

S&GRP Central Plateau Remediation Project  
**DOCUMENT REVIEW AND COMMENT FORM**

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3. Project: 200-ZP-1 OU  
 Feasibility Study

4. Review No: DOE/RL-2007-28,  
 Draft A

5. Document Number(s)/Title(s): DOE/RL-2007-28, Draft A  
**Feasibility Study Report for the 200-ZP-1 Groundwater Operable  
 Unit**

6. Program/Project/Building Number

7. Reviewer

Ecology

8. Organization/Group

Washington Department of  
 Ecology

9. Location/Phone

12. Comment Submittal Approval (optional):

15. Concurrence with indicated comment disposition(s)

17. Closure Approval

No Comments

(Disposition status is either "Open", "Closed", etc.)

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 Reviewing Organization Manager (print / sign)

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 Date

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 Reviewer/POC (print/sign)

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Item	10. Page/Line	11a. Comment (include technical justification for comment)	11b. Recommended Change	13. (A)cccept or (R)reject	14. Disposition (provide justification if <b>NOT</b> accepted)	16. Status
1	General	<p><b>ARARs. Add the following citation WAC 173-303-64620.</b></p> <p>The State ARARs are incomplete in the FS, Appendix B does not have WAC 173-303-64620. The applicable requirements for corrective action under the HWMA must be met for the proposed final action.</p> <p><i>WAC 173-303-64620(1) For all releases of Dangerous Waste and Dangerous Constituents ...</i></p> <p><i>WAC 173-303-64610(4) Defines any constituent that is a hazardous substance under MTCA</i></p> <p><i>WAC 173-303-040 "Facility" definition: ... means all contiguous property under the control of the owner/operator.</i></p> <p>Therefore, if there is a release of a MTCA hazardous substance within Hanford Boundaries (all ~560 sq. miles) it is within the scope of WAC 173-303-64620.</p> <p><b>Hanford Site Groundwater Strategy                      DOE/RL-2002-59</b></p> <p>Hanford groundwater protection, monitoring, and remediation actions are guided by both federal and Washington State regulations.</p>	<p><b>RECEIVED</b>                      FEB 27 2008                      EDMC</p>	Partially accept	<p>The substantive and technical requirements of RCRA corrective action requirements are evaluated and considered during the CERCLA RI/FS process. Both the Tri-Party Agreement and the Hanford Facility RCRA Permit acknowledge this process of considering both RCRA corrective action and CERCLA remedial action requirements at the same time. The final remedy decision will be made in order to satisfy both RCRA corrective action and CERCLA remedial action requirements.</p> <p>MTCA was evaluated as a potential ARAR for this operable unit (see response to Comment 2).</p>	<p>0076367</p>

*attached to: 0076363*

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		<p>The primary relevant acts are RCRA, CERCLA, and AEA. .... It may be appropriate to defer the groundwater component of cleanup to CERCLA OU, or to accept work conducted under CERCLA authority as <u>satisfying RCRA corrective action requirements.</u></p>				
2	General	<p><b>ARARs. Add the following citation WAC 173-340.</b></p> <p>At a minimum, corrective actions must be consistent with the following requirements of Chapter 173-340 WAC.</p> <p>From the October 14, 1994, Ecology/EPA Agreement on Roles and Responsibilities at NPL Sites. The following citation have been applicable (substantive). <b>Add these citations:</b></p> <p><b>WAC 173-340-360 (4),(6)</b></p> <p><b>WAC 173-340-440</b></p> <p><b>WAC 173-340-705</b></p> <p><b>WAC 173-340-720</b></p>		Not accepted	<p>Since Hanford is a Federal facility on the National Priorities list, MTCA is not applicable (42 U.S.C. 9620(a)(4)) (i.e., CERCLA Section 120(a)(4)). However, the citations noted in the comment were reviewed as to whether elements were relevant and appropriate.</p> <p>The substantive requirements of WAC 173-340 were considered during the ARAR process for the FS. WAC 173-340-360(4), and WAC 173-340-705 are administrative in nature and therefore were excluded. Please note that some uncertainty exists as to the content of the citations recommended to be added because WAC 173-340 has been modified since 1994. In fact, WAC 173-340-360(6) does not exist in the latest revision and differences exist between the 1994 and latest version for those sections that were kept.</p> <p>Re: WAC 173-340-440. Section 173-340-440(3) states that "This section applies to remedial actions being conducted at sites under any of the administrative options in WAC 173-340-510 [Administrative Options for Remedial Actions] and 173-340-515 [Independent Remedial Actions]." Remedial actions for 200-ZP-1 are not being undertaken under any of those options. Rather, remedial actions for 200 ZP-1 are being undertaken under the authority of 42 U.S.C. 9620 (CERCLA Section 120). Therefore, WAC 173-340-440 is not a relevant and appropriate requirement.</p> <p>USEPA provides guidance on determining whether a law or regulation is potentially relevant and appropriate. "<i>Determining whether</i></p>	

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					<p><i>a requirement is relevant and appropriate is site-specific and must be based on best professional judgment. This judgment is based on a number of factors, including the characteristics of the remedial action, the hazardous substances present at the site, and the physical circumstances of the site and of the release, as compared to the statutory or regulatory requirement.” (USEPA OSWER EPA/540/G-89/006, CERCLA Compliance With Other Laws Manual: Part I, Publication 9234.1-01, August 1988).</i></p> <p>The cleanup levels in WAC 173-340 are not relevant and appropriate to the remediation of 200-ZP-1 given site-specific circumstances. For example, Method B for calculating cleanup levels in groundwater, are equations that use domestic (i.e., residential) exposure parameters. In Response to HAB Advice No. 132, the Tri-Parties agreed that “An industrial land us (sic) scenario will set cleanup levels on the Central Plateau. Other scenarios (e.g., residential, recreational) may be used for comparison purposes...” Provisions are not made in Method B to modify the exposure parameters to suit the site-specific circumstances. In fact, the results of the calculations in Method B are in direct conflict with published, promulgated drinking water standards set forth in WAC 246-290-310 (Maximum contaminant levels (MCLs) and maximum residual disinfectant levels (MRDLs) for drinking water supplies in the State of Washington) and cannot be adjusted appropriately to obtain results consistent with that part of the administrative code.</p> <p>Therefore, WAC 173-340-720 was deemed not relevant and appropriate to this remedy because the methods for calculation of cleanup levels are not compatible with the fundamental assumptions that were agreed to be used to develop exposure scenarios and cleanup levels</p>	

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					<p>for the Central Plateau remedies.</p> <p>It is important to note that this remedy does attempt to return the groundwater to beneficial use over the course of the remedy with the objective of meeting Federal maximum contaminant levels (MCLs) as required by the National Contingency Plan (NCP). The goal is to achieve MCLs for constituents attributed to Hanford sources regardless of whether the constituent was determined by the baseline risk assessment to be a contaminant of concern.</p> <p>Further, while not ARAR, WAC 246-290-310 (Maximum contaminant levels (MCLs) and maximum residual disinfectant levels (MRDLs) for drinking water supplies in the State of Washington) are the same as the Federal MCLs. Therefore, the remedial action goal is to return the groundwater of the ZP-1 operable unit to standards that are equivalent to those used for tap water in the State of Washington.</p> <p>EPA's Risk Assessment Guidance for Superfund (Chapter 2, p.10) also supports this approach: "...If the aquifer is a potential source of drinking water, then potential ARARs generally will include the federal non-zero MCLG, MCL, or state drinking water standard, and the most stringent (i.e., the lowest concentration) is identified as the most likely ARAR-based PRG."</p>	
3	General	<p><b>ARARs.</b> Add Solid Waste Management, Recovery, and Recycling Act of 1969, RCW 70.95.</p> <p>WAC 173-304-190, -200, -460</p>		Not accepted	<p>Nondangerous waste regulations, WAC 173-304 and WAC 173-350 were considered during the ARAR process for the FS. Since the proposed remedial action would not likely generate any nondangerous waste, the waste will either be dangerous or mixed, the substantive requirements of these regulations were not included in the ARAR table.</p>	
4	General	<p><b>ARARs.</b> Remove all WAC 173-160-191, 201 221 231 241 271 281 291 301 311</p>		Accepted	<p>These citations for water supply wells will be deleted</p>	

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		321, 331, 341, 351, 371, 381. These regulations are for water supply.				