediate earth or other approved cover material shall be applied at no greater than every 8 feet vertically.
- (J) Solid waste processed by shredding, milling, baling, or other operation specifically approved by the Board, shall be compacted and covered with a minimum of four (4) inches of soil, or other approved material at a frequency specified by permit requirements.
- (K) A completed landfill or major portion thereof shall be covered with at least 18 inches of compacted soil material, graded with proper drainage to minimize soil erosion, and seeded immediately after the grading work has been completed. Landfill closure shall be in accordance with Section 2401-31-024 (Closure Plans) of these regulations.
- (L) Open burning at any storage, reclamation or disposal site shall be carried out only in conjunction with special procedures approved by the Board.

#### **2401-31-21** Reclamation Facilities Standards

No person may operate or maintain a reclamation facility or permit the use of property for such an operation unless the operation complies with the following:

- (A) By-products removed during processing shall be handled in a sanitary and nuisance-free manner and shall be recycled or disposed of in a manner approved by the Board and in accordance with international conventions, treaties, pacts, or protocols to which the Republic of Palau is signatory.
- (B) The facility shall be located at least 100 feet from any road or adjoining property and be so constructed as to prevent health hazards, public nuisances, and unsightliness.
- (C) Salvaging or reclamation of materials shall be controlled at the facility to prevent interference with the prompt sanitary disposal of solid waste and the creation of health hazards.
- (D) Scavenging is prohibited.

(Effective August 21, 2021)

#### 2401-31-22 Incineration Standards

- (A) Incinerator fly ash and other non-combustible residue generated from incineration of solid waste shall be treated and disposed of in a manner to prevent odor and dust nuisance and to control insects, birds, rodents and other vectors.
- (B) Salvaging or reclamation of materials shall be controlled at the facility to prevent interference with the prompt sanitary disposal of solid waste and the creation of health hazards.
- (C) Scavenging is prohibited.

#### 2401-31-23 Transfer Station Standards

- (A) An all-weather road negotiable by loaded collection vehicles shall be provided from the entrance of the transfer station to the unloading area.
- (B) The unloading area shall be adequate in size and design to facilitate the unloading of solid waste from vehicles with minimum delay or confusion.
- (C) Salvaging or reclamation of materials shall be controlled at the facility to prevent interference with the prompt sanitary disposal of solid waste and the creation of health hazards.
- (D) Scavenging is prohibited.

(Effective August 21, 2021)

#### **2401-31-24** Closure Plans

Any solid waste disposal facility that intends to stop receiving waste must submit a Closure Plan for approval by the Board. The goal of the closure process is to design and construct a final cover system that minimizes the percolation of precipitation into the waste. The final cover system must be constructed to sustain vegetation and provide optimal rates of infiltration, evapotranspiration, and run-off to limit percolation into the landfill waste and minimize erosion, and require little or no maintenance. Establishment of structures is prohibited within 100 feet of the solid waste boundary of the landfill.

- (A) Each Closure Plan may include the following based on site-specific conditions and the location:
  - (1) Site Characteristics
    - Climate
    - Vegetation
    - Topography
    - Geology
    - Soils
    - Hydrogeology
  - (2) Waste Characteristics
    - General
    - Service Area
    - Waste Properties (density, incoming waste quantities)
  - (3) Closure Design
    - Cover system
    - Final Grading
    - Surface Water Management
    - Erosion and Sedimentation Control
    - Leachate System
    - Landfill Gas System
    - Groundwater Monitoring System
  - (4) Post Closure Care and Maintenance
    - Access Roads

- Vegetation
- Surface Water Management
- Leachate System
- Landfill Gas System
- Groundwater Monitoring System
- Reports to EQPB
- (5) Future Land Use

#### **UNAUTHORIZED DUMPING**

#### 2401-31-25 Prohibited Deposits and Accumulations

- (A) A person shall not deposit solid waste, industrial waste or other refuse except as permitted in these regulations.
- (B) A person shall not permit the accumulation of solid waste, industrial waste or other refuse on any property owned, leased, or possessed by him, nor shall he permit the same upon any sidewalks, alleys, curbs, roadway, shoulder areas, streams and shorelines immediately adjoining such real property, except as permitted by these regulations. In the case of property owned, leased, possessed, or occupied by the government, the responsible party for purposes of the liability of the government shall be the solid waste official.

(Effective August 21, 2021)

# **LITTER CONTROL**

#### **2401-31-26** Prohibition

- (A) No person may deposit solid waste in, on or along a road right-of-way, street, trail, spur, turnaround, tunnel, drainage structure, water of the Republic, public recreation facility or other public or private property.
- (B) The prohibition on solid waste disposal and deposition set forth in Division G of this Section shall not apply where:
  - (1) Such property is an authorized solid waste disposal facility, or
  - (2) The solid waste is deposited in a public litter receptacle.

(Effective August 21, 2021)

#### **HAZARDOUS WASTES**

# 2401-31-27 Hazardous Waste Disposal Standards

- (A) The owner/operator of a national or state landfill or transfer station shall be responsible to ensure that facilities for the storage or disposal of hazardous waste materials are available.
- (B) Any person desiring to dispose of hazardous waste materials shall notify the facility owner/operator of intention to do so. Such disposal shall be undertaken and completed only upon authorization of the facility owner/operator.

- (C) Any solid waste facility that accepts hazardous waste materials for disposal shall, in order to prevent damage to human health or the environment, dispose of such wastes in accordance with the standards as described in this section.
- (D) The person responsible for any proposed new activity or modification to an existing activity which will cause the generation of hazardous wastes shall submit to the Board a Hazardous Waste Management Plan. The new or modified activity shall not commence prior to approval of the Plan by the Board.

# **2401-31-28** Persistent Organic Pollutants (POPs)

- (A) Hazardous wastes classified and listed as Persistent Organic Pollutants (POPs) under the Stockholm Convention shall be stored in a safe and secure hazardous waste storage location that is designed to prevent contamination of the natural and human environment and to prevent access by vectors until transfer of such wastes to foreign states with the capacity to recycle or otherwise properly dispose of such hazardous waste.
- (B) Export of any POPs must be in accordance with Basel Convention requirements.

(Effective August 21, 2021)

#### 2401-31-29 Lead Acid Batteries

(A) Lead Acid Batteries shall be transported to the battery recycling facility at M-Dock or other EQPB approved facility in a safe and secure manner. Batteries may be staged at the national landfill and then transferred to the approved facility.

(Effective August 21, 2021)

### 2401-31-30 Waste Oil

- (A) Generators of waste oil shall adopt all practical measures to reduce waste quantities at point of origin and to reuse or recycle waste oil to the maximum extent possible.
- (B) Waste oil shall be collected at the point of origin (such as vehicle repair facilities, utility repair and maintenance facilities, government motor-pools) and temporarily stored in weather-proof secure containers with secondary containment.
- (C) No other substances (such as solvents, transmission fluid, power steering fluid, paints) shall be mixed with waste oil.
- (D) Waste oil shall be transported to an EQPB approved oil recovery or re-processing facility such as the PPUC facility at Aimeliik power station, in accordance with the facility's requirements and in a safe and secure manner with no leakage.
- (E) Waste oil shall be stored in a safe and secure manner with secondary containment.
- (F) Transport to an off-island disposal location must be in accordance Basel Convention requirements.

(Effective August 21, 2021)

# 2401-31-31 Infectious and Pathogenic Wastes

(A) Infectious and pathogenic wastes generated at medical, veterinary, and other facilities shall if possible be incinerated, sterilized or otherwise rendered safe prior to removal from these facilities to a landfill for final disposal.

(Effective August 21, 2021)

# 2401-31-32 Dewatered Sludge

- (A) Dewatered sludge from water treatment plants and dewatered digested sludge from wastewater treatment plants shall be mixed with the other deposited solid wastes at the landfill to prevent localized leaching. For dewatered sludges to be classified as solid waste sludges, it must be dewatered to the extent that the material can be handled as a solid with conventional solid waste handling equipment.
- (B) Disposal of raw sewage sludges, including sludges from septic tank pumping, are prohibited at all solid waste disposal facilities.

(Effective August 21, 2021)

#### 2401-31-33 Other Hazardous Wastes

- (A) Other hazardous wastes directed to the landfill:
  - (1) Shall if possible be rendered non-hazardous by chemical neutralization or stabilization prior to final disposal;
  - (2) Shall be disposed in the general landfill area or a special hazardous waste disposal cell that is designed to retain the waste and prevent infiltration into ground and surface waters:
  - (3) If hazardous waste is placed in a specialized disposal cell the cell shall be clearly marked with adequate warning signs and under no circumstances will smoking or open flames be allowed when flammable types of wastes are being disposed of;
  - (4) The hazardous waste disposal cell shall be recorded in the final plan of the completed site and made a part of the legal description of the property.

(Effective August 21, 2021)

#### SOLID WASTE DISPOSAL FACILITY PERMIT SYSTEM

#### 2401-31-34 Permit Required

It shall be unlawful for any person to establish, modify, or operate any solid waste disposal facility or a part thereof or any extension or addition thereto without a permit issued in accordance with the provisions of these regulations. The planning, design, construction operations and maintenance of any solid waste disposal facility subject to the provisions of this Chapter shall comply with the terms, conditions, provisions and management plans for any National, State or traditional conservation area, preserve or other protected area as established by law.

#### Permit Application:

- (A) Application for a permit shall be completed on forms furnished by the Board and shall include the following information:
  - (1) Detailed engineering plans and specifications for the facility, including initial and final topography in intervals of 5 feet;

- (2) Certification of compliance with applicable land use and zoning requirements;
- (3) An environmental assessment of the proposed site prepared consistent with the Environmental Assessment and Environmental Impact Statement Regulations;
- (4) A Solid Waste Management Plan.
- (B) All persons responsible for existing solid waste disposal facilities not currently holding a valid permit shall, by no later than October 01, 2021, apply for a permit to continue to operate. If such application is not made by October 01, 2021, all activities not in conformance with these regulations shall cease until such permit is issued, and activities come into regulatory compliance.
- (C) Each signed application shall constitute an agreement that the applicant will assume responsibility for the construction or modification and operation of the facility in accordance with these regulations and applicable Water Quality, Air Pollution Control, Earthmoving, and all other EQPB Regulations.
- (D) Every applicant for a permit shall pay an application processing fee of \$20.00. This fee shall be submitted with the application and shall not be refunded nor applied to any subsequent application regardless of whether the application is approved, cancelled, or denied by the Board or withdrawn by the applicant.

# 2401-31-35 Application Review

- (A) The Board shall act on an application within a reasonable time, as determined from the technical complexity of the submittal, with an initial intention not to exceed sixty (60) calendar days from the date the application is received by the Board. If the Board has not acted within the sixty (60) day period, the applicant shall be notifies that the Board may request additional information from the applicant and an initial thirty (30) calendar day period shall commence on the day the supplementary information is received.
- (B) The applicant may submit answers and comments to the Board's response to the application.
- (C) The Board shall consider the applicant's answers and comments and shall notify the applicant in writing of the final approval or intent to deny the application. No application for a permit shall be denied unless the applicant has had an opportunity for a public hearing by the Board.
- (D) The Board shall approve an application for a permit if the application and the supporting information clearly show that the issuance thereof is in the public interest and that the solid waste disposal facility is designed, built, and equipped in accordance with the best practicable technology so as to operate without causing a violation of applicable rules and regulations.

(Effective August 21, 2021)

#### **2401-31-36 Duration of Permit**

The Board may grant a permit for any term, not to exceed five (5) years.

(Effective August 21, 2021)

#### 2401-31-37 Permit Conditions

The Board may apply special conditions to the permit in order to ensure the protection of public health and the protection of the environment.

(Effective August 21, 2021)

# **2401-31-38** Termination of Permitted Operations

It shall be the responsibility of the person to whom the permit is issued to inform the Board within thirty (30) days of the permanent termination of a solid waste processing or disposal at the facility for which the permit had been issued, by surrendering the permit to the Board.

(Effective August 21, 2021)

#### 2401-31-39 Performance Bond

The Board may require a performance bond to guarantee proper operation and closure of a solid waste facility. This performance bond shall be forfeited should the permittee not comply with the provisions of the permit, any requirement of these regulation or proper closure procedures.

(Effective August 21, 2021)

#### 2401-31-40 Emergency Procedures

No variance granted pursuant to these regulations shall be construed to prevent or limit the application of any emergency provisions and procedures provided for by law.

(Effective August 21, 2021)

# **ENFORCEMENT**

#### **2401-31-41 Enforcement and Compliance**

Monitoring, enforcement and court actions for implementation of regulations contained herein shall be conducted in accordance with 24 Palau National Code Sections 161 to 172, inclusive.

When solid waste, industrial waste, or other refuse is deposited or allowed to accumulate in violation of these regulations, or where there is a refusal or neglect to comply with any lawful order issued by EQPB in carrying out the provisions of this regulation, EQPB may issue a Notice of Violation and subsequent Order to the violator.

(Effective August 21, 2021)

#### MISCELLANEOUS PROVISIONS

#### **2401-31-42** Severability

If any provision of these Regulations or the application thereof to any person or circumstance is held invalid by a court decision, statute, or otherwise, the invalidity shall not affect other provisions or applications of these Regulations which can be given effect without the invalid provision or application, and to this end, the provisions of these Regulations are declared to be severable.

(Effective August 21, 2021)

# 2401-31-43 Effective Date and Repealer

These Regulations shall take effect as provided by 6 PNC § 127, at which time the EQPB Solid Waste Management Regulations preexisting heretofore shall be repealed.

(Effective August 21, 2021)

Adopted By:

The above EQPB Solid Waste Management Regulations were adopted pursuant to the Administrative Procedure Act this 22<sup>nd</sup> Day of July 2021:

Elia Yobech, Chairman  Florencio Yamada, Vice Chairman  Juliet Ngotel, Member  Jack Meltel, Member  Benjamin Adelbai, Member  Benjamin Yobech, Member  Glenn Seid, Member	Initial  White  Author  Smill  Smill	Date  1/22/2/  1/22/2/  1-22-2/  7-22-2/  7-23-2/  1/22/01
Approved this day of	2021.	
Surangel Whipps, Jr. President		