Tables

TABLE 1
Evaluation of ARARs
CSSS Lagoon Area Revised Design
(Page 1 of 3)

ARARs and TBCs	Design Components Addressing Requirement	Waivers Needed?
RCRA Subpart S CAMU **40 CFR 264.552-** **ARAR**		
RCRA General Closure Requirements—Subpart G Closure and Post-Closure **40 CFR 265.110-** **ARAR**		
Closure to minimize the need for further maintenance.	Cover slopes are kept to a 0.25% to minimize erosion. Lagoon area is pre-loaded to reduce future site settlement and allow cover slopes to be established. Design features reducing long-term maintenance include the hot spot excavation and cover components. The excavation of VOC hot spots reduces potential for releases and thus minimizes the long-term collection and treatment of leachate.	No
Closure to control, minimize, or eliminate, to the extent necessary to protect human health and the environment, postclosure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere.	The lagoon remediation design criterion is to minimize future releases by removing VOC hot spots. Impoundment sludges will be covered to minimize erosion.	No
RCRA Interim Status Standards for Owners and Operators of Hazardous Waste Treatment Storage, and Disposal Facilities Subpart K, Surface Impoundments **40 CFR 265.228-**		
Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;	Free liquids will be removed prior to pre-loading the sludges.	No
Stabilize remaining wastes to a bearing capacity sufficient to support the final cover	The sludges will be pre-loaded for five years prior to establishing the final cover contours.	No
Cover the surface impoundment with a final cover designed and constructed to:	The lagoon area will be covered with soil. This cover will minimize migration of liquids by provision of slopes to promote runoff and a vegetative layer to encourage	Yes

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(Page 2 of 3)

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• Provide long-term minimization of the migration of liquids through the closed impoundment, • Function with minimum maintenance, • Promote drainage and minimize erosion or abrasion of the cover, • Accommodate settling and subsidence so that the cover's integrity is maintained, and • Have a permeability of less than or equal to the permeability of any bottom liner system or natural subsoil present.	evapotranspiration. This level of control is considered protective because the soils and sludges remaining after VOC hot spot removal do not leach contaminants at levels of concern. The cover will promote drainage and function with minimum maintenance by providing 0.25% slopes to promote drainage and minimize erosion. Erosion protection surfaces will be provided as necessary along the sideslopes potentially affected by the river during high river stage or during flooding. The lagoon area will be pre-loaded for a five year period to allow settlement and subsidence prior to establishing the final cover contours. This requirement is not considered appropriate because once the VOC hot spots are removed the remaining soils and sludges do not pose a threat of leaching contaminants to groundwater at concentrations of concern.	
Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;	A regular maintenance program will be included for the cover.	No
Maintain and monitor the leak detection system in accordance with 40 CFR 265.221 and 40 CFR 265.226 and comply with all other applicable leak detection system requirements of this part;	A leak detection system is not appropriate because once the VOC hot spots are removed the remaining soils and sludges do not pose a threat of leaching contaminants to groundwater at concentrations of concern.	Yes
Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of Subpart F of this part; and	Groundwater monitoring is included as part of the Lagoon Area groundwater collection and treatment system.	No
Prevent run-on and run-off from eroding or otherwise damaging the final cover.	Run-on will be prevented through installation of perimeter drainage ditches. Run-off will be controlled through design of the surface drainage system to minimize erosion.	No
RCRA 100-Year Floodplain Requirements		
A facility located in a 100-year floodplain must be designed, constructed, operated, and maintained to prevent washout of any hazardous waste by a 100-year flood (40CFR 264.18(b).	The design will include necessary components to meet this requirement.	No

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(Page 3 of 3)

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Engineering analysis must be performed to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as consequence of a 100-year flood (40 CFR 270.14(b)(11)(iv).	Analysis is included as part of the design.	No
Structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., floodwalls, dikes) at the facility and how these will prevent washout (40 CFR 270.14(b)(11)(iv).	Analysis is included as part of the design.	No
Land Disposal Restrictions 40 CFR 268.45		
Achieve the greater of 90 percent reduction in total constituent concentrations or ten times the Universal Treatment Standard (UTS) for that constituent.	These requirements are ARARs for hot spot soils excavated for offsite disposal that are characteristic hazardous waste.	No
Executive Order 11990		
Requires actions to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.	Destruction of wetlands will be minimized during sludge, soil, and sediment excavation.	No
Executive Order 11988		
Requires actions to reduce the risk of flood loss; to minimize the impact of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial values served by floodplains.	No loss in flood storage capacity will occur.	No
Indiana Solid Waste Rules 329 IAC 10		

ARAR – Applicable or Relevant, and Appropriate Requirements
TBC – To be considered