



Richland LLRW Site Update and Revenue Requirement

LLW Forum Spring 2023 Meeting

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Director, Radiological Programs
March 23, 2023

Republic Services

About

- Republic Services, Inc. is now the nation's leading environmental services provider. Through our subsidiaries (US Ecology, ACV Enviro, Ecoflo), we provide superior service offerings to ensure compliance while partnering with customers to create a more sustainable world.

Company Overview

- 39K employees
- 14M customers
- 1,000+ worldwide locations
- \$11B in revenue in 2021
- 95% customer retention
- 16K Trucks | 5th largest vocational fleet in the nation
- [View 2021 Sustainability Report](#)

Business Solutions

- Solid waste collection and disposal
- Recycling
- Dumpster rental
- Construction and demo
- Compactor solutions
- Environmental solutions



BARRON'S
MOST SUSTAINABLE
COMPANIES 2022



DJSI
NORTH AMERICA
INDEX™ 2021



3BL MEDIA
100 BEST CORPORATE
CITIZENS 2022



PEOPLE
COMPANIES THAT CARE
2021



CERTIFIED
**GREAT PLACE
TO WORK**
2017 - 2022



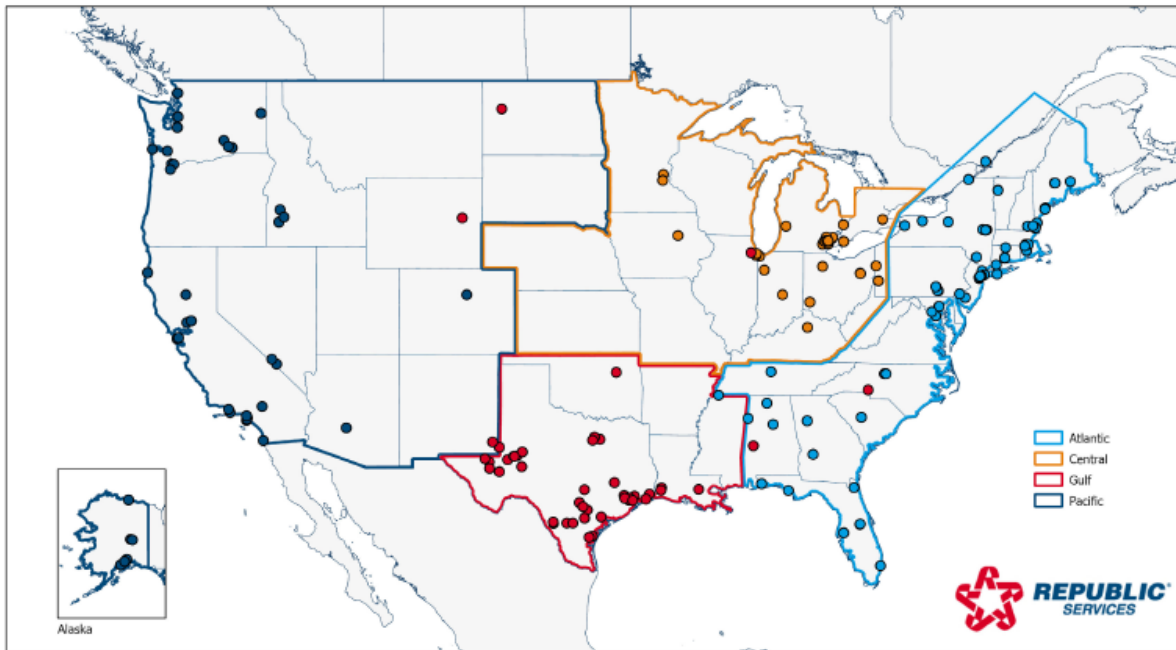
CDP
DISCLOSER 2021



**SUSTAINABILITY
YEARBOOK**
2022

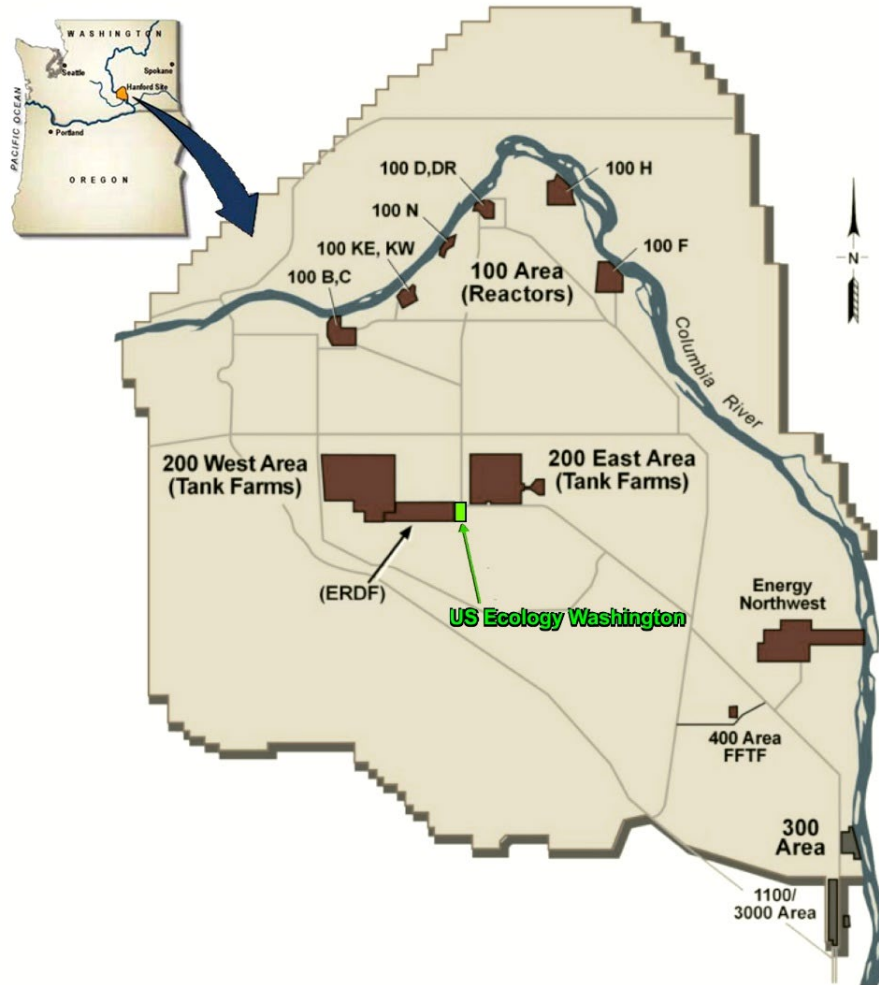


So, What's Changing?



- No changes to radioactive waste programs or services
- US Ecology will be part of larger “Environmental Solutions” Group within Republic
- Corporate HQ will be in Phoenix, AZ with Area offices throughout US
- US Ecology will be rebranded to Republic Services throughout 2023
- Location Name Changes
 - USEW → Richland Facility
 - USEI → Grand View Facility
 - USEM → Belleville Facility
 - USET → Robstown Facility
 - USEN → Beatty Facility

Richland Facility



- Part 61 LLRW Facility – 1 of 4 in United States
- Located on 100 acres within the DOE Hanford Reservation near Richland, WA
- Originally Licensed in 1965
- Designated NWIC Facility (Accessible to 11 states in NW & RM Compacts - January 1, 1993)
- Operates through sublease agreement with State of WA
- Rate-regulated by WA Utility & Transportation Commission

Washington License & Accepted Waste

- WDOH License # WN-I019-2, Amendment 42 (recently renewed)
- Expires July 31, 2027

- Class A, B and C LLRW in the Northwest and Rocky Mountain Compacts
- NORM/TENORM/NARM acceptable from generators nationwide
- High-activity sealed source capabilities
- All waste arrives by truck

State of Washington
Radioactive Materials License

Page 1 of 26

License Number: WN- I019-2

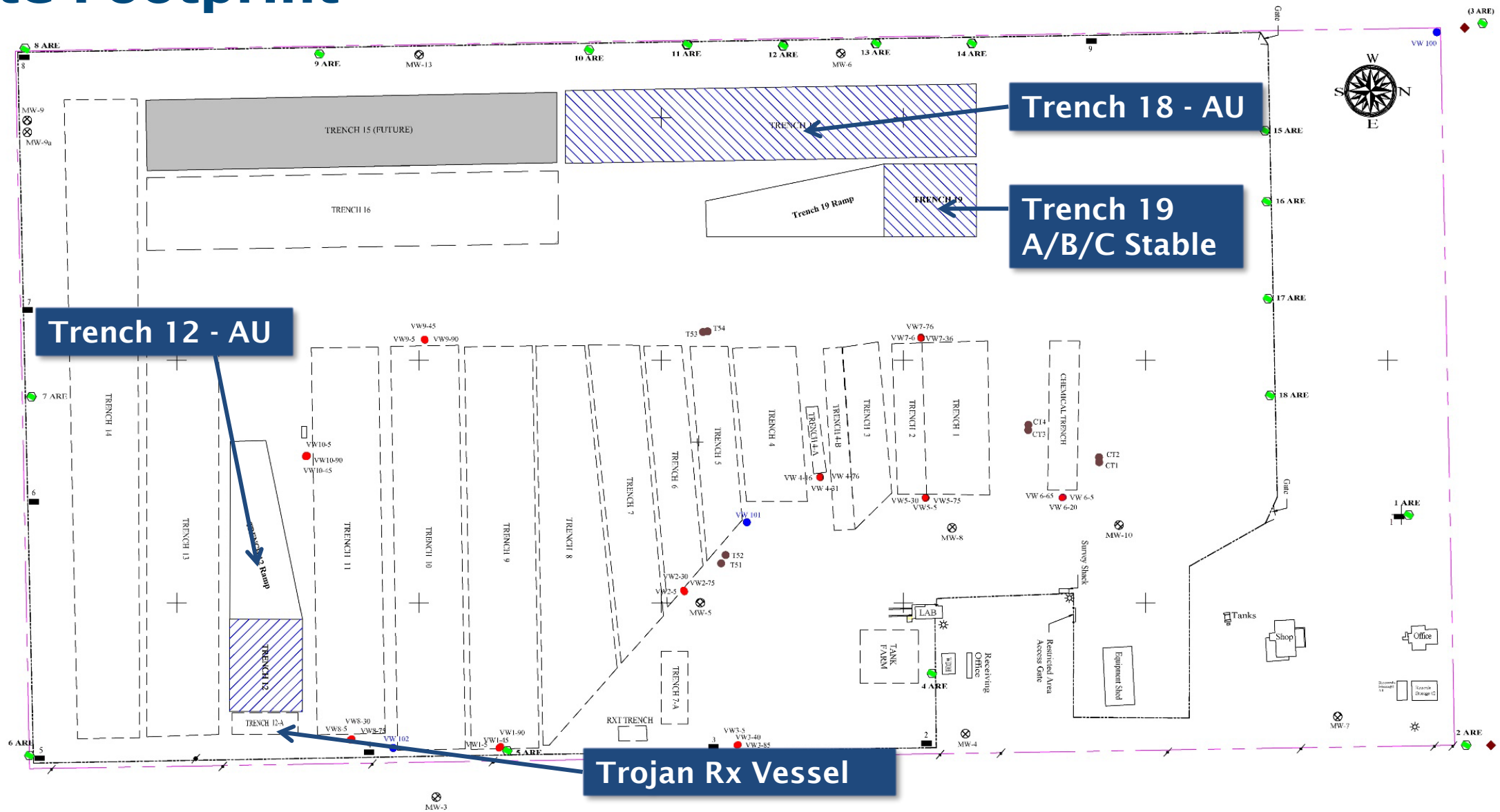
Pursuant to the Nuclear Energy and Radiation, chapter 70A.388 RCW, and the Radiation Protection Regulations, chapters 246-220 through 246-254 WAC, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated below; and to use such radioactive materials for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations promulgated by the State of Washington Department of Health.

| | |
|---|--|
| 1. License Name: US ECOLOGY WASHINGTON, INC. | 3. License Number: WN-I019-2 RENEWAL Amendment 42 |
| 2. Address: 1777 TERMINAL DRIVE RICHLAND, WASHINGTON 99354 Attn: Mike Ault, Facility Manager | 4. Expiration Date: July 31, 2027 |
| | 5. Reference Number(s): |

| | | |
|--|---|--|
| 6. Radioactive Material (element and mass number). | 7. Chemical and/or Physical Form. | 8. Maximum quantity licensee may possess at any one time. |
| 6.A. Any radioactive material, excluding source material and special nuclear material. | 7.A. Dry packaged radioactive waste except as authorized by this license. | 8.A. 60,000 Curies (2.22 x 10 ¹⁵ Becquerels). |
| 6.B. Source material. | 7.B. Dry packaged radioactive waste except as authorized by this license. | 8.B. 36,000 kilograms. |
| 6.C. Special nuclear material. | 7.C. Dry packaged radioactive waste except as authorized by this license. | 8.C. 350 grams of U ²³⁵ or 200 grams of U ²³³ or 200 grams of plutonium or any combination of these, provided the sum of the ratios of the quantities does not exceed unity. |
| 6.D. Any radioactive material. | 7.D. Check and calibration sources in any form. | 8.D. 0.1 Curie (3.7 x 10 ⁹ Becquerels). |



Site Footprint

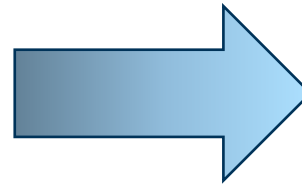


Richland Aerial Photograph ~2018

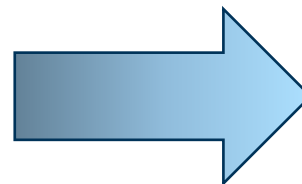


Class A Unstable Waste Trenches

Trench 18



Trench 12



Trench 19 –Class A/B/C Stable Trench

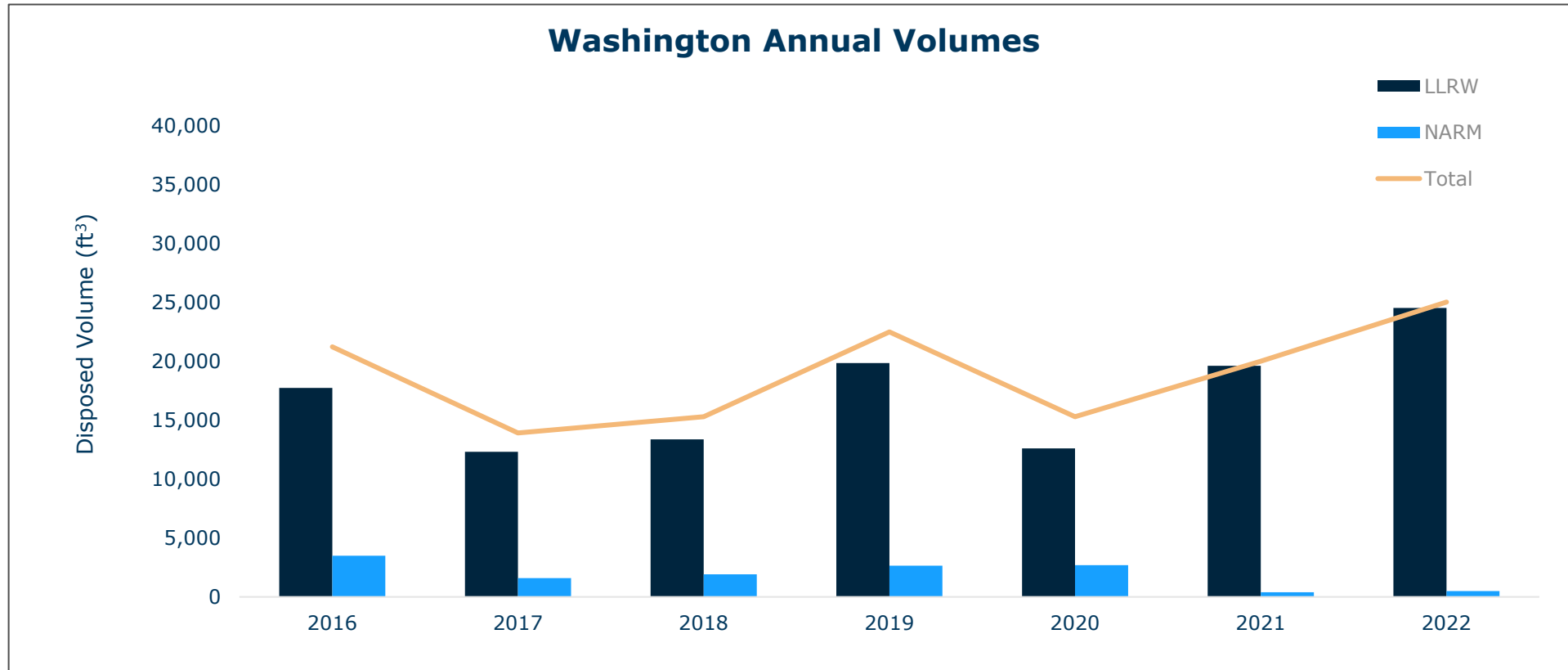


ECBs

Below Grade
Caissons

Washington Historical Volumes

- Washington Facility has received an annual average volume of $\sim 19,000 \text{ ft}^3$ (2016-2022) from generators within the Northwest and Rocky Mountain Compacts
- Approximately 50% of volume is generated at Energy Northwest Columbia Generating Station
- Ample capacity remains to support generator needs through lease expiration in 2056



All values in cubic feet (ft³)

Richland Revenue Requirement

- USEW operates under a base Revenue Requirement (RR)
- Submitted for approval by WUTC every 6 years
- Facility Cost of Operation @ 71% operating ratio
- Annual adjustments to RR based on core inflation metrics
- Uncollected amounts may be rolled over into next year's Rev Req

Richland Revenue Requirement

- Rates are set using generator supplied volume estimates
 - Total Rate = Rev Req / Volume Estimates*
- Base Rates set in January and adjusted in May of each year
- Revenue Requirement is split into 5 categories
 - Site Availability (22%)
 - Volume (31.6%)
 - Shipments (10.7%)
 - Containers (21.5%)
 - Dose Rate (14.2%)
- Overcollection in any category results in generator refunds

**Adjusted using a safety margin*

Richland Revenue Requirement

| Year | Base RR Adjusted by Inflation | Total Prior Year Carryover | Final RR |
|-------------|--------------------------------------|-----------------------------------|-----------------|
| 2018 | \$5,976,482 | \$1,895,058 | \$7,871,540 |
| 2019 | \$6,151,681 | \$1,727,783 | \$7,879,464 |
| 2020 | \$6,255,450 | \$166,477 | \$6,421,927 |
| 2021 | \$6,329,230 | \$182,964 | \$6,512,194 |
| 2022 | \$6,584,107 | \$92,239 | \$6,676,346 |

Richland Revenue Requirement

| Year | Revenue Requirement Components | RR Rate Components | | | | | |
|-------------|---|--------------------------------|--------------------|------------------|--------------------|--------------------|--------------------|
| | | Site Availability Charge (SAC) | Volume | Shipments | Containers | Dose Rate | TOTAL |
| | | 22.0% | 31.6% | 10.7% | 21.5% | 14.2% | 100% |
| 2022 | Base Revenue Requirement | \$1,448,504 | \$2,080,578 | \$704,499 | \$1,415,583 | \$934,943 | \$6,584,107 |
| 2021 | Carryover/\$-0- if Refund | \$60,588 | \$31,651 | \$-0- | \$-0- | \$-0- | \$92,239 |
| 2022 | SAC Under-recovery Allocated to Other Rate Components | \$(832,044) | \$337,084 | \$114,140 | \$229,345 | \$151,475 | - |
| 2022 | Final Rev Requirement | \$677,048 | \$2,449,313 | \$818,639 | \$1,644,928 | \$1,086,418 | \$6,676,346 |

Richland 2023 Rates

A. SITE AVAILABILITY CHARGE

1. Rates

| <u>Block</u> | <u>Block Criteria</u> | <u>Annual Charge per Generator</u> |
|--------------|--|------------------------------------|
| 0 | No site use at all..... | \$411 |
| 1 | Greater than zero but less than or equal to 10 ft ³ and 50 mR/h..... | 785 |
| 2 | Greater than 10 ft ³ or 50 mR/h* but less than or equal to 20 ft ³ and 100 mR/h* | 1,507 |
| 3 | Greater than 20 ft ³ or 100 mR/h* but less than or equal to 40 ft ³ and 200 mR/h* | 2,891 |
| 4 | Greater than 40 ft ³ or 200 mR/h* but less than or equal to 80 ft ³ and 400 mR/h* | 5,553 |
| 5 | Greater than 80 ft ³ or 400 mR/h* but less than or equal to 160 ft ³ and 800 mR/h* | 10,664 |
| 6 | Greater than 160 ft ³ or 800 mR/h* but less than or equal to 320 ft ³ and 1,600 mR/h*..... | 20,452 |
| 7 | Greater than 320 ft ³ or 1,600 mR/h* but less than or equal to 640 ft ³ and 3,200 mR/h*..... | 39,272 |
| 8 | Greater than 640 ft ³ or 3,200 mR/h* but less than or equal to 1,280 ft ³ and 6,400 mR/h*..... | 75,392 |
| 9 | Greater than 1,280 ft ³ or 6,400 mR/h* but less than or equal to 2,560 ft ³ and 12,800 mR/h*..... | 144,752 |
| 10 | Greater than 2,560 ft ³ or 12,800 mR/h* but less than or equal to 5,120 ft ³ and 25,600 mR/h*..... | 170,591 |
| 11 | Greater than 5,120 ft ³ or 25,600 mR/h* | 170,591 |

* For purposes of determining the site availability charge, mR/hour is calculated by summing the mR per hour at container surface of all containers received during the year.



Richland 2023 Rates

DISPOSAL RATES

- 1. Volume: \$194.80 per cubic foot
- 2. Shipment: \$16,140 per manifested shipment
- 3. Container: \$13,750 per container on each manifest.
- 4. Exposure:

| Block No. | Dose Rate at Container Surface | Charge per Container |
|-----------|---|----------------------|
| 1 | Less than or equal to 200 mR/h | \$114 |
| 2 | Greater than 200 mR/h but less than or equal to 1,000 mR/h | 8,110 |
| 3 | Greater than 1,000 mR/h but less than or equal to 10,000 mR/h | 32,450 |
| 4 | Greater than 10,000 mR/h but less than or equal to 100,000 mR/h | 48,700 |
| 5 | Greater than 100,000 mR/h | 818,500 |

**Do you
have any
questions?**



Contact Us!



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