

START 1513337.1252

004,0945



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: August 1, 1994

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

Transmittal No.: WDOE-975

Dear Mr. Grantham:

TRANSMITTAL

We enclosed 1 copy of the items listed below. These are issued per US-DOE request.

Response due to Fluor: N/A  
Responds to: DOE REQUEST

NUMBER	REV	DATE	TITLE
DCN - 0192	0	08/01/94	<p>DCN TITLE: FIREWATER PUMP PERMISSIVE START WITH PARTIALLY CLOSED VALVES</p> <p>NOTE: "FOR RCRA PART B PERMIT"</p>

Distribution:  
R. L. Long - DOE-RL, w/0  
TWP/AME Corresp Cntrl Cntr MSIN A5-10  
(A160 PACKAGE), w/0  
P. Felise - WHC-RL (MSIN G6-06), w/0  
Environmental Data Management Center  
(MSIN H6-08), w/1  
D. Duncan - US EPA, Region X, w/0  
M.D. Talbot, WHC -w/0

Very truly yours,

*Nazy Estraghi For*  
R. S. Poulter  
Project Director

RSP:DGL:nre



9513337.1253



FLUOR DANIEL

US DEPARTMENT OF ENERGY  
HANFORD WASTE VITRIFICATION PLANT

DESIGN CHANGE NOTICE

DCN - 0192

REV 0

PAGE 1 OF 43  
DGL

DCN TITLE  
Firewater pump permissive  
start with partially closed  
valves

DATE INITIATED  
27 June 1994

PACKAGE NO.  
A160

SECTION 1: DESCRIPTION OF CHANGE

This DCN revises the specification wording to state that the Fire Pumps (PX-500-002A/B) may start even if suction or discharge valves are not open. Previously approved specifications state that if either suction or discharge valve is not fully open, the pump shall not start.

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

CAUSE OF CHANGE:

- Field Change Request
- Supplier Disposition
- Deficiency Report
- Design Development
- Change Request
- TBD/Hold
- Other Title III  
Review

RTC-727  
(Ref. EDN T3-017)  
Initiating Document(s)

SECTION 2: EVALUATION

	IF "YES", ADDITIONAL REVIEW REQUIRED BY:	REVIEWER COMMENTS AND SIGNATURE/DATE
WAPA DWG/SPEC? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	_____	_____
QUALITY LEVEL 1 DWG/SPEC? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	_____	_____
SAFETY CLASS 1 OR 2 DWG/SPEC? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	_____	_____
SYSTEMS ANALYSES AFFECTED? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	_____	_____
MULTI-DISCIPLINE CHANGE? <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	_____	_____
DCN Evaluated by: Systems <u>J. Horvath</u> ADM <u>B. Cimbrini</u> Others <u>No Comments</u>	_____	_____

SECTION 3: APPROVED FOR CONSTRUCTION

Originator: Donald J. Sabanty Date: 28 June 94  
 Project Resident Engineer: [Signature] Date: 6/28/94

SECTION 4: CONCURRENCE

[Signature] 7-21-94 Date  
Project Management  
Peter J. Sand for H.E. Savage 7-21-94 Date  
Systems  
[Signature] 7-21-1994 Date  
Independent Safety for J.G. Kelly  
[Signature] 7-25-94 Date  
Quality Assurance  
[Signature] 7-21-94 Date  
Configuration Management

SECTION 5: RELEASED FOR CONSTRUCTION

PE STAMP REQUIRED?  NO  YES  
[Signature] 7/28/94 Date  
WHC  
[Signature] 7-27-94 Date  
UCAT  
[Signature] 22 JUL 94 Date  
DOE

COMMENTS:

9513337.1254



**FLUOR DANIEL**  
US DEPARTMENT OF ENERGY  
HANFORD WASTE VITRIFICATION PLANT

REV	DISCIPLINE	PKG. NO.	PAGE
0	Mech	A160	2

**DCN - 0192**

**DESIGN CHANGE NOTICE**

PREPARED BY: *Donald G. LaBounty*  
Date: 27 June 94

DISCIPLINE ENGINEER: *Donald G. LaBounty*  
Date: 27 June 94

**SECTION 6: CONSTRUCTION DOCUMENTS AFFECTED**

DOCUMENT NUMBER	SHT/PAGE	REV NO	DOCUMENT NAME	INCLD Y/N	DESCRIPTION OF CHANGE
B-595-C-A160-15540	11	1	Fire Water System Pumps	Yes	Revised wording of specification to state that partially opened or closed suction or discharge valves shall not inhibit the start of the fire water pumps.  <i>REFER TO DCN-0153 REV. 3 FOR ADDITIONAL CHANGES TO SPECIFICATION 15540 RELATED TO THIS CHANGE.</i>

**ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY**



EXPIRES 9-11-97

**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
N/A				

9513337.1255

- 4) Power Available indicating light.
- 5) Power Available auxiliary contact. This shall be wired to terminal blocks.
- 6) Low Discharge Pressure indicating light (PL-FWX-388B).
- 7) Terminal Block for external inputs.
- 8) High Pressure indicating light (PL-FWX-387B).
- 9) YC-FWX-383 Loop 287 logic.

Refer to Drawing H-2-121657, Sheet 1 for panel layout and nameplate descriptions.

B. Fire Water Pumps (PX-500-002A) [PX-500-002B]

The Fire Water Pumps are normally in auto standby mode while the fire water header pressure is being maintained by the jockey pump (PX-500-004). When the header pressure drops to 85 psig (PSL-FWX-018) [PSL-FWX-019] persistently for 15 seconds (KS-FWX-018), PX-500-002A starts automatically. If PX-500-002A is not available or low pressure persists for 20 seconds (KS-FWX-019) due to excessive demand, PX-500-002B starts automatically to supply the necessary water pressure. For each pump, if the suction valve switch (ZSL-FWX-012-1) (ZSL-FWX-012-2) or the discharge valve switch (ZSL-FWX-017-1) (ZSL-FWX-017-2) indicates the respective valve is closed, the respective alarm light for the suction valve (ZAL-FWX-012-1) (ZAL-FWX-012-2) or discharge valve (ZAL-FWX-017-1) (ZAL-FWX-017-2) will light. At the same time, an alarm horn on the outside of the pump house will sound. Also, pumps (PX-500-002A) [PX-500-002B] are inhibited from starting if their respective inlet and/or outlet valves are closed. An operator action is required to shutdown the pumps. The status of both pumps is indicated in the DCS (by Buyer).

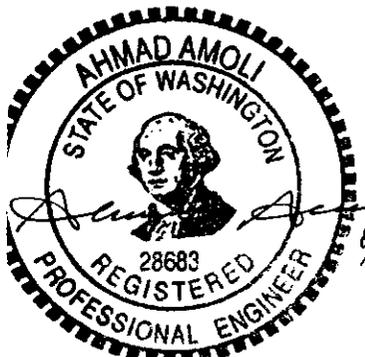
Seller shall furnish an FM-approved or UL-listed fire pump flowmeter. This flowmeter shall be of the averaging pitot tube-type. The fire pump flowmeter shall be used as a permanent installation to measure the fire pump flow performance.

The flow indicator shall have a 6 inch (minimum) dial, with a scale reading directly in GPM. The measurement accuracy shall be within ±1 percent over a scale range of 750 to 3000 GPM.

ISSUED FOR DEPARTMENT OF ECOLOGY PERMIT ONLY

DCN-0192

NOT



EXPIRES 9-11-97

DCN-0192 REV 0  
PAGE 3