



## *US Ecology Washington and Idaho Updates*

LLW Forum Fall 2021 Meeting

Joseph J. Weismann, CHP  
October 13, 2021

## Agenda

- US Ecology Overview
- US Ecology Washington Update
- US Ecology Idaho Update
- Q&A

# Our Guiding Principles

## Ongoing Focus *Perfect Sight*

**Why We Exist**

To provide safe and compliant solutions to protect human health and the environment

**Our Vision**

To be the premier provider of comprehensive environmental services

**Permission to Play**

- Safety and Compliance
- Protecting the Environment
- Doing the Right Thing, the Right Way
- Living the Humble, Hungry and Smart Virtues

**How We Win!**

- Service Excellence
- Being a Trusted Partner
- Innovative Solutions
- Being "One Team"

## Building a North American Leader

**Selected Acquisitions from 2010 – 2020**  
(In 2009, US Ecology's operations encompassed three hazardous waste landfills and one radioactive wastelandfill)

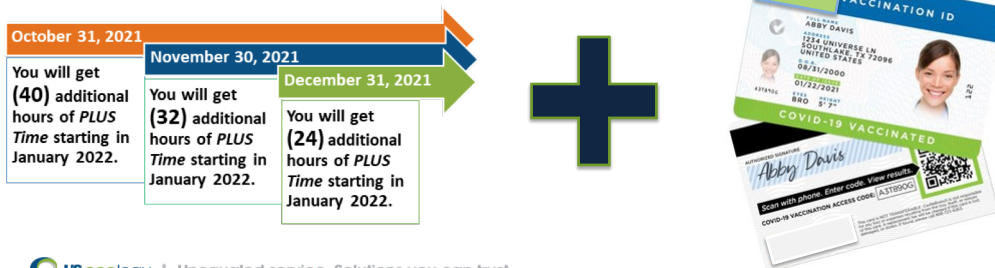
Acquisitions	Benefits
 NRCC (2019)	<ul style="list-style-type: none"> <li>• Leadership in Emergency Response and Coast to Coast field services network</li> <li>• Specialty Energy Waste capabilities in key oil and gas basins in Texas (Permian and Eagle Ford)</li> </ul>
 (2014)	<ul style="list-style-type: none"> <li>• Expanded waste infrastructure coast-to-coast</li> <li>• Added Midwest hazardous waste landfill</li> <li>• Expanded into Field Services</li> </ul>
 STABLEX a US Ecology company (2010)	<ul style="list-style-type: none"> <li>• Expanded hazardous waste treatment and landfill capabilities into Canada and Northeast</li> <li>• Specialized Mercury handling capabilities</li> </ul>
<b>Other Tuck-in Acquisitions</b>	Dynecal   ESI   eVOQUA   ES&H of   ecosERV Canada   Vernon   Dallas   a US Ecology company

**Legend**

- Service Center w/ 10-day Transfer
- Treatment/Recycling Facility
- Disposal Facility
- OSRO Tier 2 Base
- OSRO Tier 3 Base
- Regional Support Center

## COVID-19 Vaccination Incentive

- US Ecology is implementing a COVID vaccination incentive program for our Team Members
- Up to 40 hours of additional 2022 PTO can be earned if proof of vaccination is provided prior to 10/31/21
- Partnering with 3<sup>rd</sup> party provider for tracking and to provide vaccination IDs

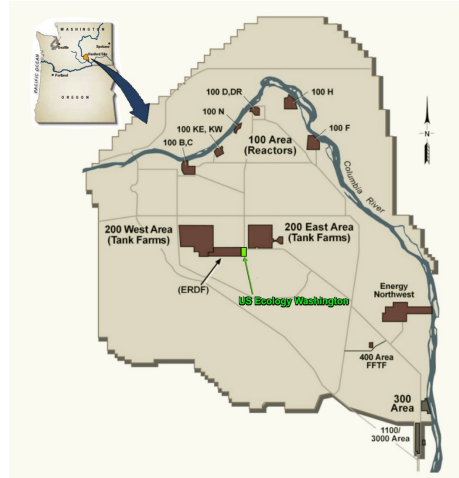


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## US Ecology Washington

## US Ecology Washington: Richland Facility

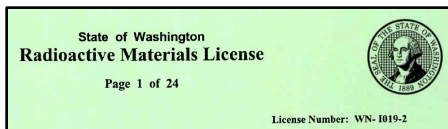
- NWIC Designated Facility. Also available to RMLLWC
- Located on 100 acres within the Hanford Reservation
- Originally licensed in 1965
- Operates through lease agreement with the State of Washington. Expires 2056
- Rate-regulated by WUTC
- Compact Class A/B/C LLRW + NARM/Exempt Nationwide



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## US Ecology Washington: Richland Facility

- WDOH license renewal submitted in Oct 2018
- License Currently in Timely Renewal
- Renewal term is 5 years



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## USEW Annual Volumes

2014: 20,466.8 ft<sup>3</sup>  
 2015: 27,400.1 ft<sup>3</sup>  
 2016: 21,218.1 ft<sup>3</sup>  
 2017: 13,809.7 ft<sup>3</sup>  
 2018: 15,285.5 ft<sup>3</sup>  
 2019: 18,695.2 ft<sup>3</sup>  
 2020: 12,601.5 ft<sup>3</sup>

Site has ample capacity to last through life of lease. (2056)



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## USEW Revenue Requirement

- USEW Operates Under a Base Revenue Requirement
  - Set by WUTC every 6 years
  - Facility Cost of Operation + 29% margin
- Adjustments to Rev Req are allowed based on over/under collection
  - Overcollection in any category results in generator refunds
  - Uncollected amounts may be rolled over into next year's Rev Req

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## USEW Revenue Requirement

- Rates are set using generator supplied volume estimates
  - Total Rate = Rev Req / Generator Volume Estimates\*
  - Rate Total is then split into 5 categories
- Rev Req Categories
  - Site Availability (22%)
  - Volume (31.6%)
  - Shipments (10.7%)
  - Containers (21.5%)
  - Dose Rate (14.2%)

*\*may be adjusted using a safety margin*

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## USEW Revenue Requirement Last 5 years

Year	Base RR	Total Adjustments	Final RR
2017	\$5,859,534	\$370,747	\$6,230,381
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	\$6,329,231	\$182,963	\$6,512,194

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## 2021 Revenue Requirement

		RR Rate Components					
		Site Availability Charge (SAC)	Volume	Shipments	Containers	Dose Rate	TOTAL
<b>Year</b>	Revenue Requirement Component	22.0%	31.6%	10.7%	21.5%	14.2%	<b>100%</b>
<b>2021</b>	Base Revenue Requirement	\$1,392,430	\$2,000,037	\$677,228	\$1,360,785	\$898,751	<b>\$6,329,231</b>
<b>2020</b>	Carryover	\$100,757	\$0	\$82,207	\$0	\$0	<b>\$182,963</b>
<b>2021</b>	SAC Under-recovery Allocated to Other Rate Components	(\$603,943)	\$244,674	\$82,848	\$166,472	\$109,949	-
<b>2021</b>	<b>Final Revenue Requirement</b>	<b>\$889,244</b>	<b>\$2,244,711</b>	<b>\$842,283</b>	<b>\$1,527,256</b>	<b>\$1,008,699</b>	<b>\$6,512,194</b>

US Ecology Idaho

## US Ecology Idaho – Grand View, ID

- RCRA Sub-C TSDF
- Capacity: 10M+ yd<sup>3</sup> permitted, 18M+ yd<sup>3</sup> additionally sited
- NORM, TENORM, Exempt VLLW (Byproduct, Source, and SNM)
- High-capacity RTF with 15k feet of rail track
- New Treatment Building completed and opened in 2021



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## USEI New Waste Treatment Building





## New Grand View Performance Assessment

### Highlights

- Replacing RESRAD with GoldSim Model
- More realistic modeling and dose assessment based on arid climate conditions
- New approach to pathway analysis – *Realistic vs Overly Conservative*
- Inadvertent Intruder scenarios built in
- Multiple closure cover designs incorporated

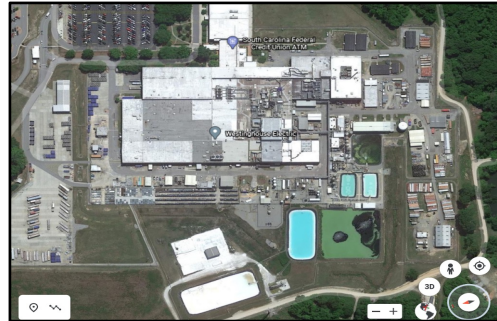
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## Project Case Study – Westinghouse CFFF

- Columbia Fuel Fabrication Facility, Columbia, SC
- Received first 20.2002 ADR Approval to USEI on 11/30/2020
- Remediation, Transportation and Disposal of East Lagoon (CaF + low concentrations of SNM) ~25pCi/g U-235



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## Project Case Study – Westinghouse CFFF

- 20.2002 ADR also includes dismantling of 526 retired UF<sub>6</sub> cannisters for disposal
- Decontaminated cannisters being segmented and packaged for T&D to Idaho

### Current Status

- East Lagoon shipments are complete
- Over UF<sub>6</sub> 400 cylinders have been shipped
- Secondary ADR recently submitted to NRC
  - Similar wastes: CaF, Lagoon Sludges, UF<sub>6</sub> Cylinders, and other volumetric and surface contaminated materials
  - Specified annual volumes of material (over 4 yrs)



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## Very Low-Level Waste Considerations

- Proposed Interpretive Rule** - "Transfer of Very Low-Level Waste To Exempt Persons for Disposal" was withdrawn by NRC on 12/17/20
- VLLW Scoping Study** - On June 1, 2021, in SECY-21-0057 – Results of the Very Low-Level Waste Scoping Study, NRC published that the Staff "plans to continue with the current regulatory framework for VLLW"



- 10CFR61 as LLRW
- ADRs via 10CFR 20.2002
- A/S Exemption/Authorization (BSFR, WCS)

**Key Takeaway – Current commercial VLLW solutions (both capacity & access) are ample to meet forecasted NPP decommissioning needs**

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# Questions?

## Contacts

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