

# START

0032346

## ENGINEERING CHANGE NOTICE

Page 1 of 31. ECN **193254**Proj.  
ECN

2. ECN Category (mark one) <input checked="" type="checkbox"/> Supplemental <input type="checkbox"/> Direct Revision <input type="checkbox"/> Change ECN <input type="checkbox"/> Temporary <input type="checkbox"/> Standby <input type="checkbox"/> Supersedure <input type="checkbox"/> Cancel/Void	3. Originator's Name, Organization, MSIN, and Telephone No. <b>William E. Davis/16410/S6-70/2-0014</b>		4. Date <b>03/26/93</b>
	5. Project Title/No./Work Order No. <b>D6T11</b>	6. Bldg./Sys./Fac. No. <b>N/A</b>	7. Impact Level <b>3EQ</b>
	8. Document Numbers Changed by this ECN (includes sheet no. and rev.) <b>WHC-SD-WM-PLN-029, Rev 1</b>		9. Related ECN No(s).

11a. Modification Work <input type="checkbox"/> Yes (fill out Blk. 11b) <input checked="" type="checkbox"/> No (NA Blks. 11b, 11c, 11d)	11b. Work Package No. <b>N/A</b>	11c. Modification Work Complete <b>N/A</b> _____ Cog. Engineer Signature & Date	11d. Restored to Original Condition (Temp. or Standby ECN only) <b>N/A</b> _____ Cog. Engineer Signature & Date
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## 12. Description of Change

- I. Page 11 Change method for Nitrogen and Nitrite from 354.1 to 300.0
- II. Page 11 Delete acidity and its method from Table 3
- III. Page 11 Add statement to Table 3 ~~W~~Listed Below or in QAPP (WHC 1992b)
- IV. Page 11 Add Nitrate with method 300.0 to Table 3

Impact Level 3EQ was chosen because the changes are Impact level 3 to an engineering document and the changes need to be reviewed by Effluent Emission Monitoring and QA.

13a. Justification (mark one)	Criteria Change <input type="checkbox"/>	Design Improvement <input checked="" 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

I. Method 354.1 is unavailable and 300.0 method will provide the same information on Nitrogen and Nitrite rinse. II. Alkalinity is already being measured; acidity and its method will not be needed. III. Allows methods listed in QAPP to be used. IV. Need Nitrate analysis.

## 14. Distribution (include name, MSIN, and no. of copies)

S. A. Brisbin	H4-16 (1)	C. D. Morrison-Beyer	S0-61 (1)
W. W. Bowen	S6-65 (1)	D. R. Speer	R1-48 (1)
S. A. Burris	T1-30 (1)	M. S. Hendrix	H4-23 (1)
L. P. Diediker	T1-30 (1)		
D. L. Halgren	S6-70 (1)		
J. E. Hyatt	S0-61 (1)		

## RELEASE STAMP

OFFICIAL RELEASE   
 BY WHC  
 DATE **APR 20 1993**

STA. # 2



# ENGINEERING CHANGE NOTICE

<b>15. Design Verification Required</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>16. Cost Impact</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">ENGINEERING</td> <td style="width: 50%; text-align: center;">CONSTRUCTION</td> </tr> <tr> <td>Additional <input type="checkbox"/> N/A</td> <td>Additional <input type="checkbox"/> N/A</td> </tr> <tr> <td>Savings <input type="checkbox"/></td> <td>Savings <input type="checkbox"/></td> </tr> </table>	ENGINEERING	CONSTRUCTION	Additional <input type="checkbox"/> N/A	Additional <input type="checkbox"/> N/A	Savings <input type="checkbox"/>	Savings <input type="checkbox"/>	<b>17. Schedule Impact (days)</b> Improvement <input type="checkbox"/> N/A Delay <input type="checkbox"/>
ENGINEERING	CONSTRUCTION							
Additional <input type="checkbox"/> N/A	Additional <input type="checkbox"/> N/A							
Savings <input type="checkbox"/>	Savings <input type="checkbox"/>							

**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"/>	None	<input checked="" 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
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**20. Approvals**

	Signature	Date		Signature	Date
<b>OPERATIONS AND ENGINEERING</b>					
Cog Engineer	<i>W. E. Lewis</i>	<u>3/26/93</u>	ARCHITECT-ENGINEER		
Cog. Mgr	<i>D. Halgren</i>	<u>3/26/93</u>	PE		
QA D. D. McAfee	<i>D. McAfee</i>	<u>3/31/92</u>	QA		
Safety N/A			Safety		
Security N/A			Design		
Environ. <del>N/A</del> <i>WED 3/26/93</i>	<i>T. P. Frazier</i>	<u>3-29-93</u>	Environ.		
Projects/Programs N/A			Other		
Tank Waste Remediation System N/A					
Facilities Operations N/A					
Restoration & Remediation N/A					
Operations & Support Services N/A					
IRM N/A	<i>C. Morrison-Beyer</i>	<u>3-31-93</u>	DEPARTMENT OF ENERGY		
Other Informal Review	<i>M. S. Hendrix</i>	<u>3/29/93</u>	Signature or Letter No.		
	<i>D. R. Speer</i>	<u>WED 3/29/93</u>	ADDITIONAL		

B PLANT CHEMICAL SEWER SAMPLING AND ANALYSIS PLAN

Table 3. Analytical Methods

is listed below  
 or in QAPP  
 (WHR 1992b)

Analyte	Method of Analysis
Sulfides	9030
Semivolatile Organics	8270
Volatile Organics	8240
Chlorinated herbicides	8150
Organophosphorus Pesticides	8140
Organochlorine Pesticides and PCBs	8080
Tin	7870
Thallium	7841
Selenium	7740
Mercury	7470
Lead	7421
Chromium	7196
Arsenic	7060
Antimony	7041
Inductively Coupled Plasma	6010
Phenolics	420.1/9065/9066/9067
Total Organic Carbon	415.2/9060
Oil and Grease, total recoverable	413.2/9070/9071
Chemical Oxygen Demand	410.1
Biochemical Oxygen Demand	405.1
Sulfate	375.4
Phosphorus, all forms	365.2
Nitrogen and Nitrite	<del>354.1</del> ← 300.0
Nitrogen, Nitrate, Nitrite	353.3
Nitrate	300.0
Ammonia	350.1
Fluoride	300.0
Total Cyanide	335.2
Chloride	300.0
Bromide	300.0
Alkalinity	310.1/310.2
Acidity	305.2
Residue	160.2
Total Dissolved Solids	160.1
pH	150.1/9040
Specific Conductance	120.1
Total Alpha	WMC approved laboratory method

93/089.2006

Complete for all Types of Release

<input type="checkbox"/> Speech or Presentation <input type="checkbox"/> Full Paper <input type="checkbox"/> Summary <input type="checkbox"/> Abstract <input type="checkbox"/> Visual Aid <input type="checkbox"/> Speakers Bureau <input type="checkbox"/> Poster Session <input type="checkbox"/> Videotape	(Check only one suffix)	<input type="checkbox"/> Reference <input checked="" type="checkbox"/> Technical Report <input type="checkbox"/> Thesis or Dissertation <input type="checkbox"/> Manual <input type="checkbox"/> Brochure/Flier <input type="checkbox"/> Software/Database <input type="checkbox"/> Controlled Document <input type="checkbox"/> Other	ID Number (include revision, volume, etc.) <del>WHC SD WM PLN 029 Rev. 1</del> List attachments. <b>ECN 193254</b> Date Release Required <p style="text-align: right; font-size: 1.2em;"><b>4/12/93</b></p>
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Title <b>B Plant Chemical Sewer Sampling and Analysis Plan</b>	Unclassified Category <b>UC-</b>	Impact Level <b>3E</b> <b>Q</b>
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New or novel (patentable) subject matter? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If "Yes", has disclosure been submitted by WHC or other company? <input type="checkbox"/> No <input type="checkbox"/> Yes Disclosure No(s).	Information received from others in confidence, such as proprietary data, trade secrets, and/or inventions? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Identify)
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Copyrights? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If "Yes", has written permission been granted? <input type="checkbox"/> No <input type="checkbox"/> Yes (Attach Permission)	Trademarks? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Identify)
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Complete for Speech or Presentation

Title of Conference or Meeting	Group or Society Sponsoring
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Date(s) of Conference or Meeting	City/State	Will proceedings be published? <input type="checkbox"/> Yes <input type="checkbox"/> No Will material be handed out? <input type="checkbox"/> Yes <input type="checkbox"/> No	
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Title of Journal

**CHECKLIST FOR SIGNATORIES**

Review Required per WHC-CM-3-4	Yes	No	Reviewer - Signature Indicates Approval
			Name (printed)                      Signature                      Date
Classification/Unclassified Controlled Nuclear Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Patent - General Counsel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>OGC Memo 2/4/93</b>
Legal - General Counsel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>OGC Memo 2/4/93</b>
Applied Technology/Export Controlled Information or International Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
WHC Program/Project	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>D. R. Speer RI-48</b> <i>D. R. Speer</i> <b>4-19-93</b>
Communications	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
RL Program/Project	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Publication Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<b>MR WOSCHICK</b> <i>Mr Woschick</i> <b>4/19/93</b>
Other Program/Project	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Information conforms to all applicable requirements. The above information is certified to be correct.

References Available to Intended Audience	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Transmit to DOE-HQ/Office of Scientific and Technical Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Author/Requestor (Printed/Signature)			Date
<b>W. E. Davis</b> <i>W E Davis</i>			<b>4/12/93</b>
Intended Audience			
<input type="checkbox"/> Internal <input type="checkbox"/> Sponsor <input checked="" type="checkbox"/> External			
Responsible Manager (Printed/Signature)			Date
<b>D. L. Halgren</b> <i>D Halgren</i>			<b>4/12/93</b>

**INFORMATION RELEASE ADMINISTRATION APPROVAL STAMP**

Stamp is required before release. Release is contingent upon resolution of mandatory comments.



Date Cancelled	Date Disapproved
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