Summary of Proposed LERF/ETF RCRA Mods - Addendum C, Addendum F, and Addendum I

Section	Page #	Modified Requirement/Text	Justification	Requested for Temporary Authorization?
C.2.1 (load-in) in last paragraph	C.3	Any leaks at the Load-In Station drain to the sump. A leak detector in the sump alarms locally and in the 200 Area ETF control room. **Alarms are monitored continuously during Load-in Station transfers and at least daily at other times.** Alternatively, leaks can be visually detected.	Class 2 justification: App. I Modification A.4.b*. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES
C.2.5.1, Monitor & Control System	C.7	The operation of the 200 Area ETF is monitored and controlled by a centralized computer system (i.e., monitor and control system or MCS). The MCS continuously monitors data from various field indicators, such as pH, flow, tank level, temperature, pressure, conductivity, alarm status, and valve switch positions. Data gathered by the MCS enable operations and engineering personnel to document and adjust the operation of the ETF. **Emergency communications equipment and warning systems are included in Addendum J, Contingency Plan. These do not rely upon continuous control room monitoring.**	Class 1 justification: App. I Modification A.1, Administrative and informational changes. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES
C.4.3.1.2, load-in tank secondary containment, end of 1st paragraph	C.19	Leaks are detected by a leak detector that alarms locally, in the 200 Area ETF control room, and by visual inspection of the secondary containment. **Alarms are monitored continuously during Load-in Station transfers and at least daily at other times.**	Class 2 justification: App. I Modification A.4.b*. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES
C.4.3.1.2, surge tank secondary containment	C.19	Leaks into the secondary containment are detected by level instrumentation in the sump~~, which alarms in the 200 Area ETF control room~~, and/or by routine visual inspections. **Sump alarms are monitored continuously during ETF processing operations and at least daily at other times.**	Class 2 justification: App. I Modification A.4.b*. Alarms can be monitored from other locations throughout the facility and are not limited to monitoring from the control room. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES
C.4.3.1.2, sump tank secondary containment	C.20	The sump tank levels are monitored by remote level indicators or through visual inspections from the sump covers. These indicators are connected to high- and low-level alarms that are monitored~~ in the control room~~ **during ETF processing operations and at least daily at other times.**	Class 2 justification: App. I Modification A.4.b*. Alarms can be monitored from other locations throughout the facility and are not limited to monitoring from the control room. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES
C.4.3.1.2, verification tank secondary containment	C.20	Leaks into the secondary containment are detected by level instrumentation in the sump ~~that alarms in the control room,~~ and/or by routine visual inspections. **Sump alarms are monitored continuously during ETF processing operations and at least daily at other times.**	Class 2 justification: App. I Modification A.4.b*. Alarms can be monitored from other locations throughout the facility and are not limited to monitoring from the control room. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES

Copy
Review & Recycle

Summary of Proposed LERF/ETF RCRA Mods - Addendum C, Addendum F, and Addendum I

Section	Page #	Modified Requirement/Text	Justification	Requested for Temporary Authorization?
C.4.3.2.1, double-walled (sump) tanks	C.21	The sump tanks are equipped with a leak detector between the walls of the tanks that provide continuous monitoring for leaks. ~~The leak detector provides immediate notification through an alarm in the control room.~~ **Sump tank alarms are monitored continuously during ETF processing operations and at least daily at other times.**	Class 2 justification: App. I Modification A.4.b*. Alarms can be monitored from other locations throughout the facility and are not limited to monitoring from the control room. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES
C.4.3.2.2, (LERF-to-ETF) transfer piping and pipe trenches, 2nd para	C.21	~~The alarms on the leak detection system are monitored in the control room.~~ **Alarms are monitored continuously during aqueous waste transfers between LERF and the ETF surge tank and at least daily at other times.**	Class 2 justification: App. I Modification A.4.b*. Alarms can be monitored from other locations throughout the facility and are not limited to monitoring from the control room. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES
C.5.5.2, 242-A to LERF PL leak detection system	C.35	If a leak develops in the carrier pipe...As moisture contacts a sensor unit, an ~~general~~ alarm sounds ~~in the 242-A Evaporator and 200 Area ETF control rooms and the zone of the Sensor unit causing the alarm can be determined using the 242-A Evaporator leak detection monitoring panel.U~~ **at ETF. ETF troubleshoots the alarm and, upon verification of a leak, requests that** the pump located in the 242-A Evaporator **be** is shut down~~,~~ **to** stop~~ping~~ the flow of aqueous waste through the transfer line.	Class 1 justification: App. I Modification A.1, Administrative and informational changes Removal of 242-A Evaporator functions is necessary to distinguish ETF vs 242-A Evaporator facility responsibilities.	NO
C.5.5.2, 242-A to LERF PL leak detection system	C.35	The catch basins have conductivity leak detectors ~~that alarm in the 242-A Evaporator and 200 Area ETF control rooms~~. **Leak detector alarms are monitored continuously during aqueous waste transfers and at least daily at other times.**	Class 1 justification: App. I Modification A.1, Administrative and informational changes & Class 2 justification: App. I Modification A.4.b*. Removal of 242-A Evaporator is necessary to distinguish ETF vs 242-A Evaporator facility responsibilities. Alarms can be monitored from other locations throughout the facility and are not limited to monitoring from the control room. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES
C.5.6, (LERF leachate) leak detection, next-to-last para	C.36	~~Automated controls maintain~~ **The** fluid level in each leachate sump **is maintained** below 33 centimeters to prevent significant liquid backup into the drainage layer. The leachate pump is activated when the liquid level in the sump reaches about 28 centimeters, and is shut off when the sump liquid level reaches about 18 centimeters. This operation **may be done either manually or automatically**. ~~prevents the leachate pump from cycling with no fluid, which could damage the pump.~~	Class 2 justification: App. I Modification A.4.b* Historical data show extremely low leachate leak rates relative to the action leakage rate in C.5.8 (page 37). Therefore manual controls are not necessary and either automatic or manual pumping is acceptable.	NO

Copy
Review & Recycle

Summary of Proposed LERF/ETF RCRA Mods - Addendum C, Addendum F, and Addendum I

Section	Page #	Modified Requirement/Text	Justification	Requested for Temporary Authorization?
C.5.6, (LERF leachate) leak detection, next-to-last para	C.36	A flow meter/totalizer on the leachate return pipe measures fluid volumes pumped and pumping rate from the leachate collection sumps, and indicates volume and flow rate on local readouts. **In addition, a timer on the leachate pump tracks the cumulative pump operating hours.**	Class 2 justification: App. I Modification A.4.b* Historical data have shown that these two leachate data collection methods are comparable	NO
C.5.6, (LERF leachate) leak detection, next-to-last paragraph	C.36	Other instrumentation provided is real-time continuous level monitoring with readout at the catch basin ~~and the 242-A Evaporator control room~~.**Leachate levels are monitored at least weekly.**	Class 1 justification: App. I Modification A.1, Administrative and informational changes & Class 2 justification: App. I Modification A.4.b*. Removal of 242-A Evaporator is necessary to distinguish ETF vs 242-A Evaporator facility responsibilities. Leachate level monitoring from Table I-1 is added for informational purposes.	NO
C.5.6, (LERF leachate) leak detection, next-to-last paragraph	C.36	~~Leak detection is provided through inspections of~~ **The leak rate through the primary liner is calculated using** the leachate flow **meter**/totalizer readings **or pump operating hours readings along with the pump flow rate. Calculations using either method are sufficient for compliance.**	Class 2 justification: App. I Modification A.4.b* Historical data have shown that these two leachate data collection methods are comparable	NO
C.5.8 (Proposed Action Leakage Rate & Response Action Plan)	C.37	An action leakage rate (also called the rapid or large leak rate) of 20,000 liters per hectare per day **(2,100 gallons/acre/day)** was calculated for each basin (WHC 1992b).	Class 1 justification: App. I Modification A.1, Administrative and informational changes: unit conversion provided	NO
F.2.3, Water Supplies, in 1st paragraph	F.3	The LERF is monitored ~~closely~~ **continuously during aqueous waste transfers and at least daily** during operation to detect abnormal conditions (e.g., leaks), and regularly inspected to detect equipment and structural deteriorations that could allow possible water supply contamination.	Class 2 justification: App. I Modification A.4.b*. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES
F.2.3, Water Supplies, in 2nd paragraph	F.3	The 200 Area ETF is monitored during ETF **processing** operations to detect abnormal conditions, and is inspected regularly to detect equipment and structural deteriorations that could allow spills to the environment. Areas in contact with dangerous and/or mixed waste are monitored continuously during **Load-in Station and/or ETF processing** operations through a series of level and pressure indicators, leak detection alarms, equipment failure alarms, and control panel readouts.	Class 1 justification: App. I Modification A.1, Administrative and informational changes: clarified meaning of 'operations'	YES

Copy
Review & Recycle

Summary of Proposed LERF/ETF RCRA Mods - Addendum C, Addendum F, and Addendum I

Section	Page #	Modified Requirement/Text	Justification	Requested for Temporary Authorization?
I.1.2.2.1, Overfill Protection	I.2	Tanks that have the possibility of being overfilled have level instrumentation that alarms before the tanks reach overflow. High tank level alarms annunciate ~~in the control room~~, allowing personnel to take immediate action to stop the vessels from overfilling. These alarms are monitoried continuously ~~in the control room~~ during solution transfers.	Class 2 justification: App. I Modification A.4.b* Alarms can be monitored from other locations throughout the facility and are not limited to monitoring from the control room.	NO
I.1.2.2.3, Secondary Containment Leak Detectors	I.2	Surge and VT secondary containment systems have sloped floors that drain solutions to sumps equipped with leak detectors ~~that alarm in the control room~~. These alarms are monitored continuously ~~in the control room,~~ during ETF processing operations and at least daily at other times.	Class 2 justification: App. I Modification A.4.b*. Alarms can be monitored from other locations throughout the facility and are not limited to monitoring from the control room. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES
I.1.2.3.3, Leak Detection, first paragraph	I.3	The leachate detection, collection, and removal system is described in Addendum C. The leachate collection sump pump is ~~automatically~~ activated when the liquid level in the leachate sump reaches a preset level. A flow meter ~~and~~ /totalizer measures the amount of leachate removed. In addition, the timer on the leachate pump tracks the cumulative pump run hours. The leak rate through the primary liner is calculated weekly using the leachate flow meter/totalizer readings or pump operating hours readings. Calculations using either method are sufficient for compliance. ~~An inspection is performed weekly where the totalizer reading and basin level reading are used to determine the leak rate per wetted surface area. The leak rate is compared to previous rates to see if leakage has increased.~~ If either the flow meter/totalizer or pump operating hours system is not functioning, this is identified as an abnormal condition (see I.1) .	Class 2 justification: App. I Modification A.4.b* Historical data show extremely low leachate leak rates relative to the action leakage rate in C.5.8 (page 37). Therefore manual controls are not necessary and either automatic or manual pumping is acceptable. Clarification of the weekly calculation process is also provided.	NO
I.1.2.3.3, Leak Detection, third paragraph	I.3	The buried pipelines normally are continuously monitored during trasnfers by a leak detection system (Addendum C). ~~The alarms on the leak detection system are monitored in the 200 Area ETF control room.~~	Class 2 justification: App. I Modification A.4.b* Alarms can be monitored from other locations throughout the facility and are not limited to monitoring from the control room.	NO
Table I.1, Visual Inspection Schedule for the LERF and 200 Area ETF	I.5 & I.6	~~Stated inspection frequency to be performed only when system is in service during 200 area ETF operations.~~	Class 2 justification: App. I Modification A.4.b* The previously footnoted daily inspections will be performed daily irregardless of ETF processing operations	NO

Copy
Review & Recycle

Summary of Proposed LERF/ETF RCRA Mods - Addendum C, Addendum F, and Addendum I

Section	Page #	Modified Requirement/Text	Justification	Requested for Temporary Authorization?
Table I.2, Inspection Plan for Instumentation Monitoring	I.7	Added asterick and footnote: **Frequency of "continuously" applies during ETF processing and/or Load-in Station transfers. Data from MCS alarms, leak detectors, and level transmitters are monitored at least daily at other times, even though many of these instruments record continuously (see C.2.5.1). Emergency communications equipment and warning systems are included in Addendum J, Contingency Plan. These do not rely upon continuous control room monitoring.**	Class 2 justification: App. I Modification A.4.b*. Emergency response alarms can be heard throughout the facility and do not depend upon control room monitoring. This modification does not result in additional risk to personnel.	YES

*changes in frequency of or procedures for monitoring, reporting, sampling, or maintenance activities by the permittee

~~purple strikeout~~ = permit text deleted in this modification

red bold text = text added in this modification

Copy
Review & Recycle