

ENGINEERING CHANGE NOTICE

Page 1 of \_\_\_\_\_

1. ECN 113816

Proj. ECN 0013153

2. ECN Category (mark one) Supplemental <input checked="" type="checkbox"/> Direct Revision <input type="checkbox"/> Change ECN <input type="checkbox"/> Temporary <input type="checkbox"/> Supersedure <input type="checkbox"/> Discovery <input type="checkbox"/> Cancel/Word <input type="checkbox"/>	3. Originator's Name, Organization, MSIN, and Telephone No. B. A. Williams/H4-55/6-3416		4. Date 4/12/90
	5. Project Title/No./Work Order No. W-017/MJ31F	6. Bldg./Sys./Fac. No. S-10 Facility	7. Impact Level 2
	8. Document Number Affected (include rev. and sheet no.) WHC-SD-EN-AP-018, Rev. 0 <u>4331</u>	9. Related ECN No(s). NA	10. Related PO No. NA
11a. Modification Work <input type="checkbox"/> Yes (fill out Blk. 11b) <input checked="" type="checkbox"/> No (NA Blks. 11b, 11c, 11d)	11b. Work Package Doc. No. NA	11c. Complete Installation Work B. A. Williams <i>[Signature]</i> Cog. Engineer Signature & Date <u>4/12/90</u>	11d. Complete Restoration (Temp. ECN only) NA Cog. Engineer Signature & Date _____

12. Description of Change

pg. 42; 1st sent. should read: Installation of two upgradient, three down gradient monitoring wells and one down gradient perched zone monitoring well...

pg. 43; 2nd para., should read: Planned wells 299-W26-7 through 10 and -12...  
 2nd para., 2nd sent., insert following sentence after 2nd sent. Well W299-26-11 will be installed within the vadose zone to monitor perched water conditions below the S-10 facility.

pg. 43; 2nd para., delete 3rd and 4th sentence.

pg. 44; 3rd para., 2nd sent., should read: ... is within the Plio-Pleistocene unit.

pg. 44; last section, 2nd, sent. should read ... will include construction of one upgradient shallow monitoring well and two downgradient wells, one perched zone monitoring well and one shallow monitoring well, respectively.  
 4th sent., correct well #'s ...(299-W26-7 through W26-10 and W26-12)...

pg. 44; ~~delete~~ <sup>Delete Rev</sup> last sentence. Add: Well W-26-11 will be installed to monitor the perched conditions below the facility.

pg. 46; Table 3.1

299-W26-11	vadose monitoring	Phase I	121	165
299-W26-12	shallow monitoring	Phase II	206	221

pg. 46; 4th para., delete last sentence (i.e., It is especially...)

13a. Justification (mark one) Criteria Change <input type="checkbox"/> Design Improvement <input type="checkbox"/> Environmental <input type="checkbox"/> As-Found <input type="checkbox"/> Facilitate Const. <input type="checkbox"/> Const. Error/Omission <input type="checkbox"/> Design Error/Omission <input type="checkbox"/>	13b. Justification Details Annual discharge to the S-10 ditch averages $5.0 \times 10^7$ gal/yr. These volumes have created unanticipated perched zones below S-10 ditch. This recharge area and perched water needs to be further evaluated/defined to access effects to the unconfined aquifer. This change is necessitated by perched water encountered while drilling W26-11. It was decided not to drill to the aquifer to prevent water contamination. To obtain upper aquifer monitoring, well W26-12 will be drilled as a shallow monitoring well.
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14. Distribution (include name, MSIN, and no. of copies)	RELEASE STAMP
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15. Design Verification Required

Yes  
 No

16. Cost Impact

ENGINEERING  
Additional  \$ \_\_\_\_\_  
Savings  \$ \_\_\_\_\_

CONSTRUCTION  
Additional  \$ \_\_\_\_\_  
Savings  \$ \_\_\_\_\_

17. Schedule Impact (days)

Improvement  \_\_\_\_\_  
Delay  \_\_\_\_\_

18. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 12. Enter the affected document number in Block 19.

SDD/DD	<input type="checkbox"/>	Seismic/Stress Analysis	<input type="checkbox"/>	Tank Calibration Manual	<input type="checkbox"/>
Functional Design Criteria	<input type="checkbox"/>	Stress/Design Report	<input type="checkbox"/>	Health Physics Procedure	<input type="checkbox"/>
Operating Specification	<input type="checkbox"/>	Interface Control Drawing	<input type="checkbox"/>	Spares Multiple Unit Listing	<input type="checkbox"/>
Criticality Specification	<input type="checkbox"/>	Calibration Procedure	<input type="checkbox"/>	Test Procedures/Specification	<input type="checkbox"/>
Conceptual Design Report	<input type="checkbox"/>	Installation Procedure	<input type="checkbox"/>	Component Index	<input type="checkbox"/>
Equipment Spec.	<input type="checkbox"/>	Maintenance Procedure	<input type="checkbox"/>	ASME Coded Item	<input type="checkbox"/>
Const. Spec.	<input type="checkbox"/>	Engineering Procedure	<input type="checkbox"/>	Human Factor Consideration	<input type="checkbox"/>
Procurement Spec.	<input type="checkbox"/>	Operating Instruction	<input type="checkbox"/>	Computer Software	<input type="checkbox"/>
Vendor Information	<input type="checkbox"/>	Operating Procedure	<input type="checkbox"/>	Electric Circuit Schedule	<input type="checkbox"/>
OM Manual	<input type="checkbox"/>	Operational Safety Requirement	<input type="checkbox"/>	ICRS Procedure	<input type="checkbox"/>
FSAR/SAR	<input type="checkbox"/>	IEFD Drawing	<input type="checkbox"/>	Process Control Manual/Plan	<input type="checkbox"/>
Safety Equipment List	<input type="checkbox"/>	Cell Arrangement Drawing	<input type="checkbox"/>	Process Flow Chart	<input type="checkbox"/>
Radiation Work Permit	<input type="checkbox"/>	Essential Material Specification	<input type="checkbox"/>	Purchase Requisition	<input type="checkbox"/>
Environmental Impact Statement	<input type="checkbox"/>	Fac. Proc. Samp. Schedule	<input type="checkbox"/>	_____	<input type="checkbox"/>
Environmental Report	<input type="checkbox"/>	Inspection Plan	<input type="checkbox"/>	_____	<input type="checkbox"/>
Environmental Permit	<input type="checkbox"/>	Inventory Adjustment Request	<input type="checkbox"/>	_____	<input type="checkbox"/>

19. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision	Document Number/Revision	Document Number/Revision
_____	_____	_____
_____	_____	_____
_____	_____	_____

20. Approvals

Signature	Date	Signature	Date
<u>OPERATIONS AND ENGINEERING</u>		<u>ARCHITECT-ENGINEER</u>	
Cog./Project Engineer <u>B. A. Gilkeson</u>	<u>4/13/90</u>	PE _____	_____
Cog./Project Equip. Mgr. <u>K. R. Fecht</u>	<u>4/13/90</u>	QA _____	_____
QA <u>L. W. Vance</u>	<u>4/13/90</u>	Safety _____	_____
Safety <u>D. J. Alexander</u>	<u>4/13/90</u>	Design _____	_____
Security _____	_____	Other _____	_____
Proj. Prog./Dept. Mgr. <u>R. L. Jackson</u>	<u>4/13/90</u>	_____	_____
Def. React. Div. _____	_____	_____	_____
Chem. Proc. Div. _____	_____	_____	_____
Def. Wst. Mgmt. Div. _____	_____	<u>DEPARTMENT OF ENERGY</u>	_____
Adv. React. Dev. Div. _____	_____	_____	_____
Proj. Dept. _____	_____	_____	_____
Environ. Div. <u>LC Swanson</u>	<u>4/13/90</u>	<u>ADDITIONAL</u>	_____
IRM Dept. _____	_____	_____	_____
Facility Rep. (Ops) _____	_____	_____	_____
Other _____	_____	_____	_____

pg. 55; Well 299-W-26-11, 1st sentence should read: This well will be used to evaluate and monitor the quality of the perched water downgradient of the S-10 facility.

pg. 56; Well 299-W26-12, change paragraph to read: This well will be used to evaluate groundwater quality in the uppermost aquifer, downgradient of the S-10 facility. This well will be located approximately 50 feet from 299-W26-11, along the northeast portion of the S-10 ditch. This well will provide downgradient coverage of the portion of the S-10 facility that continues to receive waste water.

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DISTRIBUTION SHEET

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Project Title/Work Order		EDT No  ECN No <b>113805</b>

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D. C. Weekes	H4-56	X		
B. A. Williams	H4-56	X		
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