Outline

• Permitting
• Holistic negotiations
• TPA milestone negotiations
Permitting: education/status

- Ecology has more than 50 modifications to the Hanford hazardous waste permit in progress right now
  - There were 23 public comment periods in 2020
  - Multiple, sometimes concurrent public comment periods are required, but challenging to follow

- How does someone know what to comment on?
A quick introduction

- 34 facilities where hazardous waste was or is being Treated, Stored or Disposed of (also called TSD)
  - These facilities are called “units groups” in the Hanford hazardous waste permit
  - The 149 single shell tanks are 1 unit group
- Many of these unit groups have chapters in the current Hanford permit
  - Any of the chapters can be modified at any time
  - Some of the modifications are subject to public comment
- All of the units groups will have chapters when a new permit is issued
- More than 3,500 Hanford locations where waste was possibly spilled, leaked, or intentionally disposed (past practices) – 1,500 in Central Plateau
  - Tens to hundreds of these locations are bundled into cleanup decisions under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA or Superfund)
  - Public comment is done via CERCLA process, not the Hanford permit
Current permit vs. Re-issued permit

- 1943: Hanford starts up
- 1984: RCRA deemed applicable to Federal facilities (LEAF v. Hodel)
- 1989: Tri-Party Agreement signed with a purpose to develop a permit for Hanford facilities that treated, stored, or disposed of hazardous waste
- 1994: first Hanford permit was issued
  - Not all operating groups were included because of the size and complexity of Hanford
  - Additional groups were scheduled to be added until all were included
- 2004: Hanford permit “expired”
  - Regulations limit the term of a permit to 10 years
  - Permittees can continue to operate on an “expired” permit
  - The current permit will continued to be modified, until it’s re-issued
- 2022 (Dec): expected re-issue of the permit for public comment
Classes of permit modifications

- Class 1 and 1’ changes
  - Least significant. Permittee may put them into effect, and Ecology approves them quarterly

- Class 2
  - More significant. Single public comment period run by the permittee.

- Class 3
  - Most significant.
  - One public comment period run by the permittee.
  - One subsequent public comment period run by Ecology.

- Agency-initiated modification
  - Ecology starts modifications without a request from the permittee.
  - One public comment period run by Ecology.
Hanford Site-wide Permit Rev. 8c Permit Modifications

- Class 1 and 1 Prime, 31
- Class 3, 15
- Class 2, 5
- Agency-Initiated, 3
Hanford Site-wide Permit Rev. 8c Permit Modifications by Unit Group

Hanford Site-wide Permit, Revision 8c Modifications

- Class 1 and 1 Prime
- Class 2
- Class 3
- Agency-Initiated
Acronyms Legend

HFSW: Hanford Facility Site Wide
LAWPS: Low Activity Waste Pre-Treatment
LERF-ETF: Liquid Effluent Retention Facility-Effluent Treatment Facility
242-A: 242-A Evaporator
WTP: Waste Treatment Plant
IDF: Integrated Disposal Facility
400 Area WMU: 400 Area (Fast Flux Test Facility) Waste Management Units
CIS: Cesium Interim Storage
WESF: Waste Encapsulation Storage Facility

PUREX: 221-A Building aka PUREX Plant
Attachment 4A: attachment to the permit
“Building Emergency Directors/Building Wardens
SST: Single Shell Tank System
324: 324 Building
325: 325 Building
CWC: Central Waste Complex
Example description of a permit modification available for public comment

This modification proposes allowing facility upgrades associated with the new waste transfer lines from the Double-Shell Tank (DST) System to the 242-A Evaporator. The original transfer lines failed pressure tests in 2018 and must be replaced. Specifically, this modification allows penetrating a wall to install the transfer lines and to perform modifications in the pump-room. These new transfer lines will allow 242-A Evaporator to continue to treat DST waste, reducing DST waste volume, and allowing for continued Single-Shell Tank waste retrievals.

The transfer lines themselves are administratively controlled by the DST system and are being built under applicable interim status regulations. Construction of the lines is not a part of this permit modification.

https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods##Open
Example description of a permit modification in an Ecology presentation

The 242-A Evaporator Class 2 Permit Modification to include penetrations in the facility for upgraded double-shell lines has been reclassified to a Class 3 permit modification. The permittees provided IQRPE* documentation and there were technical issues with the documentation. (February-March 2021)

*Independent Qualified Registered Professional Engineer
Example Documents made available for the public comment period

**Focus sheet**
- Transmittal letter
- Cover sheet

**Fact sheet**
- Conditions
- Process Information
- RPP-IQRPE-50066
- RPP-IQRPE-50067
- Determination of Significance and Notice of Adoption (SEPA)
- Response to comments
- ECN-715003 Rev01 Stamped
- ECN-715004 Rev01 Stamped

- ECN-715005 Rev00 Stamped
- H-2-98988-2 R21 P&ID Evap Recirc System
- H-2-98989-1 R29 P&ID Slurry System
- CH-14-111832 R1 Wall Nozzle Assemblies 242-A Pump Room
- UH-14-111834 R0 Jumper Assembly 41-5 242-A Pump Room
- H-14-111835 R0 Jumper Assembly 43-13A 242-A Pump Room
- MT-50400 R1 242-A Evaporator Waste Transfer Line Replacement
- RPP-CALC-63208-01 Structural Analysis 242-A Pump Room Wall Nozzle Assemblies Plus Counterweight Lifting Devices
- RPP-CALC-63211 ASME B31.3 Analyses New SL-170 SL-171 SL-172 SN-275 WTL 241-AW Tank Farm
- RPP-CALC-63213 ASME B31.3 Analyses 41-5 43-13A Jumpers 242-A Evaporator Pump Room
- RPP-CALC-63214 242-A Evaporator Pump Room Jumpers Supporting Analyses
- RPP-RPT-61521 Material Compatibility Report Project T1P207 DST Replacement Waste Transfer Lines 241-AW
Holistic negotiations

- Ecology proposed holistic negotiation of tank waste retrieval, treatment
- Sessions are being facilitated by mediators from the Federal Mediation and Conciliation Service
- EPA is participating in the sessions in addition to USDOE, US Department of Justice, Ecology, and the Washington Attorney General Office
- Per a mediation agreement, the parties will not discuss status or progress during the negotiations
- Meetings continue to occur
Tri-Party Agreement negotiations
transuranic mixed waste

• M-91 milestone series addresses transuranic mixed waste in storage at the Central Waste Complex (CWC) or retrievably stored in the Central Plateau burial grounds across the road from CWC
  ▪ Milestone adjustments were required because of the shutdown then slow down at the Waste Isolation Pilot Plant (WIPP)
  ▪ Also the WIPP closing date was extended from 2030 to 2050
    – DOE agreed to ship 99% of the waste off site by 2040
▪ Tri-Parties signed a Tentative Agreement with draft milestones
▪ March 9: ListServ notice of upcoming public comment period
▪ April 26 – June 14 comment; May 13 virtual public meeting
Tri-Party Agreement negotiations
Central Plateau milestones (continued)

• Federal Fiscal Year 2018, 2019, and 2020 Appropriations by Congress were less than needed to achieve TPA milestones
  ▪ TPA allows DOE-RL to propose changes to milestones in response to congressional budget appropriations that are less than estimated funding levels required

• September 2019, the Parties formed a team to develop an alternative approach
  ▪ Accelerate cleanup decisions,
  ▪ Ensure consistent remedies for similar waste sites,
  ▪ Reduce characterization pre-Record of Decision (ROD), and
  ▪ Conduct focused confirmatory characterization post-ROD

• Team reached agreement!

March 2021 the lead negotiators couldn’t agree on milestone changes
- DOE planned budgets are a limiting factor

Negotiations have been elevated to Tri-Party managers (3/18/2021)