



**RETURN RECEIPT REQUESTED**  
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July 14, 2022

Lene Ichinotsubo, P.E., Acting Chief  
Solid and Hazardous Waste Branch  
Environmental Management Division  
Hawaii State Department of Health  
2827 Waimano Home Road, Rm. #100  
Pearl City, HI 96782

Subject: Honolulu Resource Recovery Venture (HRRV)  
2021-2022 Annual Solid Waste Report

Ms. Lene Ichinotsubo,

Attached please find HRRV's annual summary report for the fiscal year 2021 through 2022 per Part II - Special Conditions, Section G. No. 44 of Solid Waste Permit No. IN-0049-11. We have separated the report into four attachments:

- Attachment A – Inbound Receipts. Type and tonnage or volumes of waste received, recycled, combusted, and disposed of from each area of the facility.
- Attachment B – Outbound Residue. Tonnage or volumes of ash and residue generated and disposed from each area of the facility.
- Attachment C – Storage Locations. Identification of disposition location for each waste stream from each area of the facility.
- Attachment D – Full Area Diversions. Dates, total number of days, and reasons that each area of the facility was not accepting MSW or was not in operation.

If there are any further questions, please call me at 682-0201 or Ms. Katelyn Asato at 808-682-0264.

Very truly yours,

Tony Waldo  
Facility Manager

KTA:jt  
220706tw

**Attachments**

cc: Ahmad Sadri, City and County of Honolulu  
George Drew (Covanta), E-mail

**EXHIBIT "I"**

**Attachment A**  
Inbound Receipts

Attachment A – Inbound Receipts. Type and tonnage or volumes of waste received, recycled, combusted and disposed of from each area of the facility.

| Material Type                       | Destination or Origination & Plant | Material Code             | Tonnage Received (1) | Recycled (2)                                                                               | Combusted | Disposed         |
|-------------------------------------|------------------------------------|---------------------------|----------------------|--------------------------------------------------------------------------------------------|-----------|------------------|
| <b>Municipal Solid Waste</b>        |                                    | 01, 02, 03,<br>04, 05, 06 | 732,956              |                                                                                            |           |                  |
|                                     | RDF                                | MOR                       | 445,531              | See Metals Recovered                                                                       | 417,716   | See Attachment B |
|                                     | Mass Burn                          | MOR                       | 305,494              |                                                                                            | 300,579   | See Attachment B |
|                                     | Waste Auxiliary Building           |                           | 2,543                |                                                                                            |           | See Attachment B |
| <b>Special Waste</b>                |                                    |                           | 1,285                |                                                                                            |           |                  |
|                                     | RDF                                | MOR                       | 17                   | See Metals Recovered                                                                       | 17        | See Attachment B |
|                                     | Mass Burn                          | MOR                       | 1,268                |                                                                                            | 1,268     | See Attachment B |
| <b>Unacceptable Waste (UAW) (3)</b> | RDF & Mass Burn                    | 13                        | 22                   |                                                                                            |           | See Attachment B |
|                                     | RDF UAW to Mass Burn               | 15                        | -*                   |                                                                                            | See note* |                  |
| <b>Metals Recovered</b>             |                                    |                           |                      | Sent to a Permitted Recycler (Island Recycling, Refrigerant Recycling, or Schnitzer Steel) |           |                  |
|                                     | RDF, Pre-Burn Ferrous              | 20, 23                    | 9,796                |                                                                                            |           |                  |
|                                     | RDF, BAMR Ferrous                  | 22                        | 1,832                |                                                                                            |           |                  |
|                                     | RDF, BAMR Non-Ferrous              | 21                        | 776                  |                                                                                            |           |                  |
|                                     | Mass Burn, BAMR Ferrous            | 32, 33                    | 10,109               |                                                                                            |           |                  |
|                                     | Mass Burn, BAMR Non-Ferrous        | 31                        | 1,637                |                                                                                            |           |                  |
| <b>Sludge</b>                       | Mass Burn                          | 52, 55                    | 16,869               |                                                                                            | 16,869    | See Attachment B |
| <b>Tires (4)</b>                    | Mass Burn                          | WPF                       | 33,596               |                                                                                            | 33,596    | See Attachment B |

(1) The tonnage is rounded up to a whole number.

(2) Recycled tonnage is tonnage extracted in the Waste Process Facility, and from the Bottom Ash Metals Recovery System

(3) The program PC Scale does not distinguish which facility the unacceptable material originated from.

(4) Tires tonnage is a total number of tires, not a tonnage of the tires.

\*Small quantities of WPF UAW were taken to Mass Burn. The tonnage combusted at Mass Burn is inclusive of the RDF UAW tonnage.

**Attachment B**  
Outbound Residue

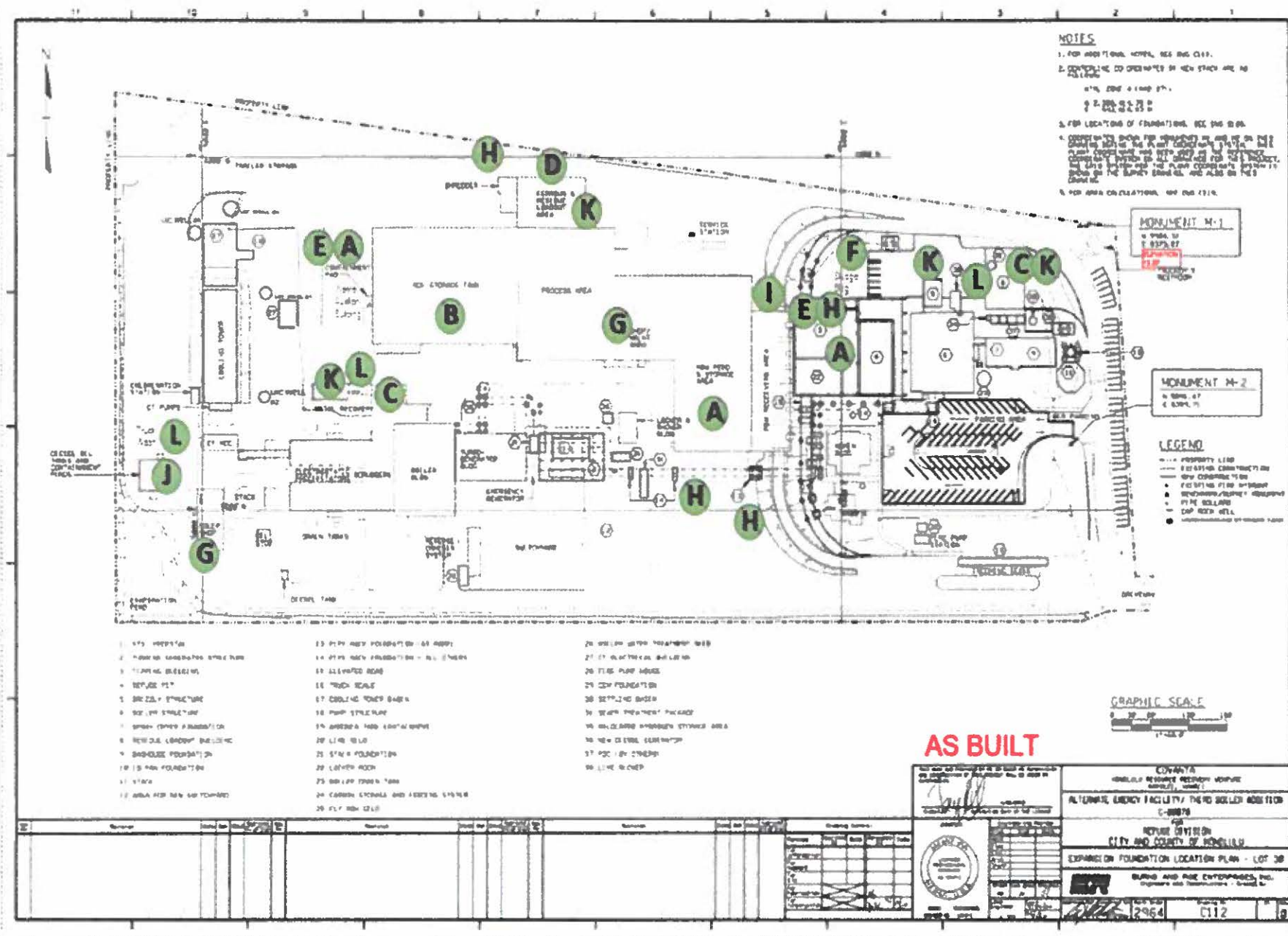
**Attachment B – Outbound Residue. Tonnage or volumes of ash and residue generated and disposed from each area of the facility.**

[illegible]

**Attachment C**  
Storage Locations

**Attachment C – Storage Locations. Identification of disposition location for each waste stream from each area of the facility.**

| <b>Map Code</b> | <b>Waste Stream</b>       | <b>Waste Disposition</b>                                                                                                              | <b>Disposal Method</b>                                                                                                                                                                                      |
|-----------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A               | Municipal Solid Waste     | Household trash, supplemental waste, and all other approved forms of waste.                                                           | Combustion or Processed into Refuse Derived Fuel (RDF).                                                                                                                                                     |
| B               | Refuse Derived Fuel       | MSW that was processed through a series of shredders, trommels, magnets, to refine MSW into a lighter highly combustible fuel source. | Combustion, RDF Plant                                                                                                                                                                                       |
| C               | Combined Ash              | Post-combustion residue, inert material.                                                                                              | Disposal at Waimanalo Gulch Sanitary Landfill                                                                                                                                                               |
| D               | Process Residue           | Fall-out MSW from process equipment (trommel), normally comprised of glass, plastic, sand, dirt, and non-combustible MSW.             | Disposal at Waimanalo Gulch Sanitary Landfill                                                                                                                                                               |
| E               | Tires                     | Passenger tires from C&C of Honolulu collection systems.                                                                              | Combustion, Mass Burn                                                                                                                                                                                       |
| F               | Sludge                    | Wastewater treatment plant biosolids; 20-25% moisture, non-hazardous material.                                                        | Combustion, Mass Burn                                                                                                                                                                                       |
| G               | Solvent                   | Non-combustable liquid solvent for parts and painting equipment                                                                       | Recycled - Unitek Solvent Services                                                                                                                                                                          |
| H               | Unacceptable Waste        | White goods, bulky metals (metal bookshelves, metal furniture), compressed cylinders, etc.                                            | Recycled - Transferred to either Schnitzer Steel Hawaii, or Island Recycling. Temporarily stored on tipping floors or just outside in large trailers until enough is generated to move offsite to recycler. |
| I               | Universal Waste           | Lamps, Bulbs, batteries                                                                                                               | Treated - EnviroServices                                                                                                                                                                                    |
| J               | Used Oil                  | Recyclable liquid product generated from fleet, heavy, and plant equipment maintenance.                                               | Recycled - Cameron Chemical                                                                                                                                                                                 |
| K               | Ferrous/Non-Ferrous Metal | Pre-burn and post-burn recovered ferrous and non-ferrous metal.                                                                       | Recycled - Transferred to either Schnitzer Steel Hawaii, or Island Recycling                                                                                                                                |
| L               | Sump Sludge               | Mostly liquid material mixed with ash and road grime; non-hazardous.                                                                  | Recycled - Mixed with ash discharger to cool the ash.                                                                                                                                                       |





**Attachment D**  
Full Area Diversions

Attachment D – Full Diversions. Dates, total number of dates, and reasons that each area of the facility was not accepting MSW or was not in operation.

| <b>Dates</b>           | <b>Number of Days</b> | <b>Reason for Diversion or Downtime</b>                                                                                     |
|------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 10/7/2021 - 10/11/2021 | 3.5                   | Boiler #3 offline for feed chute damage repair. Please refer to correspondence dated 10/12/2021.                            |
| 11/8/2021 - 11/12/2021 | 4                     | Boiler #3 feed table door repairs. Sludge was diverted during this period. Please refer to correspondence dated 10/12/2021. |
| 2/19/2022 - 3/8/2022   | 17                    | Boiler #3 annual maintenance outage. Please refer to correspondence dated 3/15/2022.                                        |
| 5/1/2022 - 5/5/2022    | 3                     | Boiler #3 tube rupture repair. Please refer to correspondence dated 5/13/2022.                                              |
| 5/10/2022 - 5/17/2022  | 7                     | RDF Boilers 1 and 2 common outage for turbine repairs. Please refer to correspondence dated 5/18/2022.                      |
| 6/29/2022 - 7/7/2022*  | 8                     | Fire in the Waste Processing Facility (WPF). Please refer to correspondence dated 7/12/2022.                                |

\*The Annual Report covers July 1, 2021 - June 30, 2022. This instance of downtime is being included in this report for consistency due to the overlapping of periods.