PUREX STORAGE TUNNELS
ADDENDUM I
INSPECTION REQUIREMENTS

CHANGE CONTROL LOG

Change Control Logs ensure that changes to this unit are performed in a methodical, controlled, coordinated, and transparent manner. Each unit addendum will have its own change control log with a modification history table. The "**Modification Number**" represents Ecology's method for tracking the different versions of the permit. This log will serve as an up to date record of modifications and version history of the unit.

Modification History Table

Modification Date	Modification Number
09/30/2010	

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I. INSPECTION REQUIREMENTS

This ~~A~~addendum discusses the inspection requirements for dangerous waste management units within the Plutonium Uranium Extraction Facility (PUREX) Storage Tunnels. ~~-~~The PUREX Storage Tunnels are permitted as miscellaneous units under Washington Administrative Code (WAC) 173-303-680 and comprise Closing Unit Group 25.

I.1 PUREX ~~Storage~~ Tunnel~~s~~ Number 1

PUREX Tunnel Number 1 has been filled with grout, and personnel entry is no longer possible. ~~Because waste within the PUREX Storage Tunnels is inaccessible and exposure to the mixed waste would be extremely hazardous to personnel, inspection~~ Inspection of the tunnel interior cannot~~will not~~ be performed. External inspections of the tunnel~~s~~ will be performed annually. Annual inspections are sufficient because the waste is encapsulated with grout minimizing the potential for structural failure and release of dangerous waste constituents to the environment through normal aging of the structure. The identified inspection frequency is sufficient to detect the types of problems defined in Table I.1. ~~-~~The inspection schedule ~~, log,~~ and records will be maintained in the Hanford Facility Operating Record, PUREX ~~Storage~~ Tunnel~~s~~ Number 1 File for a minimum of 5 years.

Information from inspections will be recorded on ~~inspection logs~~inspection record forms. The ~~log~~ forms are used to initiate corrective action if necessary. The elements inspected at ~~the PUREX Storage~~ Tunnel~~s~~ Number 1 are identified in Table I.1. Abnormal conditions are recorded, evaluated, and corrective action initiated as necessary. Abnormal conditions means changes from previous observations of the exterior conditions of the tunnel that have the potential to affect the safe storage of dangerous wastes.

Table I.1. Inspection Schedule for Tunnel Number 1

Requirement Description	Inspection Frequency	Types of Problems
Perform external surveillance of PUREX Storage Tunnel~~s~~ Number 1	Annual	External surfaces of ~~the~~ PUREX Storage Tunnel~~s~~ Number 1 are observed for evidence of structural deterioration. Tunnel subsidence and~~,~~ erosion of the earth cover~~, and vent stack damage~~ are of primary concern. The points of access to ~~the PUREX Storage~~ Tunnel~~s~~ Number 1 are inspected to ensure warning signs are in place, visible, and legible.

I.2 PUREX Tunnel Number 2

PUREX Tunnel Number 2 will be filled with grout during interim closure activities. The inspection requirements before and after grouting are described below.

Personnel access into Tunnel Number 2 is prohibited because of the threat of structural failure. During and after grouting, personnel entry will not be possible. Thus, inspection of the tunnel interior will not be performed. Video surveillances of the exterior of the tunnel are performed and documented and will continue daily until grouting is completed. External visual inspections of the tunnel will be performed annually. Annual inspections are sufficient because the waste will be encapsulated with grout minimizing the potential for structural failure and release of dangerous waste constituents to the environment through

normal aging of the structure. The identified inspection frequency is sufficient to detect the types of problems defined in Table I.2. The inspection schedule and records will be maintained in the Hanford Facility Operating Record, PUREX Tunnel Number 2 File for a minimum of 5 years.

Information from inspections will be recorded on inspection record forms. The forms are used to initiate corrective action if necessary. The elements inspected at Tunnel Number 2 are identified in Table I.2. Abnormal conditions are recorded, evaluated, and corrective action initiated as necessary. Abnormal conditions means changes from previous observations of the exterior conditions of the tunnel that have the potential to affect the safe storage of dangerous wastes.

Table I.2. Inspection Schedule for Tunnel Number 2

Requirement Description	Inspection Frequency	Inspection Method	Types of Problems
Perform external surveillance of PUREX Tunnel Number 2	Annual	Visual	External surfaces of PUREX Tunnel Number 2 are observed for evidence of structural deterioration. Tunnel subsidence and erosion of earth cover are of primary concern. The points of access to Tunnel Number 2 are inspected to ensure warning signs are in place, visible, and legible.
Perform external surveillance of PUREX Tunnel Number 2	Daily until interim closure grouting activities are complete	Video	External surfaces of PUREX Tunnel Number 2 are observed for evidence of structural deterioration. Tunnel subsidence, erosion of earth cover, and vent stack damage are of primary concern.