



Mr. John Grantham
 State of Washington
 Department of Ecology
 Nuclear & Mixed Waste Program
 P. O. Box 47600
 Olympia, WA 98504-7600

FLUOR DANIEL, INC.

Date: June 17, 1993

Reference: Hanford Waste Vitrification Plant
 DOE Contract DE-AC06-86RL10838
 Fluor Contract 8457

Transmittal No.: WDOE-461

Dear Mr. Grantham:

TRANSMITTAL

We enclose 2 copy of the items listed below. These are issued per US-DOE request.

Response due to Fluor: N/A

Responds to: E350 PACKAGE

NUMBER	REV	DATE	TITLE
DCN-00045	0	05/26/93	DCN TITLE- USE MATERIALS LISTED IN AISC N690

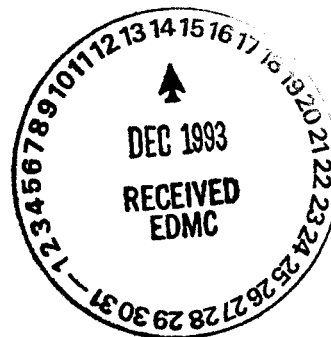
Distribution:

Reference: FRP-1003, FUP-499
 R. L. Long: DOE-RL, w/0
 TWP/AME Corresp Cntrl Cntr, MSIN A5-10
 (E350 PACKAGE), w/0
 P. Felise, WHC-RL (MSIN G6-06), w/1
 Environmental Data Management Center
 (MSIN H6-08), w/1
 D. Duncan, US EPA, Region X, w/0

Very truly yours,

Rosalie Cadenas for
 R. S. Poulter
 Project Director

RCR
 RSP:RCR:lh





FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN -00045

REV 0

PAGE 1 OF 10

DCN TITLE

Use materials listed in
AISC N690

DATE INITIATED

5-26-93

PACKAGE NO.

E350

SECTION 1: DESCRIPTION OF CHANGE

- Threaded studs and hex nuts should be changed from carbon steel to weathering steel, ASTM A 242, Type 1.
- ASTM A 847 materials should be replaced by ASTM A 242, Type 1 material.

CAUSE OF CHANGE:

- Field Change Request
- Supplier Disposition
- Deficiency Report
- Design Development
- Change Request
- Other Systems Review

I.O.C. Safety to Division
10-19-92

Initiating Document(s)

FOR LIST OF AFFECTED DOCUMENTS, SEE SECTIONS 6 AND 7.

SECTION 2: EVALUATION

ARE ANY OF THE FOLLOWING AFFECTED?

- | | | |
|---------------------|--|---|
| WAPA | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |
| QUALITY LEVEL 1 | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> YES |
| SAFETY CLASS 1 OR 2 | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> YES |
| SYSTEMS ANALYSES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> YES |
| MULTI-DISCIPLINE | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> YES |

IF "YES" REVIEW REQUIRED BY:

J. Kelly
A. Yee
R. Bromm

REVIEWER COMMENTS/SIGNATURE/DATE

No Comments [Signature] 6/15/93
No comment [Signature] 6/17/93
No Comments [Signature] 6/10/93

DCN Evaluated by:

Systems RB ADM M. Yamaguchi Others

SECTION 3: APPROVED FOR CONSTRUCTION

C. Wilborn 6-15-93
Originator Date

[Signature] 6/15/93
Project Resident Engineer Date

SECTION 4: CONCURRENCE

- Project Management _____ Date
- Systems _____ Date
- Independent Safety _____ Date
- Quality Assurance _____ Date
- Configuration Management _____ Date

SECTION 5: RELEASED FOR CONSTRUCTION

PE STAMP REQUIRED? NO YES

- WHC _____ Date
- UCAT _____ Date
- DOE _____ Date

COMMENTS:



FLUOR DANIEL

US DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN - 0045

REV
0

DISCIPLINE
Mechanical

PKG. NO.
E350

PAGE
2

PREPARED BY: C. Divona

Date: 6-1-93

DISCIPLINE ENGINEER:

Date:

SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED

DOCUMENT NUMBER	SHT/PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
13088	5	0	CANISTER/OVERPACK - STORAGE TUBE ASSY	N	DELETE LAST SENTENCE of TP 2.1.1.1 Material for rolled tubes
13096	4	0	CANISTER/OVERPACK - Floor Plug Embeds.	N	DELETE TP 2.1.1.3
13099	1	0	CANISTER/OVERPACK - STORAGE TUBE Installation	N	DELETE CITATION TO ASTM A108
"	4	0	"	N	IN TP 2.1.1.3, Replace Grade A with Grade C3
"	4	0	"	N	IN TP 2.1.1.4 DELETE FIRST SENTENCE Replace with " Threaded weld studs Shall be made from material equal to ASTM A242 type 1 chemical composition
H-2-120005	1	0	STANDARD FLOOR Plug Embed	N	ITEM 16 Change ASTM A847 to ASTM A242 Ty 1
H-2-120395	1	0	Standard/OVER PACK Tube Assy	N	ITEMS 20 & 21 Change ASTM A847 to ASTM A242 Ty 1
H-2-120396	1	0	STANDARD/OVERPACK Tube Base Assy	N	ITEM 7, Change ASTM A847 to ASTM A242 Ty 1
H-2-120397	1	0	STANDARD/OVERPACK Storage Assy	N	ITEM 31 DELETE MATERIAL/REFERENCE DELETE THE WORD "NELSON" Change mat. to ASTM A242 Type 1 ITEM 32 Change GRADE A to GRADE C3


SECTION 7: NON-CONSTRUCTION DOCUMENTS AFFECTED

This section references affected items such as P&IDs or calculations/analyses, but they are generally not included in DCN package.


DOCUMENT NUMBER	SHT/PAGE	REV NO	DOCUMENT NAME	DESCRIPTION OF CHANGE
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2.1.1.1


Plates less than or equal to 1/2" thick shall be in accordance with ASTM A242/A242M, Type 1. ~~Material for rolled tubes shall be in accordance with ASTM A847.~~

 FLUOR DANIEL		U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT		DESIGN CHANGE NOTICE		
DESCRIPTION OF CHANGE <ul style="list-style-type: none">• Threaded studs and hex nuts should be changed from carbon steel to weathering steel, ASTM A242, Type.• ASTM A847 material should be replaced by ASTM A242, Type 1 material.				BASE DOC. NO. 13088		
				SHT/PG. 5 REV. 0		
				DISCIPLINE: Mechanical		
PREPARED BY: P. McCaughey		DATE: 6-2-93		DCN - 0045	REV	PAGE
DISCIPLINE ENGINEER: C. Divona		DATE: 6-2-93			0	3

~~2.1.1.3 The material for the annular sections and rolled debris trap shall be in accordance with ASTM A847.~~


 FLUOR DANIEL		U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT		DESIGN CHANGE NOTICE		
DESCRIPTION OF CHANGE <ul style="list-style-type: none"> Threaded studs and hex nuts should be changed from carbon steel to weathering steel, ASTM A242, Type. ASTM A847 material should be replaced by ASTM A242, Type 1 material. 				BASE DOC. NO. 13096		
				SHT/PG. 4 REV. 0		
				DISCIPLINE: Mechanical		
PREPARED BY: P. McCaughey		DATE: 6-2-93		DCN - 0045	REV 0	PAGE 4
DISCIPLINE ENGINEER: C. Divona		DATE: 6-2-93				

~~ASTM A108~~ ~~1990 Standard Specification for Steel Bars, Carbon, Cold Finished, Standard Quality~~

 FLUOR DANIEL		U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT		DESIGN CHANGE NOTICE		
DESCRIPTION OF CHANGE <ul style="list-style-type: none">Threaded studs and hex nuts should be changed from carbon steel to weathering steel, ASTM A242, Type.ASTM A847 material should be replaced by ASTM A242, Type 1 material.				BASE DOC. NO. 13099		
				SHT/PG. 1 REV. 0		
				DISCIPLINE: Mechanical		
PREPARED BY: P. McCaughey		DATE: 6-2-93		DCN - 0045	REV 0	PAGE 5
DISCIPLINE ENGINEER: C. Divona		DATE: 6-2-93				

2.1.1.3 Nuts shall be in accordance with ASTM A563, Grade A C3. An additional 5% of the required quantity shall be supplied as spares. Nuts shall be packaged for field use.

2.1.1.4 Threaded weld studs shall be in accordance with ASTM A108, Grades 1011-1022 (#CPL, TRW Nelson or equal). Threaded weld studs shall be made from material equal to ASTM A242, Type 1, chemical composition. An additional 5% of the required quantity shall be supplied as spares. Studs shall be packaged for field use.

 FLUOR DANIEL		U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT		DESIGN CHANGE NOTICE	
DESCRIPTION OF CHANGE <ul style="list-style-type: none"> Threaded studs and hex nuts should be changed from carbon steel to weathering steel, ASTM A242, Type. ASTM A847 material should be replaced by ASTM A242, Type 1 material. 				BASE DOC. NO. 13099	
				SHT/PG. 4 REV. 0	
				DISCIPLINE: Mechanical	
PREPARED BY: P. McCaughey		DATE: 6-2-93		DCN - 0045	REV 0
DISCIPLINE ENGINEER: C. Divona		DATE: 6-2-93			

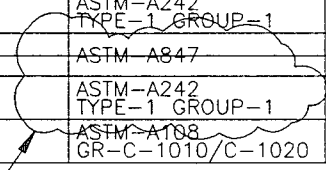
PARTS/MATERIAL LIST


QTY REQD				PART/DASH NUMBER	NOMENCLATURE/DESCRIPTION	MATERIAL/REFERENCE	SHEET	ITEM NO.
040	030	020	010					
			X	-010	STANDARD FLOOR PLUG EMBED		1	1
		X		-020	OVERPACK FLOOR PLUG EMBED		2	2
	X			-030	STANDARD FLOOR PLUG EMBED GAUGE		3	3
X				-040	OVERPACK FLOOR PLUG EMBED GAUGE		3	4
								5
								6
								7
		AR	AR		BAR, 1.0 X 1.25	ASTM-A588 GRADE-A		8
AR	AR				BAR, 1.0 X 2.0	ASTM-A588 GRADE-A		9
		AR	AR		BAR, 1.0 X 2.5	ASTM-A588 GRADE-A		10
		AR	AR		BAR, 1.5 X 3.5	ASTM-A588 GRADE-A		11
AR	AR				PLATE, 3/4 THK	ASTM-A588 GRADE-A		12
AR	AR				PLATE, 1 5/8 THK	ASTM-A588 GRADE-A		13
		AR	AR		PLATE, 3/16 THK	ASTM-A242 TYPE-1		14
AR	AR				ANGLE, 3 X 3 X 3/8	ASTM-A242 TYPE-1 GROUP-1		15
AR	AR	AR	AR		PLATE, 1/2 THK	ASTM-A847		16
AR	AR	AR	AR		PLATE, 1/2 THK	ASTM-A242 TYPE-1 GROUP-1		16
		20	30		NELSON HEADED WELD STUD, Ø1/2 X 2 1/8 LG	ASTM-A108 GR-C-1010/C-1020		17

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E


DCN-0045



 FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT		DESIGN CHANGE NOTICE		
	DESCRIPTION OF CHANGE: ASTM-A847 MATERIALS SHOULD BE REPLACED BY ASTM-A242 TYPE 1 MATERIAL		BASE DOC. NO. H-2-120005 SHT/PG. 1 REV. 0 CR NO.	DISCIPLINE: MECHANICAL	
PREPARED BY: P.NGUYEN DISCIPLINE ENGINEER: C.J.DIVONA	DATE: 06-02-93	DCN - 0045	REV. 0	PAGE 7	

3										2		1				
QTY REQ'D										PART/DASH NUMBER		NOMENCLATURE/DESCRIPTION		MATERIAL/REFERENCE	SHEET	ITEM NO.
110	100	090	080	070	060	050	040	030	020	010						
											-010	STANDARD TUBE ASSEMBLY		1	1	
											-020	OVERPACK TUBE ASSEMBLY		1	2	
											-030	STANDARD BELLOWS ASSEMBLY		2	3	
										1	-040	OVERPACK BELLOWS ASSEMBLY		2	4	
										1	-050	STANDARD FUNNEL ASSEMBLY		3	5	
										1	-060	OVERPACK FUNNEL ASSEMBLY		3	6	
											-070	STANDARD TUBE GAUGE ASSEMBLY		1	7	
											-080	OVERPACK TUBE GAUGE ASSEMBLY		1	8	
											-090	STANDARD UPPER IMPACT ABSORBER GAUGE ASSEMBLY		2	9	
											-100	STANDARD CENTER IMPACT ABSORBER GAUGE ASSEMBLY		2	10	
											-110	OVERPACK UPPER IMPACT ABSORBER GAUGE ASSEMBLY		2	11	
															12	
															13	
															14	
										1	#30.5-30LP-SFW5	BELLOWS, STANDARD EXPANSION JOINT	BADGER OR EQUIVALENT		15	
										1	#34.5-30LP-SFW5	BELLOWS, OVERPACK EXPANSION JOINT	BADGER OR EQUIVALENT		16	
															17	
															18	
															19	
									AR	AR			PLATE, 3/16 THK	ASTM-A847	20	
AR	AR	AR	AR	AR	AR	AR	AR				AR	AR	PLATE, 1/2 THK	ASTM-A847	21	
									AR	AR			PLATE, 3/16 THK	ASTM-A242 TYPE-1	20	
AR	AR	AR	AR	AR	AR	AR	AR				AR	AR	PLATE, 1/2 THK	ASTM-A242 TYPE-1	21	
									AR	AR			PLATE, 1/2 THK	ASTM-A242 TYPE-1	22	
AR	AR	AR	AR	AR									PLATE, 1 THK	ASTM-A588 GRADE-A	23	
AR	AR	AR											PLATE, 1 1/2 THK	ASTM-A588 GRADE-A	24	
									AR	AR			BAR, RECT 2 X 1 3/4	ASTM-A242 TYPE-1	25	
												AR	BAR, SQ 1 X 1	ASTM-A588 GRADE-A	26	
											AR		BAR, RECT 1 X 1 5/8	ASTM-A588 GRADE-A	27	
										AR	AR		BAR, RECT 3/4 X 3 1/4	ASTM-A588 GRADE-A	28	
										AR	AR		BAR, RECT 1 1/2 X 2 1/4	ASTM-A588 GRADE-A	29	

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 FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE	
		DESCRIPTION OF CHANGE: ASTM-A847 MATERIALS SHOULD BE REPLACED BY ASTM-A242 TYPE 1 MATERIAL	
PREPARED BY: P. NGUYEN		DATE: 06-02-93	
DISCIPLINE ENGINEER: C.J. DIVONA		DATE:	
BASE DOC. NO. H-2-120395		SHT/PG. 1 REV. 0	
CR NO.		DISCIPLINE: MECHANICAL	
DCN - 0045		REV. 0	PAGE 8

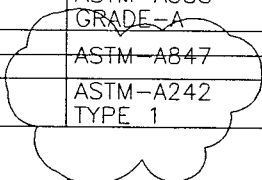
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1

PARTS/MATERIAL LIST

QTY REQD	PART/DASH NUMBER	NOMENCLATURE/DESCRIPTION	MATERIAL/REFERENCE	SHEET	ITEM NO.
-020-010	010	STANDARD TUBE BASE ASSEMBLY			1
X	020	OVERPACK TUBE BASE ASSEMBLY			2
					3
					4
					5
AR	AR	PLATE, 3/4 THK	ASTM-A588 GRADE-A		6
AR	AR	PLATE, 1/2 THK	ASTM-A847		7
AR	AR	PLATE, 1/2 THK	ASTM-A242 TYPE 1		7

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DCN-0045



FLUOR DANIEL

U.S. DEPARTMENT OF ENERGY
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DESCRIPTION OF CHANGE:

ASTM-A847 MATERIALS SHOULD BE
REPLACED BY ASTM-A242 TYPE 1 MATERIAL

BASE DOC. NO. H-2-120396

SHT/PG. 1 REV. 0

CR NO.

DISCIPLINE: MECHANICAL

PREPARED BY: P.NGUYEN

DATE: 06-02-93

DISCIPLINE ENGINEER: C.J.DIVONA


DATE:

DCN - 0045

REV. 0 PAGE 9

QTY RECD		PART/DASH NUMBER	NOMENCLATURE/DESCRIPTION	MATERIAL/REFERENCE	SHEET	ITEM NO.
030	020-010					
		-010	STANDARD CANISTER STORAGE TUBE ASSEMBLY		1	1
		-020	OVERPACK CANISTER STORAGE TUBE ASSEMBLY		1	2
		-030	TEMPERATURE PROBE LINE ASSEMBLY		2	3
						4
						5
						6
3		-001	PIPE STRAP, 1/4 THK	ASTM-A242 TYPE-1	2	7
242		-002	PIPE STRAP, 1/4 THK	ASTM-A242 TYPE-1	2	8
234		-003	SUPPORT BASE, 3/8 THK	ASTM-A242 TYPE-1	2	9
18		-004	END PLATE, 3/8 THK	ASTM-A242 TYPE-1	2	10
						11
						12
						13
						14
	1	H-2-120394-010	STANDARD FLOOR PLUG ASSEMBLY			15
	1	H-2-120394-020	OVERPACK FLOOR PLUG ASSEMBLY			16
	1	H-2-120005-010	STANDARD FLOOR PLUG EMBED			17
	1	H-2-120005-020	OVERPACK FLOOR PLUG EMBED			18
	1	H-2-120395-010	STANDARD TUBE ASSEMBLY			19
	1	H-2-120395-020	OVERPACK TUBE ASSEMBLY			20
	1	H-2-120142-010	STANDARD UPPER IMPACT ABSORBER ASSEMBLY RA-180-003			21
	1	H-2-120142-020	STANDARD CENTER IMPACT ABSORBER ASSEMBLY RA-180-002			22
	1	H-2-120142-030	STANDARD LOWER IMPACT ABSORBER ASSEMBLY RA-180-001			23
	1	H-2-120142-040	OVERPACK UPPER IMPACT ABSORBER ASSEMBLY RA-180-005			24
	1	H-2-120142-050	OVERPACK LOWER IMPACT ABSORBER ASSEMBLY RA-180-004			25
	1	H-2-120396-010	STANDARD TUBE BASE ASSEMBLY			26
	1	H-2-120396-020	OVERPACK TUBE BASE ASSEMBLY			27
						28
						29
						30
4	4		NELSON THREADED WELD STUD, Ø3/4-10 UNC-2A X 5 LG	ASTM-A108 GRADES 1011-1022		31
8	8		NUT, 3/4-10 UNC-2B HVY HEX	ASTM-A563 GRADE-A		32
4	4		THREADED WELD STUD, Ø3/4-10 UNC-2A X 5 LG	ASTM-A242 TYPE 1		31
8	8		NUT, 3/4-10 UNC-2B HVY HEX	ASTM-A563 GRADE-C3		32
9			PIPE EMBED, 3" SCH 80	ASTM-A53 TYPE-F		33
9			ANGLE, 3 X 3 X 3/8 THK X 6 LG	ASTM-A242 TYPE-1 GROUP-1		34
AR			PIPE, 3/4" SCH 40S	ASTM-A312 GRADE-304L		35
27			CAP, BUTTWELD 3/4" SCH 40S	ASTM-A403 GRADE-WP304L		36

DCN-0045

 FLUOR DANIEL	U.S. DEPARTMENT OF ENERGY HANFORD WASTE VITRIFICATION PLANT	DESIGN CHANGE NOTICE		
		DESCRIPTION OF CHANGE: THREADED STUDS AND HEX NUTS SHOULD BE CHANGED FROM CARBON STEEL TO WEATHERING STEEL, ASTM-A242 TYPE 1	BASE DOC. NO. H-2-120397 SHT/PG. 1 REV. 0 CR NO. DISCIPLINE: MECHANICAL	
PREPARED BY: P. NGUYEN	DATE: 06-02-93	DCN - 0045	REV. 0	PAGE 10
DISCIPLINE ENGINEER: C.J. DIVONA	DATE:			