

START

ENGINEERING CHANGE NOTICE

0012016

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1. ECN ~~XXXXXX~~

Proj. ECN B-714-54

4. Date 08-20-90

7. Impact Level 3

10. Related PO No. N/A

2. ECN Category (mark one)
- Supplemental
 - Direct Revision
 - Change ECN
 - Temporary
 - Supersedure
 - Discovery
 - Cancel/Void

3. Originator's Name, Organization, MSIN, and Telephone No.
C.R. ZOOK, KEH, E6-24, 6-2602

5. Project Title/No./Work Order No.
SEE BLOCK 12

6. Bldg./Sys./Fac. No.
218-E-16

8. Document Number Affected (include rev. and sheet no.)
SEE BLOCK 12

9. Related ECN No(s).
B-714-26

11a. Modification Work
 Yes (fill out Blk. 11b)
 No (NA Blks. 11b, 11c, 11d)

11b. Work Package Doc. No.
UNKNOWN

11c. Complete Installation Work

Cog. Engineer Signature & Date

11d. Complete Restoration (Temp. ECN only)

Cog. Engineer Signature & Date

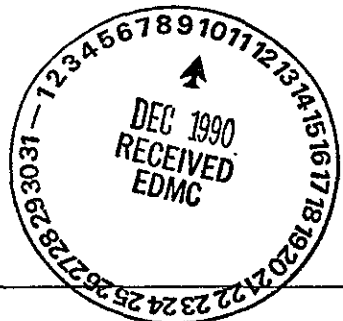
12. Description of Change

Block 5: B-714; GROUT VAULT PAIR (218-E-16-102 & 103)(218-E-16-104 & 105)/ER8007

Block 8:
SPECIFICATION B-714-C2, REV 0 (V-B714C2-003, REV 0):
SECTION 01400, 01720 & 15493 SEE PAGE 3 OF THIS ECN

DRAWINGS: H-2-77596, SH 1, REV 0 H-2-78467, SH 1, REV 0
H-2-77611, SH 1, REV 0 H-2-78481, SH 1, REV 0

SEE PAGE 4 OF THIS ECN



- 13a. Justification (mark one)
- Criteria Change
 - Design Improvement
 - Environmental
 - As-Found
 - Facilitate Const.
 - Const. Error/Omission
 - Design Error/Omission

13b. Justification Details

2, 3A) Criteria was added to establish base line measurement so that the effect of erosion can be verified after filling vaults (Ref WHC ECN # B-714-112851)

1 & 3B) M-25 pipe changed from Safety Class 3 to Safety Class 2 (Ref WHC-SD-B714-W-QAPP-001, REV 4)

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

<u>KEH DISTRIBUTION</u>		<u>WHC DIST. (con't)</u>	
Const Doc Cntl	E2-50	O. A. Halverson	R3-09
Engrg Doc Cntl	E6-52	J. F. Hill [2]	H4-57
		J. R. McGee	SI-54
		D. B. Powell [4]	R4-03
		J. E. Vanbeek	R3-27
<u>WHC DISTRIBUTION</u>		<u>DOE</u>	
Project Files	R1-28	A. G. Lassila	A5-18
S. R. Briggs(PE)	R3-27		
J. K. Epperley	SO-05		
STATION 10	A3-87		
LUPE GARTA	A3-80		

RELEASE STAMP

OFFICIAL RELEASE BY WHC

DATE SEP 19 1990

STAMP # 4

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ENGINEERING CHANGE NOTICE

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1. ECN (use no. from pg. 1)
B-714-54

15. Design Verification Required
 Yes
 No

16. Cost Impact

ENGINEERING	CONSTRUCTION
Additional <input checked="" type="checkbox"/> \$ <u>608</u>	Additional <input checked="" type="checkbox"/> \$ <u>16500</u>
Savings <input type="checkbox"/> \$ _____	Savings <input type="checkbox"/> \$ _____

17. Schedule Impact (days)
 Improvement NA
 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>J.R. Brown</u>	<u>9/14/90</u>	PE <u>K.C. Bergard</u>	<u>9/10/90</u>
Cog./Project Engr. Mgr. <u>J. G. ...</u>	<u>9/14/90</u>	QA <u>J. ...</u>	<u>9-13-90</u>
QA <u>Jacobson</u>	<u>9/14/90</u>	QA <u>J. ...</u>	<u>9-10-90</u>
Safety <u>NA</u>	_____	Safety <u>J. Lundgren</u>	<u>9-7-90</u>
Security _____	_____	Design <u>PIPING J. ...</u>	<u>9/7/90</u>
Proj. Prog./Dept. Mgr. _____	_____	Other <u>SPECS K. ...</u>	<u>9/10/90</u>
Def. React. Div. _____	_____	<u>ENVIR P. ...</u>	<u>9/10/90</u>
Chem. Proc. Div. _____	_____	<u>PLE J. ...</u>	<u>9/10/90</u>
Def Wst. Mgmt. Div. _____	_____	<u>DEPARTMENT OF ENERGY</u>	
Adv. React. Dev. Div. _____	_____	_____	
Proj. Dept. _____	_____	_____	
Environ. Div. _____	_____	<u>ADDITIONAL</u>	
IRM Dept. _____	_____	_____	
Facility Rep. (Ops) _____	_____	_____	
Other _____	_____	_____	

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CHANGES TO SPECIFICATION B-714-C21) SECTION 01400

A) Para 1.3.1.4.a.1 (affects ECN B-714-26, pg 3, item 1B):

ADD after DIVISION 13 the following:DIVISION 15 - MECHANICAL

Section 15493 Chemical Process Piping Systems

- M-25 pipe code materials and welding filler material used to weld M-25 pipe code materials outside confines of pits.

- Guides, supports and anchor materials for M-25 piping as shown on Drawing numbers H-2-77599, 1 of 1, H-2-78470, 1 of 2, 2 of 2 and welding filler material used to weld guides, supports and anchors for M-25 piping outside confines of pits.

B) Article 1.7 (affects ECN B-714-9, pg 9)

Under the heading MECHANICAL Chemical Process Piping System ADD to Off-Site* the following: H - Initial M-25 Pipe Bending2) SECTION 01720

ADD para 1.4.6.20 as follows:

1.4.6.20 Pipe Bend Wall Thickness Measurements: Provide records of measurements required by Section 15493, paragraph 3.1.1.4.

3) SECTION 15493

A) ADD subparagraph a following paragraph 3.1.1.4 as follows:

- a. Measure and document wall thickness at equally spaced 2 inch increments radially around each bend on M-25 Grout Feed Line pipe at the locations shown on drawings. Take 4 measurements 90 degrees apart at each increment. Documentation shall be traceable to bend location. Deliver documentation to KEH.

B) CHANGE para 3.1.4.5 to read as follows:

3.1.4.5 Show on weld identification drawings location and extent of pressure boundary materials and materials attached to pressure boundary requiring CMTR's. Reference each item to its specific report.

CHANGES TO DRAWINGS1) H-2-77596, SH 1, REV 0

A) ISOMETRIC (ZB7): ADD the following callout with leader line & arrow pointing to the top bend on 2" GR-203-M25 pipe: SEE NOTE 12

B) ADD NOTE 12 as follows:

12. MEASURE AND RECORD THE WALL THICKNESS OF THE 2" GR-M25 PIPE AT THE BEND AS SPECIFIED IN SPECIFICATION B-714-C2, SECTION 15493.

2) H-2-77611, SH 1, REV 0

DETAIL 2 (ZE5): CHANGE callout to read 3'-0" BEND RADIUS
TYP (SEE NOTE 12)

3) H-2-78467, SH 1, REV 0
ADD NOTE 14 as follows:

14. MEASURE AND RECORD THE WALL THICKNESS OF THE 2" GR-M25 PIPE AT THE BEND AS SPECIFIED IN SPECIFICATION B-714-C2, SECTION 15493.

4) H-2-78481, SH 1, REV 0

DETAIL 3 (ZC7): ADD the following callout with leader line & arrow pointing to the bend on the 2" GR-300-M25 pipe 3'-0" BEND RADIUS
TYP (SEE NOTE 14)

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