Environmental Protection Agency

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Environmental Permit (Varied)

Issued under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000

Reference No.:	**20200709-PHWRC**
Fee:	**Large (C1)- US$1,500 per year**
Total Fee:	**US$ 7500 for Five (5) years (May 2023- April 2028)**
Addressee:	**Cevons Waste Management 572, Toucan Drive, South Ruimveldt Garden Guyana.**
Activity:	**Integrated Hazardous Waste Treatment & Disposal Facility**
Varied Activity	**Fuel Storage in support of Waste Treatment & Disposal Facility Operations.**

Cevon's Waste Management., hereinafter referred to as the "Permit Holder", is hereby authorised in accordance with the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, to Operate the Integrated Hazardous Waste Treatment & Disposal Facility at Lot Tract "A" Plantation, Peters Hall, East Bank Demerara, hereinafter referred to as the "Project", in the manner indicated in the initial application submitted on November 30, 2021, the Environmental Assessment Management Plan submitted on April 17, 2023, and application for a variance of an environmental authorization submitted on April 25, 2024, subject to the terms and conditions set forth herein under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, any existing or forthcoming Regulations made under the said Act, and any existing or forthcoming written law, guidelines, best practices, standards, codes of practice, and other statutory or regulatory instruments relevant to this project.

This is a Variance of Environmental Permit Reference No.: 20200709-PHWRC, issued on May 14, 2023, and expires on April 30, 2028.

The Permit Holder, His Servants, Agents and/or Sub-Contractors shall comply with the following Terms and Conditions:

1.0 AUTHORISATION

1.1 An application shall be made to the Agency to vary this Permit in instances where it becomes necessary to:

i. Change the construction, operation, structure, or layout of the Project and all associated buildings;
ii. change equipment, machine, apparatus, mechanism, system or technology serving the Project;
iii. change the position and design of any outlet at the point or points of discharge of effluents; or
iv. effect any other change outlined in Regulation 20(3) of the Environmental Protection (Authorisations) Regulations

1.2 The Project shall operate in accordance with the Environmental Assessment and Management Plan (EAMP) submitted to the EPA on April 17, 2023.

1.3 Operation, inspection, maintenance, and repair of ALL Treatment Equipment, shall be in accordance with their respective manufacturer's specifications. A summarized copy of the inspection and maintenance report shall be made available to the EPA upon request.

1.4 Emergency spill clean-up kits shall be maintained and made readily available at the Project location. Kits should include absorbent materials, drain seals, and other appropriate tools for clean-up.

1.5 All employees and third parties under the Project's direction shall be made aware of the conditions of the Environmental Authorisation.

1.6 The Permit Holder shall provide training on good environmental practices. Records of training conducted must be made available to the EPA upon request. Records of training conducted must be made available to the EPA upon request.

1.7 Fire prevention and control equipment shall be maintained in accordance with **Guyana Fire Service Approval.**

1.8 Adhere to the requirements of the **Occupational Safety and Health Act, Cap. 99:01, Laws of Guyana.**

2.0 CONSTRUCTION

2.1 Land clearing and disturbance shall be limited to areas where immediate work is taking place.

2.2 Construction works shall **not be executed between 18:00 hrs. to 06:00 hrs,** on any day, close to communal areas unless, approval is sought from the EPA. This requirement does not apply for large concrete pours or asphalt laying and earth

removal where work in the early morning and late evening is required.

2.3 Areas for construction material stockpiles and equipment shall be clearly identified. Stockpile areas shall be downwind to avoid materials being dispersed by wind to sensitive areas. Loading and offloading activities shall, as far as possible, also be confined to this location.

2.4 Temporary stockpiles shall not exceed **twenty-four (24) hours** before being removed, or transferred to the designated stockpiling areas established by **Condition 2.3**.

2.5 Temporary stockpiles of construction materials, including excavated waste shall be stored in a secured, designated area, and protected from wind and water erosion.

2.6 Stockpiles shall not exceed the height of the parameter fence.

2.7 Stockpiles, including dusty materials transported to, from, and within the site shall be enclosed or covered to reduce airborne emissions. Where this is not practical owing to frequent usage, employ wet suppression methods such as watering or erecting dust screens/fences to control emissions.

2.8 Install a silt fence **at least 3 meters** from the boundary of any canal, drain, or river to prevent any possible contamination from construction material. The height of the silt fence shall be **no less than 3 meters**; the distance between fence posts shall **not exceed 1.2 meters (4 ft.),** and fence posts shall beinstalled at a depth of **at least 0.6 meters (24 inches).**

2.9 Where feasible, pre-mixed, 'ready-mixed' concrete shall be used to reduce dust emissions caused by on-site preparation.

2.10 Measures shall be implemented for the removal of any contamination and or siltation of drains during construction.

2.11 All construction equipment and machinery shall be maintained in accordance with the manufacturer's specifications to avoid mechanical failures and abnormal noise pollution. Logs and records signed by the appropriate inspecting personnel shall be maintained and made available for inspection by the EPA upon request.

2.12 All cutting of wood and mixing of cement shall be done at least 15m from the perimeter drains to minimize pollution.

3.0 COLLECTION & TRANSPORTATION OF HAZARDOUS WASTES

Hazardous Wastes Collection and Transportation

3.1 All collection and transportation of hazardous wastes to and from the Project shall be in accordance with the Transportation Plan outlined within the EAMP.

3.2 All employees involved in the transportation of waste shall be trained on the

Transportation Plan outlined in **condition 3.1**. The training reports shall be made available for inspection by the EPA upon request.

3.3 Highly visible and legible labels shall be affixed to all vehicles transporting the waste and shall include but not be limited to the following information:

i. **"Danger"**
ii. **"Contains Hazardous Wastes"**
iii. **"No Smoking"**

3.4 All hazardous wastes shall be stored in sealed and labeled containers, appropriate for the waste stream during transport.

3.5 Each individual container of hazardous waste shall be labeled with the contents of the container (waste name) and the hazardous characteristic or property of the waste contained therein.

3.6 Cargo Carrying Units (CCUs) shall be inspected **before and after** the transportation of waste for signs of leakage, deterioration, or corrosion. Damaged containers **must be** replaced **immediately.** Inspection reports must be made available for inspection by the EPA upon request.

3.7 A trained operator or carrier shall supervise, monitor, and control the collection and transportation of hazardous waste.

3.8 Emergency spill clean-up kits and cordon equipment (traffic cones and restriction tapes) shall be maintained on transport vehicles for response to spills. Kits shall contain absorbent materials, drain seals, and other appropriate tools for clean-up and shall be readily available and clearly identified.

3.9 A register or manifest of the quantities of waste collected and transported shall be established and maintained. A summary of the registered information must be made available for inspection by the EPA upon request.

3.10 An incident spill report shall document **EVERY** occurrence of spills during the collection and/or transportation of hazardous waste. A copy of the spill report shall be submitted to the Agency **within twenty-four (24) hours of the incident**.

3.11 Clearly marked routes for vehicle movements shall be delineated at the Project to prevent any accident which may lead to spillage of waste. This route must be kept clear of waste and free of obstacles, surface water drainage systems, and equipment.

3.12 Non-hazardous solid wastes collected shall be disposed of at an EPA Authorized Waste Disposal Site.

4.0 WASTE ACCEPTANCE

4.1 The Project shall maintain a Waste Acceptance Criteria as defined by the Waste Acceptance procedure submitted within the EAMP on April 17, 2023, for waste treated by the Project, including consideration of the following factors:

i. Concentration, boiling, and flash point of volatile organic contaminants
ii. Water content, pH, and physical and chemical characteristics of waste material.
iii. Presence of inorganic contaminants, chlorinated compounds, and odorous materials.

4.2 The following waste streams are permitted under this project:

i. Waste Scrap metals
ii. Waste Plastics such as IBC Totes, Containers, and Bottles.
iii. Contaminated Waste Water
iv. Contaminated Solid Waste
v. Oily filters
vi. Oil-based Sludge/ Water Based Sludge
vii. Waste Motor Oil & Industrial Lubricants

4.3 The following wastes are not permitted under this Project:

i. Radioactive Waste
ii. Bio-hazardous Waste
iii. Waste containing Polychlorinated biphenyls (PCB)
iv. Explosive Wastes

4.4 Wastes shall only be accepted if they conform to the Project Waste Acceptance Criteria.

4.5 Hazardous wastes accepted for treatment by the Project shall be profiled in accordance with the EPA-approved Waste Profile Sheet. Hazardous waste generators profile sheet shall:

i. Be current and available for review upon request by the Agency.
ii. Contain the waste designation and the necessary information for how that designation was determined.

5.0 HAZARDOUS WASTE HANDLING AND STORAGE

5.1 A register of the types and quantities of hazardous waste accepted and stored onsite shall be established and maintained. The register must also record the source of waste generation for each waste type accepted. A summary of the registered information shall be maintained and must be made available to the EPA upon

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request.

5.2 Hazardous waste shall be contained in bunded storage areas. This area shall be provided with the following:

i. Low traffic
ii. No floor drains
iii. The bunded area shall provide 110% containment of the largest volume stored therein.

5.3 The Hazardous Waste Storage areas shall be clearly labeled, secured, and well-illuminated when not in use. The following warning signs shall be clearly posted:

i. "Hazardous Waste Storage Area"
ii. Danger- "Authorized Personnel Only"
iii. No Smoking
iv. No Eating or Drinking

5.4 Where applicable, hazardous waste storage areas shall possess ventilation in accordance with one of the following:

i. Gravity ventilation to the outside with a capacity of one cubic foot per minute per square foot or floor space
ii. Mechanical ventilation with on/ off switches at points of ingress that are capable of exhausting to the outside.
iii. Natural ventilation

5.5 Hazardous waste shall be stored away from ignition sources.

5.6 Hazardous waste shall be stored in sealed containers appropriate for the waste stream. That is:

a) Sealed Plastic Containers:
i. Water-based wastes:
ii. Fountain Solutions, Pre-Press

b) Sealed Metal or Plastic Containers:
i. Solvents and Petroleum- based products; and
ii. Oil and Oily Absorbents.

5.7 Hazardous waste containers shall be labeled with the following:

i. The words **"Hazardous Waste"**
ii. The type of waste
iii. Beginning accumulation date - The date when the container was first placed in the Hazardous Waste Storage Area. Should the hazardous waste container be reused, the date hazardous waste was first placed in the container shall be recorded on the container.

5.8 Waste oil containers shall be labeled with the following:
i. The words **"Waste Oil or "Used oil"**
ii. Beginning accumulation date

5.9 Hazardous waste storage containers shall remain closed during storage, except when it is necessary to add or remove waste.

5.10 Hazardous waste storage containers shall be inspected weekly for signs of leakage, deterioration, or corrosion and damaged containers **must be** replaced **immediately.** A summarised inspection report shall be compiled and must be made available to the EPA upon request.

5.11 Standard Operating Procedures (SOPs) for safe transfer operations (from storage containers to the treatment plant), maintenance of containers, and filling of storage containers shall be maintained. The SOP must be made available to the EPA upon request.

5.12 All employees shall be trained on these SOPs outlined in **condition 5.11**. Records of training conducted must be made available to the EPA upon request.

6.0 MANAGEMENT OF WASTE TREATMENT SYSTEMS

6.1 The following records shall be established & maintained for all treatment systems identified in the EAMP:
1. Waste treatment verification results
2. Operating logs
3. Shutdown events
4. Failed batches and their re-treatment

6.2 The records outlined in **condition 6.1** must be made available to the EPA upon request.

6.3 Records or Manifests of all bi-products generated from each treatment system shall be maintained and submitted to the EPA as a component of the **Annual Report.**

6.4 Bi-products generated from the treatment systems shall be subjected to analytical testing prior to discharge or disposal. The results shall be submitted cumulatively as a component of the project's **Annual Report.**

6.5 Solid waste bi-products generated from the used oil re-refinery & recycling, incinerator, and shredder unit shall be subjected to Toxicity Characteristic Leaching Procedures (TCLP) prior to disposal. The results must be within the allowable limits in accordance with the following table:

Contaminant Group	Contaminant	Regulatory Level (mg/L)	CAS No.
Metals	Arsenic	5.0	7440-38-2
	Barium	100.0	7440-39-3
	Cadmium	1.0	7440-43-9
	Chromium	5.0	67-66-3
	Lead	5.0	7439-92-1
	Mercury	0.2	7439-97-6
	Selenium	1.0	7782-49-2
	Silver	5.0	7740-22-4
Volatile Organic Compounds	Benzene	0.5	71-43-2
	Carbon tetrachloride	0.5	56-23-5
	Chlorobenzene	100.0	108-90-7
	Chloroform	6.0	67-66-3
	1,4-Dichlorobenzene	7.5	10-46-7
	1,2-Dichloroethane	0.5	107-06-2
	1,1-Dichloroethylene	0.7	75-35-4
	Methyl ethyl ketone	200.0	78-93-3
	Tetrachloroethylene	0.7	127-18-4
	Trichloroethylene	0.5	79-01-6
	Vinyl chloride	0.2	74-01-4
Semi volatile Organic Compounds	o-Cresol	200.0	95-48-7
	m-Cresol	200.0	108-39-4
	p-Cresol	200.0	106-44-5
	Cresol (total)	200.0	N/A
	2,4-Dinitrotoluene	0.13	121-14-2
	Hexachlorobenzene	0.13	118-74-1
	Hexachlorobutadiene	0.5	87-68-3
	Hexachloroethane	3.0	67-72-1
	Nitrobenzene	2.0	98-95-3
	Pentachlorophenol	100.0	87-86-5
	Pyridine	5.0	110-86-1
	2,4,5-Trichlorophenol	400.0	95-95-4
	2,4,6-Trichlorophenol	2.0	88-06-2
Pesticides	Chlordane	0.03	57-74-9
	Endrin	0.02	72-20-8
	Heptachlor (and its Epoxide)	0.008	76-44-8
	Lindane	0.4	58-89-9
	Methoxychlor	10.0	72-43-5
	Toxaphene	0.5	8001-35-2
Herbicides	2,4-D	10.0	94-75-7
	2,4,5-TP (Silvex)	1.0	93-72-1

6.6 Solid waste bi-products generated from the incinerator, shredder, recovery & refinery system that are within the allowable limits noted in **condition 6.5** shall be disposed of at an EPA Authorized Waste Disposal Site.

6.7 Employees shall be trained on Operations Manuals for the waste treatment systems they are assigned to operate. Records of training conducted must be made available to the EPA upon request.

6.8 All waste treatment systems shall be situated in a bunded area which shall provide 100% containment of the largest volume stored therein.

6.9 Representative samples of new waste streams and new waste generation sources shall be taken and analyzed in a certified laboratory to characterize the waste material and identify contaminants prior to treatment.

6.10 Sample size and numbers shall be large enough to adequately represent the range of waste characteristics and contaminants contained in the waste material.

6.11 All treatment cycles shall be operated in accordance with the optimum operating criteria for the treatment plant, specifically maximum and minimum temperature range, waste feed rate, residence time, and airflow determined by the waste trial.

I. Wastewater Treatment System

6.12 The Wastewater Treatment System shall only accept waste with the following properties identified in the Waste Acceptance Criteria submitted to the EPA:

I. Flammable/Inflammable Liquids
II. Flash Point up to (>93°C)
III. Kinematic Viscosity – up to 500 CST
IV. Freezing points (-50°C)

6.13 Hoses shall be inspected weekly for signs of leakage, deterioration, or corrosion and damaged hoses **must be** replaced **immediately.** A summarised inspection report shall be compiled and maintained on-site.

6.14 Secondary containment, drip trays, sump, or other overflow and drip containment measures shall be utilized to capture spillage at connection points and other possible overflow points.

6.15 Connection points shall be tightly secured using the Best Available Technology.

6.16 The Wastewater Treatment System shall not treat more than 400 bbl. of wastewater per day.

6.17 Overfill protection shall be maintained on all franc tanks. This may include an

automatic shut-off device or an audible or visible overfill alarm.

6.18 The safe fill level shall be clearly identified on the gauge and set at 90% to prevent overfilling of the franc tanks. In the event of overfilling, all discharges shall be released into the containment bund.

6.19 Water recovered from the treatment process shall be directed to a storage tank made of plastic or metal, for testing prior to being discharged.

II. Used-Oil Re-refinery System

6.20 Waste oil managed by the Project, including recovered oily water shall be directed to the Used Oil Re-refinery System for treatment for recovery.

6.21 The Used-Oil Re-refinery System shall treat no more than 80 bbl. of oil per day.

6.22 Overfill protection shall be maintained on all franc tanks. This may include an automatic shut-off device or an audible or visible overfill alarm.

6.23 The safe fill level shall be clearly identified on the gauge and set at 90% to prevent overfilling of the franc tanks. In the event of overfilling, all discharges shall be released into the containment bund.

6.24 The Project shall maintain a register of the recovered oil. The register must be made available to the EPA upon request.

III. INCINERATOR

6.25 The Incinerator shall only be used for the treatment of the below waste:

i. Solids
ii. Filter rags
iii. Oily debris (rags, pads, absorbents, etc.)
iv. Paint
v. Aerosol cans
vi. Chemical sacks
vii. Dry sludge
viii. Liquids
ix. Contaminated fuel
x. Lubricants
xi. Hydraulic/transmission oil

6.26 All treatment of oil sludge shall be conducted in accordance with the optimum operating criteria for the incinerator, specifically maximum and minimum temperature range, waste feed rate, residence time, and burning capacity.

6.27 Adhere to the following provisions outlined in the Incinerator Manual:

i. The Incinerator shall burn waste in the Primary combustion chamber at the temperature of 8500C
ii. The Incinerator shall burn waste in the Primary combustion chamber at the temperature of 10500C;

6.28 Install the stack to ensure it is higher than any building within 40 m of the base of the stack.

6.29 Servicing and maintenance of the incinerator shall be conducted in accordance with the Incinerator Manual.

6.30 A wet scrubber shall be maintained on the Incinerator to minimize the impacts of air emissions.

7.0 WATER QUALITY

7.1 Adhere to the provisions of the **Environmental Protection (Water Quality) Regulations, 2000.**

7.2 Discharge of untreated wastewater into the environment is **strictly prohibited.**

7.3 All contaminated wastewater generated by the Project and its supporting operations including effluent from Wet Scrubbers shall be collected and directed to the **Waste Water Treatment System**.

7.4 Stormwater discharge shall be directed away from the Project and hazardous waste storage areas.

7.5 Hazardous waste shall not be stored in an area where it could enter any waterways due to heavy rainfall or high winds. All hazardous waste shall be stored at least **5m** away from any drains on site.

7.6 All equipment re-fuelling shall be conducted on an impervious base to prevent leakage into the soil and surrounding waterways.

7.7 Samples of **treated water** from the Waste Water Treatment System shall be collected for analysis from the Wastewater Treatment System prior to final discharge into the environment.

7.8 The treated water and effluent discharge shall be in accordance with the Guyana National Bureau of Standards (GNBS) *Interim Guidelines for Industrial Effluent Discharge into the Environment*. The following allowable limits shall not be exceeded:

8.0

Parameter	Daily Maximum Concentration	Units	Sample type
pH	(pH 5.0-9.0)	S.U	Grab
Temperature	<40	°C	Grab
Total Suspended Solids (TSS)	< 50	mg/L	Composite
Oil and Grease	< 10	mg/L	Composite
Biochemical Oxygen Demand (BOD)	< 50	mg/L	Composite
Chemical Oxygen Demand	>250	mg/L	Grab
Faecal Coliform	<400	MPN per 100 ml	Grab
Total Petroleum Hydrocarbon (TPH)	< 40	mg/L	Grab
Ammonia-Nitrogen	<10	mg/L	Grab
Phosphorus	<2	Mg/L	Grab

7.9 The following information from the monitoring exercise shall be recorded and submitted cumulatively as a component of the project's **Annual Report**:

i. The laboratory certificate;
ii. Training certificate for individual(s) who performed the sampling;
iii. Certificate of calibration for the equipment used;
iv. The exact place, date and time of sampling;
v. The analysis of the results of the monitoring conducted;
vi. Copies of original laboratory analytical reports.

7.10 GPS Coordinates for this final discharge point(s) shall be submitted to the EPA.

8.0 AIR QUALITY MANAGEMENT

8.1 Adhere to the provisions of the **Environmental Protection (Air Quality) Regulations, 2000.**

8.2 The wet scrubber installed on the emission stack of the incinerator shall be maintained.

8.3 Flue Gas monitoring shall be conducted at the emission stack connected to the incinerator to determine compliance with the requisite standards outlined below:

Table 2. – A list of Air pollutants, parameters, and permissible levels for required assessment within a given period:

No.	Air Pollutant	Maximum Permissible Level	Frequency of Monitoring
1.	Carbon Monoxide	1000mg/m3	Annually
2.	Nitric Acid or Oxides of Nitrogen	350mg/m3	Annually
3.	Sulphuric Acid or Sulphuric Trioxide Dioxide	100mg/m3	Annually
4.	Particulate Matter	100 µg/m3	Annually
5.	Fluoride compounds	50mg/m3	Annually
6.	Chlorine or inorganic chlorine compounds	200 µg/m3	Annually
7.	Opacity	5%	Continuously
8.	Hydrogen sulphide	5mg/m3	Annually

Monitoring at the stack shall be conducted during normal operations by certified laboratory or trained personnel utilizing calibrated equipment.

8.4 Use tightly closed or covered containers when moving or transporting bottom ash to the approved disposal site.

8.5 The following information from the monitoring exercise shall be recorded and **submitted** cumulatively as a component of the project's **Annual Report**:

i. The laboratory certificate;
ii. Training certificate for individual(s) who performed the monitoring exercise;
iii. Certificate of calibration for the equipment used
iv. The exact place the monitoring was conducted;
v. Duration of the monitoring exercise
vi. The analysis of the results of the monitoring conducted;
vii. Copies of original laboratory analytical reports

8.6 The Permit Holder shall immediately respond to any visible (opaque) emissions that exceed six minutes. A record of each air pollution episode and the actions to resolve same shall be maintained by the Permit Holder.

8.7 The **Best Available Technique (BAT)** for wet dust suppression shall be utilized in the areas of the Project which are not enclosed, to reduce the emission of particulate matter.

9.0 STORAGE & SHREDDING OF PLASTICS IBC TOTES & USED OIL FILTER

9.1 IBC totes in storage shall not be stacked more than **three (3)** totes high.

9.2 The Project shall maintain records of the number of plastic materials and IBC totes received, shredded, and removed. The records shall be maintained and made available to the EPA upon request.

9.3 The Shredder shall at all times be operated in accordance with the manufacturer's specification.

9.4 Standard Operating Procedures (SOPs) for safe use of the Shredder shall be established and maintained on-site and made available to the EPA upon request.

9.5 The shredder shall at all times be mounted on an impervious base within an enclosed facility.

9.6 All shredding activities shall be conducted within the confines of the enclosed facility.

9.7 Shredded materials shall be stored in secured polyethylene bags so as to prevent the release of the material into the surrounding environment.

9.8 Shredded materials stored in bags shall be properly loaded, enclosed, and secured in the designated containers before exportation.

9.9 All exportation of Plastic, ULABS, E-Waste, and Ferrous and Non-Ferrous wastes shall be conducted in accordance with the prior informed consent procedure of the Basel Convention for the Transboundary Movement of Hazardous Waste and their disposal.

9.10 Waste Electrical & Electronic Equipment (E-Waste) shall be managed with care in order to avoid the release of hazardous substances into the air, water, or soil, as a result of damage and/or leakage.

9.11 Dismantling and sorting of waste electrical & electronic Equipment (E-Waste) shall be conducted on impervious surfaces.

9.12 Management and storage of Waste Electrical & Electronic Equipment (E-Waste) components containing hazardous materials shall be conducted in a secure and designated ventilated area. This area shall include the following:

i. Signage- "**E-Waste Storage Area**"
ii. Not exposed to direct sunlight and rainfall
iii. No damage components to release gases, liquids, or solid particles to the environment.

9.13 Waste Electrical & Electronic Equipment (E-Waste) shall not be mixed with non-hazardous waste.

9.14 Containers used for the storage of Waste Electrical & Electronic Equipment (E-Waste) containing hazardous substances shall be cleaned and decontaminated prior to re-use, recycling, or disposal.

9.15 The disposal of Waste Electrical & Electronic Equipment (E-Waste) **is strictly prohibited.**

9.16 An inventory of Waste Electrical & Electronic Equipment (E-Waste) shall be established and maintained. The reports shall be made available to the EPA upon request.

10.0 MANAGEMENT OF FERROUS AND NON-FERROUS SCRAP WASTES

10.1 Scrap metal wastes shall be stored under covered areas on an impervious surface that is protected from the ingress of storm or rainwater. The storage area shall be clearly demarcated and shall not be accessible to unauthorized persons.

10.2 Storage of ferrous scrap wastes at the Project shall be orderly with adequate distance between stockpiles.

10.3 The base of the storage area for non-ferrous scrap waste shall be impervious. The storage area shall be clearly demarcated and shall not be accessible to unauthorised persons.

10.4 An inventory of ferrous and non-ferrous scrap wastes shall be established and maintained. The reports shall be made available to the EPA upon request.

10.5 Cutting of scrap metal shall be conducted within a controlled environment designed to control indoor and outdoor hazardous air emissions.

10.6 Used Lead Acid Battery (ULAB) shall be accepted **DRAINED**. Signage to this effect shall be clearly visible at the Project's entrance.

10.7 All residual acids in the ULABs shall be neutralized (i.e. mixing the residual acid with a base chemical such as Sodium Carbonate to attain a pH of 7).

10.8 Neutralizing base chemicals shall be stored in accordance with the manufacturer's directions or Safety Data Sheet (SDS) instructions.

10.9 Secondary containment (bunded area) shall be established and maintained around

storage areas of all liquid chemicals.

10.10 The secondary containment shall have the capacity to store 110% of the volume of the largest storage container and must be constructed of impermeable material such as concrete.

10.11 Used lead-acid batteries shall be stored upright on pallets which shall be inspected for signs of leakage or corrosion. Damaged pallets shall be replaced.

10.12 Acid spill occurring during handling or unloading operations shall be immediately cleaned, as guided by the respective Safety Data Sheet, and appropriately disposed to prevent discharges into surface or groundwater.

11.0 NOISE QUALITY MANAGEMENT

11.1 Adhere to the provisions of the **Environmental Protection (Noise Quality) Regulations, 2000.**

11.2 Comply with the Guyana National Bureau of Standards (GNBS) Guidelines for Noise Emission into the Environment at a distance of 15 m (50 ft) from the source or at the property boundary, whichever is closer.

Industrial Limits: **100 dB** during the daytime (06:00 h - 18:00 h)
80 dB during the night-time (18:00 h - 06:00 h)

11.3 Noise monitoring shall be conducted **quarterly** using a calibrated Noise Meter, at least 3.5 meters from any reflecting surface and 1.5 above ground. Records of each monitoring exercise shall be maintained and results submitted to the Agency as a component of the project's **Annual Report.**

11.4 All equipment and machinery shall be placed upon foundations properly designed to ensure effective damping of vibrations.

11.5 All significant noise-producing equipment, such as generators, shall be equipped with appropriate silencers or mufflers and/or are enclosed in suitable acoustic enclosures where necessary, to reduce noise levels impacting the surrounding environment to achieve compliance with Guyana National Bureau of Standards (GNBS) requirement.

12.0 FUEL HANDLING AND STORAGE

12.1 A register of the type and quantity of fuel stored onsite shall be established and maintained. Records shall be made available for inspection by the EPA upon request.

12.2 Fuel shall at all times be stored above ground and away from ignition sources. 'No Smoking' signs shall be posted where fuel is handled or stored.

12.3 The project shall install and maintain an oil-water separator at the final discharge point.

Secondary Containment

12.4 The secondary containment shall;

i. Possess 110% capacity of the volume of liquid stored within the largest storage container
ii. Walls shall be constructed of impermeable materials.

12.5 Discharge from the secondary containment directly into waterways is Strictly Prohibited. All effluent from the secondary containment shall be directed through the oil-water separator.

12.6 Secondary containment around the fuel tanks shall be inspected monthly for cracks and breakage to ensure they are liquid-tight to withstand the hydrostatic pressure of any contained liquid when full. A summarized inspection report shall be maintained and made available for inspection by the EPA upon request.

12.7 All secondary containment shall remain sealed, where existing piping enters or exits the containment through the wall. This area shall be sealed to provide total containment. No part of the tank infrastructure (e.g., dispenser, filing hoses, and valves) shall protrude outside the containment.

Fuel Tank

12.8 Fuel storage tanks shall be visually inspected monthly to verify their integrity. A summarised inspection report shall be compiled, maintained, and made available for inspection by the EPA upon request.

12.9 Protection measures such as painting and coating shall be maintained to minimise corrosion of the fuel tanks.

12.10 Maintenance and/or repair of fittings, pipes, and hoses shall be conducted in accordance with the manufacturer's specifications. A summarised inspection report shall be maintained and made available for inspection by the EPA upon Request.

12.11 The following labels shall be posted on ALL fuel storage tanks in accordance with the Global Harmonization Standards (GHS):

i. The name of the fuel stored,
ii. The tank capacity
iii. Warning signs ("Danger", "no-smoking", etc.)

Overfill Protection and Leak Detection

12.12 Overfill protection shall be installed and maintained on fuel tanks and may include an automatic shut-off device or an audible or visible overfill alarm.

12.13 The safe fill level shall be identified on the gauge and set at 90% to prevent overfilling. In the event of overfilling, all discharges shall be released into the containment bund.

12.14 Dispensing equipment shall be designed with the Best Available Technology (BAT) to minimise spills e.g. suction, pressure, or gravity systems.

12.15 During fuel transfer, the Best Available Technology/ Technique (BAT) shall be employed to capture fuel lost during fuel unloading to storage tanks and refueling equipment.

13.0 WASTE MANAGEMENT

13.1 In accordance with the **Environmental Protection (Litter Enforcement) Regulations, 2013**, promote good sanitation and solid waste disposal practices on site. Covered garbage receptacles shall be placed upon impervious base at strategic locations, both within and outside facility.

13.2 Burning of waste is **strictly prohibited**. All solid waste shall be disposed at an approved solid waste disposal site by an EPA Authorised Waste Disposal Company.

13.3 Good house-keeping, sanitary, and hygienic practices shall be maintained at all times. The Project's drains and surroundings shall be kept free of vegetation and litter.

13.4 Solid waste receptacles shall be secured when not in use.

13.5 Promote waste minimisation and the reuse and/or recycling of waste and other materials where practical.

13.6 Waste collection areas shall be kept clean. Dry methods shall be used when cleaning around waste handling and disposal areas (e.g., sweeping, use of absorbents).

13.7 Acid-contaminated waste shall be disposed of by an EPA-authorised Hazardous Waste Disposal Facility where applicable.

13.8 The disposal of bulk liquid waste at any Landfill is **STRICTLY** prohibited. Liquid waste is waste that;

i. Has a solids content of less than 20% and liberates free liquids when transported and or stored; or
ii. Does not produce free liquids when tested in accordance with the USEPA Paint Filter Liquids Test and liberates no free liquids when transported.

14.0 ENVIRONMENTAL EMERGENCY RESPONSE MANAGEMENT

14.1 The Project shall be equipped with the following:

i. An internal communications or alarm system capable of providing immediate emergency instruction to facility personnel.
ii. Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment.
iii. Water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.

14.2 Standard Operating Procedures (SOPS) shall be established for inspecting and maintaining safety and emergency equipment, security devices, and operating and structural equipment that are important to preventing, detecting, or responding to environmental or human health hazards. The SOP must be made available to the EPA upon request.

14.3 All employees shall be trained on the SOP outlined in **condition 8.2.** Records of training conducted must be made available to the EPA upon request.

14.4 All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, must be tested and maintained as necessary to assure its proper operation in time of emergency.

14.5 Aisle space must be maintained at the Project to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency.

14.6 An EPA-approved Emergency Preparedness Plan shall be maintained for the Project, and communicated to Staff and Contractors of the project. The Procedure shall include, but not be limited to:

i. Procedures to be followed in the event of Plant malfunction.

ii. The actions facility personnel must take to respond to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the Project.

iii. Systems for notification of national and local emergency response authorities

iv. The names and contact information of all persons qualified to act as emergency coordinators.

v. A list of all emergency equipment at the Project (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required.

vi. An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

vii. Clean-up Plan for the different areas of the operation.

viii. Analysis of potential accidents and the proposed responses.

14.7 All employees shall be trained on the Emergency Response Plan outlined in the EAMP referenced in **condition 8.6.** Records of training conducted must be made available to the EPA upon request.

15.0 COMPLIANCE MONITORING AND REPORTING

15.1 Notify the Environmental Protection Agency **within one (1) hour** of the occurrence of any environmental emergencies (e.g., oil spills, hazardous materials/wastes spill, sudden onset disaster, natural, technological or human-induced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood).

15.2 Make all employees, and third parties under your direction, aware of the conditions of the Environmental Authorisation and provide training on good environmental practices.

15.3 Monitor the implementation of the conditions of this Permit, insofar as they involve adherence by your employees.

15.4 Notify the Agency in writing of any change of name or ownership of the Permit Holder's facility within **thirty (30) days** after the change occurs.

15.5 Notify the Agency **within twenty-one (21) days** in event of death, bankruptcy, liquidation or receivership of the Permit Holder or if the Company becomes a party to an amalgamation.

15.6 Maintain and submit to the Agency records of the type, composition and quantity of contaminant released (i.e. any solid, liquid, gas, odour, sound, vibration, radiation, heat or combination of any of them).

15.7 Submit an **Annual Report** to the EPA on the progress of the operation and

compliance with the conditions under which this Permit was granted on or before **March 31, each year.**

15.8 Report to the Agency any non-compliance(s) with the Environmental Permit (Renewed):

i. Within **twenty-four (24) hours** of the time the Permit Holder becomes aware of the non-compliance, the anticipated manner in which it may endanger human health or the environment.

ii. Within **seventy-two (72) hours**, submit to the Agency a written report containing a description of the non-compliance, its cause and the period of non-compliance including exact dates and time.

iii. Submit a report to the Agency indicating the reasons and the anticipated time it is expected to continue if the non-compliance has not been corrected.

15.9 Comply with any lawful directions given by the EPA from time-to-time in furtherance of the implementation of any international or other obligation for the environmental protection of Guyana.

15.10 It is the responsibility of the Permit Holder to ensure the permitted activity and premises are secured and that all practicable steps necessary to prevent fires, explosions, leaks or suspected leaks and spills at the permitted premises are taken.

16.0 INSTITUTIONAL AUTHORITY/ LIABILITIES

16.1 The EPA reserves the right to conduct regular inspections of the Permit Holder's operation as part of its monitoring and enforcement requirements under the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection Regulations, 2000.

16.2 The EPA reserves the right to review/amend the conditions attached to this Permit which also includes the review and/or amendment of permit fees in consideration of any changes in fee schedule as determined by the Agency for projects of this nature.

16.3 The Permit Holder shall, at all times, allow entry to the permitted facility to any Officer designated by the EPA for the purposes of conducting inspections or any other legitimate business of the Agency. Pursuant to s.38 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana, it is an offence to assault, obstruct or hinder an authorised person in the execution of his/her duty under the said Act or its Regulations and the Permit Holder shall be liable to penalties prescribed under paragraph (c) of the Fifth Schedule for doing so.

16.4 The EPA shall have the right to cancel or suspend this Permit for breach of any of the terms and conditions contained herein.

16.5 The Permit Holder, his Servants and/or Agents shall be strictly jointly and severally liable as follows:

a. For any activity that causes, or is likely to cause pollution of the environment, unless the person takes all reasonable and practicable measures to prevent or minimise any resulting adverse effect, in accordance with Section 19(1)(a) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

b. For any activity which results in the discharge, release or entry into the environment of any contaminant in any amount, concentration or level in excess of that prescribed by the regulations or stipulated by this Permit, in accordance with Section 19(1)(b) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

c. The discharge or release of contaminants, such as hydraulic fluids, lubricants, fuel, or other industrial fluids relative to the Project, which are not stipulated herein, or by Regulations under the Environmental Protection Act, are strictly prohibited. Any such discharge or release shall be a violation of Section 19(1)(b) of the Environmental Protection Act, Cap 20:05, Laws of Guyana.

d. For the compensation of any Party who suffers any loss or damage as a result of the project. (s.19(3)(e)) Environmental Protection Act, Cap. 20:05, Laws of Guyana.

e. For any material or serious environmental harm caused by pollution of the environment, whether intentionally or recklessly, in accordance with section 39 (1), (2), (3) and (4) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

f. Any gross negligence or wilful misconduct resulting in serious risk, or adverse effects to the marine environment, biodiversity, protected species and natural habitat with respect to any release or discharge, spill, contaminant fluids, oil, or lubricants from any facilities permitted under this project.

g. For the payment of all costs and expenses related to the assessment of damage and investigations required, as a result of any pollution incidents attributable to the activity for which this Permit has been issued.

16.6 The Agency (EPA) shall notify the Permit Holder immediately of any written claim or notice sent by any Complainant seeking loss or damage for negligence as a result of the Permit Holder's lack of due care and diligence.

16.7 Should the Permit Holder contravene or is likely to contravene any condition of this Permit, the Agency (EPA) may serve him an enforcement notice, in accordance with s. 26 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

16.8 Where it appears to the Agency that the Permit Holder is engaged in any activity that may pose serious threat to natural resources or serious pollution of the Environment or any damage to public health, issue to the Permit Holder a Prohibition Notice, which may include an order to immediately cease the offending activity. See: s. 27 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

16.9 This Environmental Permit (Varied) is subject to other relevant authorities' approval.

16.10 This Environmental Permit (Varied) is effective for the period stipulated herein; **May 2023 to April 2028.**

16.11 This Environmental Permit (Varied) shall remain valid until **April 30, 2028,** unless otherwise suspended, cancelled, modified or varied, in accordance with the provisions of this Permit or the Environmental Protection Act, Cap. 20:05, Laws of Guyana, Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.

16.12 This Permit must be renewed by submitting a completed Renewed Application Form for Environmental Authorisation (Environmental Permit) to the Agency at least six months before this Permit expires, that is, no later than **October 31, 2027.**

16.13 Any late submission of renewal application(s) after the specified date as stated above, shall require the Permit Holder to pay, in addition to renewal fee, a late penalty fee (accruing at the time such obligation was first owed for renewal) at a rate of **two thousand dollars (GY$2000.00) per day for every day late, until such renewal application is submitted to the Agency**, without prejudice to any other rights of the Permit Holder in connection therewith.

16.14 Failure to comply with the requirements of this Permit or with applicable laws and regulations, whether existing or forthcoming, shall render the Permit Holder liable to prosecution and to penalties, inclusive of civil penalties, injunctive relief and imprisonment, as prescribed under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection Regulations and other applicable laws.

Signed by _____ on behalf of the Environmental Protection Agency.

Environmental Protection Agency

Mr. Kemraj Parsram
Executive Director

Executive Director

Date 2024.09.24

I hereby accept the above terms and conditions upon which this Environmental Permit (Modified) is granted and agree to abide by the Environmental Protection Act, Cap. 20:05, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, and any existing or forthcoming written law, guidelines, best practices, standards, codes of practice and other statutory or regulatory instruments made under this Act.

NAME	Sharone Delph
DATE	30th Sept, 2024
SIGNATURE	S Delph
DESIGNATION	Admin Assistant