



U.S. Department of Energy
Office of River Protection

0099235

P.O. Box 450, MSIN H6-60
Richland, Washington 99352

SEP 23 2011

11-ESQ-241

Mr. John Martell, Manager
Radioactive Air Emissions Section
Washington State Department of Health
309 Bradley Blvd., Suite 201
Richland, Washington 99352
(Hanford Mailstop: B1-42)

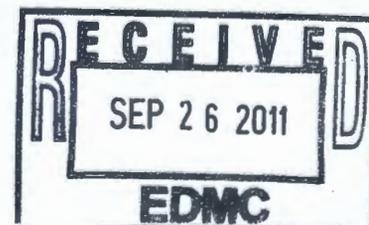
Dear Mr. Martell:

U.S. DEPARTMENT OF ENERGY (DOE), OFFICE OF RIVER PROTECTION (ORP)
SUBMITTAL OF CLOSURE REPORTS FOR SIX EMISSION UNITS IN THE HANFORD
SITE AIR OPERATING PERMIT (AOP), PERMIT NUMBER 00-05-006/LICENSE NUMBER
FF-01

DOE ORP hereby submits to the Washington State Department of Health, Closure Reports, also known as Reports of Closure, for six Emission Units (listed below) currently in the Hanford Site AOP. These Reports of Closure (Attached) are required pursuant to Washington Administrative Code 246-247-080(6), and document the cessation of radionuclide emitting activities. This information is necessary to facilitate removal of the units from the AOP.

Emission Units reported in Closure Reports:

- P-296-P028-001 (EU ID 54);
- P-296AW-001 (EU ID 150);
- C-106 Sluicing (EU ID 236);
- P-Vadose-002 (EU ID 539);
- P-Vadose-003 (EU ID 541); and
- P-244CR-003 (EU ID 714).



H.O.9

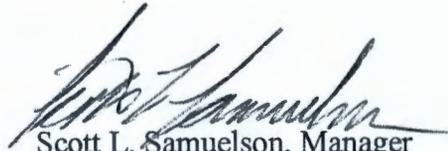
Mr. John Martell
11-ESQ-241

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SEP 23 2011

If you have any questions, please contact me, or your staff may contact Dennis W. Bowser, Environmental Compliance Division, (509) 373-2566.

Sincerely,


Scott L. Samuelson, Manager
Office of River Protection

ESQ:DWB

Attachment

cc w/attach:

O. S. Wang, Ecology

R. H. Anderson, MSA

J. W. Donnelly, WRPS

Administrative Record

Environmental Portal, LMSI

WRPS Correspondence

cc w/o attach:

J. A. Bates, CHPRC

J. Cox, CTUIR

S. Harris, CTUIR

S. L. Dahl, Ecology

D. Hendrickson, Ecology

T. G. Beam, MSA

G. Bohnee, NPT

K. Niles, Oregon Energy

D. E. Jackson, RL

F. R. Miera, WRPS

M. G. Peloquin, WRPS

L. L. Penn, WRPS

J. A. Voogd, WRPS

R. Jim, YN

Attachment
11-ESQ-241
(79 Pages)

Report of Closure for Emission Units

REPORT OF CLOSURE FOR EMISSION UNITS:

1. P-296-P028-001 (EU ID 54)
2. P-296AW-001 (EU ID 150)
3. C-106 Sluicing (EU ID 236)
4. P-Vadose-002 (EU ID 539)
5. P-Vadose-003 (EU ID 541)
6. P-244CR-003 (EU ID 714)

Report of Closure/Permit Revision

NOTE: Any increase to abated or unabated PTE requires a full NOC modification

REASON FOR CHANGE

Submittal Date: 08/31/2011

NOC Application Revision

New NOC Rev Number: _____

Condition Change/ Clarification

WDOH Condition Number: _____

AOP Condition Number: See below

ALARACT Revision

New ALARACT Rev Number: _____

PROJECT IDENTIFICATION

Project Title: Report of closure for P-296P028-001, 296-P-28

Current NOC Application Number: AOP Permit 00-05-006/ License Number FF-01

AEI ID Number (AOP Emission Unit Number(s)): P-296P028-001

Current WDOH Approval Letter Number(s): N/A

WDOH NOC ID Number: 54

DESCRIPTION OF CHANGE

Number of Attachments 1

Report of Closure for P-296P028-001

Summary/Introduction

In accordance with Washington Administrative Code 246-247-080(6), this report of closure is being submitted to the State of Washington Department of Health (WDOH) to document cessation of radionuclide emitting activities from P-296P028-001.

The following information is provided in this document:

- Date of closure
- Remaining material
- Assessment of potential continued emissions
- Future plans
- Emissions control and monitoring

1. Date of closure:

The P-296P028-001 exhauster has been inactive and the status is non-operational in the Hanford Site Air Operating Permit (AOP), 00-05-006. In a review of the historical file of the *Radioactive Air Emissions Report for the Hanford Site* (1998 Annual Report), there have been no reported emissions for this exhauster for the last 11 years. This exhauster has been stored in 241-SY Tank Farm in a non-operational status and has been removed from the 241-SY Tank Farm and disposed as waste. The closure date is the submittal date of this closure report.

2. Remaining material:

The P-296P028-001 exhauster, associated ventilation components, and condensate drain lines were placed in a container/burial box, removed from the 241-SY Tank Farm and disposed of as waste as an American Recovery and Reinvestment Act of 2009 activity. There is no remaining material.

3. Assessment of potential continued emissions:

There is no potential for continued emissions as the P-296P028-001 has been removed and disposed of as waste. The flex duct connection attached to the exhaust system was removed and a blind flange installed. The condensate drain line was capped. The seal pot was drained. All removed equipment was placed in a container/burial box. Isolation field work and loading of the P-296P028-001 was performed under Tank Farm Work Instruction 2W-03-00852/M, "241-SY Remove the P-28 Exhauster". There is no potential for future emissions.

4. Future plans:

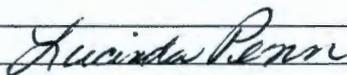
Dispose of exhauster as waste.

5. Emissions control and monitoring:

Emissions control and monitoring is not required for the P-296P028-001 exhauster. The emissions control and monitoring system have been removed.

Based on this report of closure it is requested that emission unit/notice of construction approval P-296P028-001 be removed from the Hanford Site Air Operating Permit (AOP Permit 00-05-006/ License Number FF-01).

SIGNATURES

| Reviewed by Contractor | Reviewed by RL/ORP | Approved by WDOH |
|---|--------------------|------------------|
|  | | |
| | | |
| Date: 8/31/11 | Date: | Date: |

**Solid Waste Information and Tracking System
Container Listing Report**

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06/29/2011 13:12
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for Package ID: **BOE-09-246-01**
Source Facility:
Location Facility:
Shipment #:

| | | |
|--|--|--------------------------------------|
| Package ID: BOE-09-246-01 | Secondary Pkg ID: BOE-09-246-01 | Accumulation Date: 09/20/2009 |
| Waste Type: D LLW | Phys State Cd: S | Deadline Date: 12/18/2009 |
| Sec Waste Type: LLW | UHC Determination: G | Ship Date: 10/21/2009 |
| Encasement/HIC#: | UHC's Applicable: D | TSD Receive Date: 10/23/2009 |
| Profile / Rev#: 2007-WRPS-0003 - 01 | NFPA < 93.3C: | TSD Accept Date: 10/23/2009 |
| WSRd / Rev #: 647 - 04 | Storage Category: M | Disposal Date: |

Routine Status: **100 Non-Routine / Other**

| | |
|---|---|
| Container Type / Descr: CM / 17.7*9.7*13.6 | Container Empty Tare Wt. (kg): 3307.0000 |
| Container Volume (cu. meters): 52.9500 | Waste Weight (kg): 4176.8000 |
| Labpack Flag: N | Container Gross Wt. (kg): 7581.8000 |
| Container Contents: 241 SY P-28 EXHAUSTER CONSISTING OF LEAD, STEEL, ASBESTOS, ALUMINUM, COPPER, WOOD, RUBBER, CLOTH, PLASTIC, & PAPER | |
| SWO Comments: | |

Generator Information

| | | |
|---|------------------------------|----------------------------------|
| Generating Company: WRPS WASHINGTON RIVER PROTECTION SOLUTIONS | Generator ID: 0002035 | Generator Group: TANKFARM |
| Source Facility: 241SY | Generator: TM TURNER | |
| Generator Comments: SHIPMENT # TF591. ACTUAL SIZE OF BOX: 10' X 11' X 17'. LEAD WILL BE SEGREGATED/REMOVED & THEN TREATED AS MIXED WASTE AT PFM. REMAINING PORTION WILL BE PROCESSED/MANAGED AS LLW. | | |

Billing Detail

| <u>Charge Code</u> | <u>COA</u> | <u>Company</u> | <u>Group ID</u> | <u>Percent</u> |
|--------------------|------------|---------------------------------------|-----------------|----------------|
| 301550 | EF00 | WASHINGTON RIVER PROTECTION SOLUTIONS | TANKFARM | 100.00 |
| | | | | 100.00 |

Solid Waste Information and Tracking System
Container Listing Report
for Package ID: BOE-09-246-01
Source Facility:
Location Facility:
Shipment #:

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Page 2 of 4

Hazardous Package Detail

Container Status: **Partially Full** Flashpoint: **N/A** pH Value: **>2-<12.5** Subpart CC Flag: **N**
DW Numbers: **D008**

RCRA Reporting

ADWR Stream Description: **Debris - Metal, Organics**
Designation Code: **DW**
Source Code: **G15** **Process equipment change-out or retirement**
Comment:
Form Code: **W319** **Other inorganic solids, specify in comments**
Comment: **Contaminated Equipment**
Origin Code: **ii** **Non-recurrent waste stream.**
Residual Mgmt Method:
Comment:
Management Method: **H112** **Macro-encapsulation before disposal**
Comment:
Certification Group:
Reportable CERCLA?:

Pre-2007 Reporting

Waste Stream: Offsite TSD Waste Stream: RCRA Designated Date:

PCB Package Detail:

PCB Type:
PCB Subtype:
PCB Contents:

PCB Source Concentration (PPM):
PCB Waste Weight:
Removed from Service:

Solid Waste Information and Tracking System
Container Listing Report
for Package ID: BOE-09-246-01
Source Facility:
Location Facility:
Shipment #:

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Radioactive Package Detail

| | | |
|-----------------------------|--------------------------------|---|
| Waste Category: WC1 | Shielding: None | Thermal Power (w/cu.m.): 1.75945E-05 |
| Combustible Flag: | Handling: C | Neutron Dose Rate: .00000E+00 |
| Exceeds ISB Limit: N | RSWIMS Container Cnt: 1 | Contact Dose Rate: 3.00000E+00 |
| NRC Class: A | Excluded from DE-Ci: | Tot Pe-Ci: 7.67000E-06 |
| | | ICRP 71 DE-Ci: 2.54788E-05 |

VOC/Hydrogen Gas Diffusion Detail

H2 Diffusion Release Date: VOC Hold?: VOC Resample Date:

Current Location Information

| | | |
|-----------------------------|----------------|--------------------------|
| Facility ID: OFFSITE | Tier Level: | Loc Beg Coordinates - N: |
| Trench / Unit: | Tier Position: | W: |
| Module: | GPS Data Flag: | Loc End Coordinates - N: |
| | | W: |

Isotope Information

| <u>Isotope Number</u> | <u>Isotope Name</u> | <u>Isotope Activity (Ci)</u> |
|-----------------------|---------------------|------------------------------|
| 8 | Cs-137 | 1.93000E-01 |
| 26 | Am-241 | 7.67000E-06 |
| 80 | Sm-151 | 1.60000E-02 |

Solid Waste Information and Tracking System
Container Listing Report
 for Package ID: **BOE-09-246-01**
 Source Facility:
 Location Facility:
 Shipment #:

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Waste Component Records

| <u>Component ID</u> | <u>Component Text</u> | <u>PPM</u> | <u>Weight (kg)</u> | <u>Weight %</u> |
|---------------------|-----------------------|------------|--------------------|-----------------|
| 7429-90-5 | ALUMINUM | | 52.6277 | 1.26 |
| 7439-92-1 | LEAD | | 55.1338 | 1.32 |
| 7440-50-8 | COPPER | | 91.8896 | 2.2 |
| GCNASBESTOS | ASBESTOS | | 229.3063 | 5.49 |
| GCN CLOTH | CLOTH | | 13.7834 | 0.33 |
| GCMETAL | METAL (NONHAZARDOUS) | | 3440.8478 | 82.38 |
| GCPAPER | PAPER/CARDBOARD | | 18.3779 | 0.44 |
| GCNPLASTIC | PLASTIC | | 80.1946 | 1.92 |
| GCRUBBER | RUBBER | | 45.5271 | 1.1 |
| GCRWOOD | WOOD | | 149.1118 | 3.57 |
| | | | <u>4176.8000</u> | |

Packaging Components

| <u>Component Description</u> | <u>Weight (kg)</u> |
|------------------------------|--------------------|
| 10 MIL LINER | 88.0000 |
| ABSORBENT PAD, POLYPROPYLENE | 10.0000 |
| | <u>98.0000</u> |

Manifest / Shipping Information

| <u>Shipment</u> | | | | <u>RSR</u> | <u>DOT</u> | <u>DOT</u> | <u>REQ</u> | <u>Shipment</u> | <u>Date</u> | <u>Shipment</u> | <u>Manifest</u> | <u>Tran</u> | <u>Tran</u> | <u>Dest</u> | <u>Dest</u> | <u>Receiving</u> | <u>Rtn</u> |
|-----------------|------------------|-------------|--------------|-------------|-------------|------------|------------|------------------|----------------|-----------------|-----------------|---------------|-------------|---------------|-------------|------------------|------------|
| <u>Type</u> | <u>Document#</u> | <u>Item</u> | <u>RSR #</u> | <u>Type</u> | <u>Spec</u> | <u>Cat</u> | <u>Num</u> | <u>Scheduled</u> | <u>Shipped</u> | <u>Arrived</u> | <u>Returned</u> | <u>Compny</u> | <u>Type</u> | <u>Compny</u> | <u>Type</u> | <u>Facility</u> | |
| MFT | TF591 | 1 | | OFF | 7AA | UN2915 | | 10/21/09 | 10/21/09 | 10/23/09 | 10/23/09 | SAV | TRA | PFNW | TSD | | |

PermaFix
Northwest, Inc.



2025 Battelle Blvd.
Richland, WA 99354
Telephone: (509) 375-5160
FAX: (509) 375-0613

October 21, 2009

Mandrake Pascual
Department of Energy
WA River Protection Solutions
P.O. Box 0000 MSIN:RI-51
Richland, WA 99352

33592-12/20
TF591

Mr. Pascual:

In compliance with the requirements of 10 CFR 20, Appendix G, Section III, C.1, the attached-signed shipping manifest copy is your notice of receipt and acceptance of the mixed hazardous/radioactive waste materials specified on the manifest. Manifest number 000731332GBF (MWA09-170) received on October 21, 2009 has been assigned receipt number of MWR09-174.

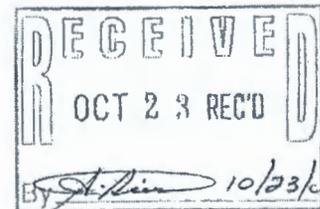
This is an acknowledgement of receipt only. Any discrepancies found during unloading will be processed at a later date.

Thank you for your business.

Sincerely,

Dakin Utley
Technical Projects Lead
Perma-Fix Northwest

Enclosure(s): UHWM, 540, 541,



| | | | | | | |
|---|---|--|---|---|--|----------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number WA47690008967 | 2. Page 1 of 1 | 3. Emergency Response Phone 1-800-766-0771 | 4. Manifest Tracking Number 000701332GBF | |
| 5. Generator's Name and Mailing Address US DOE IN CARE OF WASHINGTON RIVER PROTECTION SOLUTIONS PO BOX 850, RICHLAND, WA, 99354 Generator's Phone: 509 372-0713 Attn: MF PASCUAL | | | Generator's Site Address (if different than mailing address) US DOE IN CARE OF WASHINGTON RIVER PROTECTION SOLUTIONS PO BOX 850, RICHLAND, WA, 99354 R1-51 | | | |
| 6. Transporter 1 Company Name SAVAGE LOGISTICS LLC | | | | U.S. EPA ID Number WA4100030373 | | |
| 7. Transporter 2 Company Name NONE | | | | U.S. EPA ID Number N/A | | |
| 8. Designated Facility Name and Site Address PLUG-A-FIX NORTHWEST 2025 SATTELLE BLVD, RICHLAND, WA 99352 Facility's Phone: (509)375-5160 | | | | U.S. EPA ID Number WA4000010366 | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | 10. Containers | | 11. Total Quantity |
| | | | | No. | Type | 12. Unit Wt/Vol. |
| | | 1. WASTE RADIOACTIVE MATERIAL, TYPE A PACKAGE, 7; UN2915; SOLID, MIXTURE; CS-137, AM-241; 7.82 E+03 MBQ; BAE-09-246-01 STEEL BOX; Radioactive YELLOW-II; TT 0.7; Placard Excepted; | | 1 | LD | 1.562 |
| | | 2. | | | | |
| | | 3. | | | | |
| | 4. | | | | | |
| 14. Special Handling Instructions and Additional Information WASTE - F591 - Additional information on accompanying paperwork -- Exclusive Use Shipment -- Return to Generator if not Delivered -- ERG #: 163 | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. ON BEHALF OF DOE-RL | | | | | | |
| Generator's/Offeror's Printed/Typed Name RL CLAWSON | | | | Signature <i>[Signature]</i> | | Month Day Year 10 21 09 |
| TRANSPORTER INTL | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name NIC HERNANDEZ | | | | Signature <i>[Signature]</i> | |
| | Transporter 2 Printed/Typed Name | | | | Signature <i>[Signature]</i> | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residua <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | |
| | Facility's Phone: _____ | | | | | |
| 18c. Signature of Alternate Facility (or Generator) Month Day Year | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | |
| 1. 1124 | | 2. | | 3. | | 4. |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | |
| Printed/Typed Name DORIS R. LITLEY | | | | Signature <i>[Signature]</i> | | Month Day Year 10 21 09 |

Report of Closure/Permit Revision

NOTE: Any increase to abated or unabated PTE requires a full NOC modification

REASON FOR CHANGE

Submittal Date: 08/31/2011

NOC Application Revision

New NOC Rev Number: _____

Condition Change/ Clarification

WDOH Condition Number: _____

AOP Condition Number: See below

ALARACT Revision

New ALARACT Rev Number: _____

PROJECT IDENTIFICATION

Project Title: Report of closure for P-296AW-001, 296-A-27

Current NOC Application Number: AOP Permit 00-05-006/ License Number FF-01

AEI ID Number (AOP Emission Unit Number(s)): P-296AW-001

Current WDOH Approval Letter Number(s): N/A

WDOH NOC ID Number: 150

DESCRIPTION OF CHANGE

Number of Attachments 1

Report of Closure for P-296AW-001

Summary/Introduction

In accordance with Washington Administrative Code 246-247-080(6), this report of closure is being submitted to the State of Washington Department of Health (WDOH) to document cessation of radionuclide emitting activities from P-296AW-001.

The following information is provided in this document:

- Date of closure
- Remaining material
- Assessment of potential continued emissions
- Future plans
- Emissions control and monitoring

1. Date of closure:

The P-296AW-001 exhauster has been removed from service. This exhauster has been dismantled and will be disposed as waste. The closure date is the submittal date of this closure report.

2. Remaining material:

The P-296AW-001 exhauster, associated ventilation components, and condensate drain lines have been placed in a container/burial box and are being disposed of as waste as an American Recovery and Reinvestment Act of 2009 activity. There is no remaining material.

3. Assessment of potential continued emissions:

There is no potential for continued emissions as the P-296AW-001 has been dismantled and is being disposed of as waste. There is no potential for future emissions.

4. Future plans:

Dispose of exhauster as waste.

5. Emissions control and monitoring:

Emissions control and monitoring is not required for the P-296AW-001 exhauster. The emissions control and monitoring system have been removed.

Based on this report of closure it is requested that emission unit/notice of construction approval P-296PAW-001 be removed from the Hanford Site Air Operating Permit (AOP Permit 00-05-006/ License Number FF-01).

SIGNATURES

| Reviewed by Contractor | Reviewed by RL/ORP | Approved by WDOH |
|------------------------|--------------------|------------------|
| <i>Alicinda Penn</i> | | |
| | | |
| | | |
| Date: 8/31/11 | Date: | Date: |

ENGINEERING CHANGE NOTICE

1a. ECN No.: 10-001692

Page 1 of 12

DM FM TM

1b. Project No.: N/A

| | | |
|--|---|------------------------------|
| 2. Simple Modification <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 3. Design Inputs – For full ECNs, record information on the ECH-1 Form (not required for Simple Modifications) | 4. Date 01/05/2011 |
|--|---|------------------------------|

| | | | |
|---|--|---|---|
| 5. Originator's Name, Organization, MSIN, & Phone No. VJ Bender, ARES Corporation 1100 Jadwin Ave, Suite 400 509-946-3300 | 6. PrHA Number No. 0105R-0 <input checked="" type="checkbox"/> N/A PBD 01/14/11 For MUSHULTZ Per Telecom | 7. USQ Number No. - - - R- N/A J. H. Giesey 1/9/11 USQ Evaluator Sign/Date | 8. Related ECNs ECN-726786-R0 ECN-836684-R0 ECN-726664-R0 PBD 01/13/11 |
|---|--|---|---|

| | | | |
|--|---|--|---------------------------------------|
| 9. Title Isolate and remove 241-AW Primary Ventilation | 10. Bldg. / Facility No. 241-AW | 11. Equipment / Component ID AW Primary Ventilation System | 12. Approval Designator N/A |
|--|---|--|---------------------------------------|

| | | |
|--|--|--|
| 13. Engineering Documents/Drawings to be Changed (Incl. Sheet & Rev. Nos.) 726786 PBD 01/14/11 Supersedes ECN-72786-R0 with this ECN, changes continue on page 3. | 14. Safety Designation <input type="checkbox"/> SC <input type="checkbox"/> SS <input checked="" type="checkbox"/> GS <input type="checkbox"/> N/A | 15. Expedited/Off-Shift ECN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
|--|--|--|

| | | | |
|--|--|--|--|
| 16a. Work Package Number TFC-WO-10-4004 TFC-WO-10-4243 TFC-WO-10-4055-PBD 01-4055 06/23/11 RPB 01/17/11 Responsible Engineer / Date | 16b. Modification Work Completed Responsible Engineer / Date | 16c. Restored to Original Status (TM) N/A Responsible Engineer / Date | 17. Fabrication Support ECN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| | | | 29. CAD File? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No 1/17/11 |

18. Description of the Change (Use ECN Continuation pages as needed)

Problem:
 Under project W-314, the original primary exhaust trains were replaced. The original K1 system was abandoned in place. The original K1 system requires removal to optimize operations, remove potential sources of radiation and contamination, and improve worker safety.

Solution:
 This ECN is to identify and establish isolation boundaries and facilitate removal of the abandoned system components. This ECN supersedes ECN-726786-R0 in its entirety.
 Due to the nature of the original K1 system design media and to simplify the work control documentation, this ECN identifies the system removal boundaries for configuration control during the removal of the K1 system. This ECN includes Essential Drawings which define the actual field changes and Support/Reference drawings which define removal boundaries.
 The actual removal of components will be as directed through the work control documentation using this ECN to define the removal boundaries and the methods of isolation.

| | | |
|--|---|---|
| 19. Justification of the Change (Use ECN Continuation pages as needed) The K1 Exhaust System is not in use and has been abandoned. The primary ventilation function is accomplished by an updated ventilation system, thus AW241-VTP-EF-001 & AW241-VTP-EF-002 are no longer required. Disconnecting power will support future demolition activities for this equipment. PrHA is N/A per TFC-ENG-DESIGN-C-35, Section 1.0. | Engineering Rework <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Training Impact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 20. ECN Category <input type="checkbox"/> Direct Revision <input checked="" type="checkbox"/> Supplemental <input type="checkbox"/> Void/Cancel ECN Type <input checked="" type="checkbox"/> Supersedure <input type="checkbox"/> Revision |
| 19b. Existing Test Program Worksheet (TWP): <input type="checkbox"/> . Work is TP-3 <input checked="" type="checkbox"/> . Test Program providing new TPW <input type="checkbox"/> | | |

| 21. Distribution | | | |
|------------------|-------|------------|-------|
| Name | MSIN | Name | MSIN |
| P DeBaigne | R2-54 | C Slack | R1-51 |
| D Scott | R3-26 | A Holbrook | R3-26 |
| T Bennginton | R3-25 | R Brooks | S5-03 |
| M Harty | S5-27 | M Cranston | S7-07 |
| G Tardiff | S5-25 | | |
| R Nicholson | S5-25 | | |
| M Sheridan | S5-25 | | |

JAN 17 2011

DATE: _____

STA: 4

HANFORD
RELEASE

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ENGINEERING CHANGE NOTICE

1a. ECN No.: 10-001692

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DM FM TM

1b. Proj. No.: N/A

22. Revisions Planned (Include a brief description of the contents of each revision)

None

Note: All revisions shall have the approvals of the affected organizations as identified in block 12 "Approval Designator," on page 1 of this ECN.

23. Commercial Grade Item Dedication Numbers (associated with this design change)
N/A

24. Engineering Data Transmittal Numbers (associated with this design change, e.g., new drawings, new documents)
N/A

25. Other Non Engineering (not in HDCS) documents that need to be modified due to this change

| Type of Document | Document Number | Update Completed On | Responsible Engineer (print/sign and date) |
|----------------------------------|-----------------|---------------------|--|
| Alarm Response Procedure | N/A | | |
| Operations Procedure | N/A | | |
| Maintenance Procedure | N/A | | |
| CHAMPS Equipment Database Change | N/A | | |
| Software Change | N/A | | |
| PM/S Activity Change | N/A | | |
| Spare Parts Requirement | N/A | | |
| Other | | | |
| Other | | | |
| Other | | | |

26. Field Change Notice(s) Used?

Yes No

If Yes, Record Information on the ECN-2 Form, attach form(s), include a description of the interim resolution on ECN Page 1, block 18, and identify permanent changes.

NOTE: ECNs are required to record and approve all FCNs issued. If the FCNs have not changed the original design media then they are just incorporated into the design media via an ECN. If the FCN did change the original design media then the ECN will include the necessary engineering changes to the original design media.

27. Design Verification Required?

Yes No

If Yes, as a minimum attach the one page checklist from TFC-ENG-DESIGN-P-17.

28. Approvals

| Facility/Project Signatures | | Date | A/E Signatures | | Date |
|-----------------------------|---|----------|--|---|------------|
| Resp. Engineer | P DeBuigne <i>[Signature]</i> | 01/17/11 | Originator/Design Agent | VJ Bender <i>[Signature]</i> | 01/11 |
| Resp. Manager | M Sheridan <i>[Signature]</i> | 1/17/11 | Professional Engineer | | |
| Quality Assurance | T Bennington <i>[Signature]</i> | 1-12-11 | Project Engineer | M Jennings <i>[Signature]</i> | Jan 10 11 |
| IS&H Engineer | | | Quality Assurance | | |
| NS&L Engineer | | | Safety | | |
| Environ. Engineer | | | Designer | | |
| Engineering Checker | M Harty <i>[Signature]</i> | 1/17/11 | Environ. Engineer | | |
| Other | MA Fish N/A <i>[Signature]</i> | 01/14/11 | Other | A/E Checker: K White <i>[Signature]</i> | Jan 10, 11 |
| Other | | | Other | | |
| Other | | | DEPARTMENT OF ENERGY / OFFICE OF RIVER PROTECTION | | |
| Other | | | Signature or a Control Number that tracks the Approval Signature | | |
| Other | | | ADDITIONAL SIGNATURES | | |
| Other | | | | | |
| Other | | | | | |

ENGINEERING CHANGE NOTICE CONTINUATION SHEET

1a. ECN No.: 10-001692

Page 3 of 12

1b. Proj. No.: N/A

Document/Drawing No.

Sheet

Revision

Drawings to be Changed:

Continued from Block 13

H-2-90906, Sheet 1, Rev. *8/9*
H-2-90922, Sheet 1, Rev. 1
H-14-020102, Sheet 2, Rev. *14/16*
H-14-020102, Sheet 3, Rev. *7a*

Continued from Block 18:

Once components are physically removed separate ECNs will be issued to revise the following drawings to reflect actual field configuration.

| | |
|-------------|---|
| H-2-70302-1 | 241-AW Tank Farm Civil Plot Plan |
| H-2-70323-1 | Electrical Plans and Details |
| H-2-70324-5 | Electrical Plans and Details |
| H-2-70325-4 | Electrical Power and Control Elementary Diagrams |
| H-2-70331 | Instrument Elementary Diagram |
| H-2-70333-6 | Electrical Wire Run List |
| H-2-70333-7 | Electrical Wire Run List |
| H-2-70333-9 | Electrical Wire Run List |
| H-2-70339-1 | HVAC Equipment Plans (K2 Seal Pot) |
| H-2-70341-1 | HVAC/Piping Standard Tank Farm details |
| H-2-70358-1 | Instrumentation Exhaust Stack Radiation Monitoring |
| H-2-70362-1 | Instrumentation Annunciator Elementary Diagram |
| H-2-70362-3 | Instrumentation Annunciator Elementary Diagram |
| H-2-74896-1 | 296-A-27 Tank Stack Monitor Installation |
| H-2-74896-2 | 296-A-27 Tank Stack Monitor Installation |
| H-2-74896-3 | 296-A-27 Tank Stack Monitor Installation |
| H-2-74896-4 | 296-A-27 Tank Stack Monitor Installation |
| H-2-74896-5 | 296-A-27 Tank Stack Monitor Installation |
| H-2-90905-1 | Drawing List/HVAC Flow Control Diagram |
| H-2-90906-1 | HVAC Equipment Plan and Elevations |
| H-2-90907-1 | HVAC Demolition Plan |
| H-2-90908-1 | HVAC Miscellaneous Details |
| H-2-90909-1 | HVAC Equipment Schedules and Notes |
| H-2-90911-1 | HVAC Support Structure |
| H-2-90912-1 | HVAC Plenum Assy |
| H-2-90912-2 | HVAC Plenum Detail |
| H-2-90914-1 | HVAC End Panel |
| H-2-90915-1 | HVAC Plenum Equipment Assembly Detail |
| H-2-90916-1 | HVAC Fan to Plenum Assembly |
| H-2-90917-1 | HVAC Electric Heat Trace |
| H-2-90920-1 | Structural Concrete Foundation Plan |
| H-2-90922-1 | Piping Primary Exhaust Modification |
| H-2-90923-1 | Piping Primary System Seal Pot |
| H-2-90925-1 | Piping Portable Exhauster Plan, Section and Details |
| H-2-90926-1 | Piping Portable Exhauster Plan, Section and Details |
| H-2-90927-1 | Electrical One Line and Details |
| H-2-90928-1 | Electrical Elementary Diagram |
| H-2-90928-2 | Electrical Elementary Diagram |
| H-2-90929-1 | Electrical Connection Diagram |
| H-2-90930-1 | Electrical Plans and Details |
| H-2-90930-2 | Electrical Plans and Details |
| H-2-90931-1 | Electrical Wire Run List |
| H-2-91784 | Central Exhaust Station Heat Trace Installation |
| H-2-99085 | Electrical Elementary Diagram |
| H-2-99075 | Electrical Control RM Details |

Note: An AutoCAD page may be used in place of this form (the header section items must be included on the AutoCAD page).

**ENGINEERING CHANGE NOTICE
CONTINUATION SHEET**

1a. ECN No.: 10-001692

Page 4 of 12

1b. Proj. No.: N/A

| Document/Drawing No. | Sheet | Revision |
|----------------------|--------------------------------|----------|
| H-2-92520 | Generic Stack Beta RCD Cabinet | |
| H-2-92495 | Generic Stack Sampler | |
| H-2-92493 | Generic Stack Sampler | |

Electrical ECN Planned:

ECN 726664-R0 electrical disconnect at the power source. This ECN and/or later revisions will identify load isolation and wire removal.

Description of the Change:

Continued from Block 18

Revise the following drawings as described on this ECN to identify and establish the isolation removal boundaries for the 241-AW K1 system:

H-2-90906, Sheet 1, Rev. 8 HVAC Equipment Plans Elevation and Details

Revise drawing to show isolation and removal of the K1 system above grade. Seal pot, concrete pad and associated dimensioning are to remain. See pages 5 & 6 of this ECN.

H-2-90922, Sheet 1, Rev. 1 Piping Primary Exhaust Modification

Revise drawing to show isolation and removal of the K1 system above grade and delete associated details. See pages 7 & 8 of this ECN.

H-14-020102, Sheet 2, Rev. 14 AW VTP P&ID

Revise drawing to show isolation and removal of the K1 system. Associated piping to be cut and capped at grade. See pages 9 & 10 of this ECN.

H-14-020102, Sheet 3, Rev. 7 AW VTP Stack Monitor P&ID

Revise drawing to show isolation and removal of the K1 system. See pages 11 & 12 of this ECN.

1. Does the change introduce any new failure modes to the equipment? Yes No
Basis (required for Yes):
2. Does the change increase the probability of existing failure modes? Yes No
Basis (required for Yes):
3. For Safety Significant equipment, does the change require a modification to Chapter 4 of the DSA and/or FRED?
 Yes No N/A
Basis (required for Yes):

Note: An AutoCAD page may be used in place of this form (the header section items must be included on the AutoCAD page).

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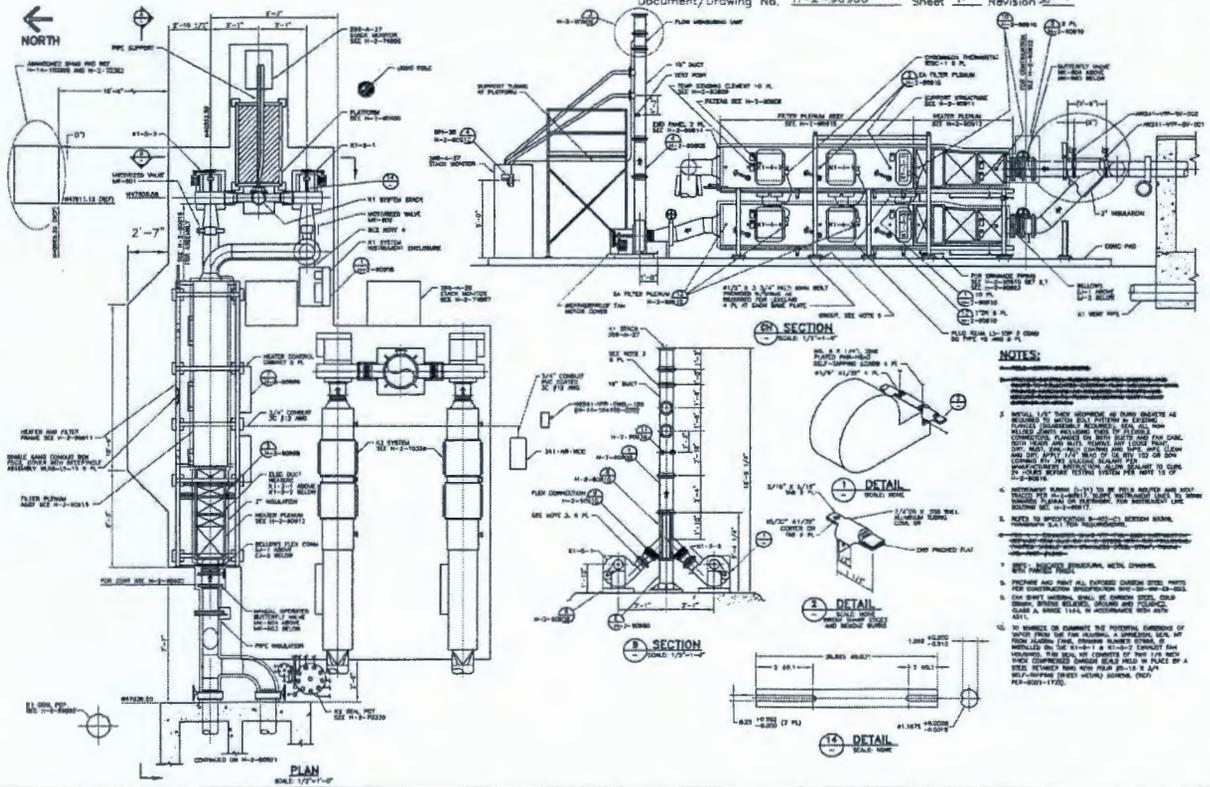
ENGINEERING CHANGE NOTICE
CONTINUATION SHEET

1a. ECN NO.: 10-001692

Page 5 of 12

1b. Proj. NO.: N/A

Document/Drawing No. H-2-90906 Sheet 1: Revision 1



- NOTES:**
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PLOT DATE: 1/6/2011

IS: ECH NOTE: (DO NOT INCORPORATE)
SEAL POT, CONCRETE PAD AND ASSOCIATED
DIMENSIONING TO REMAIN.

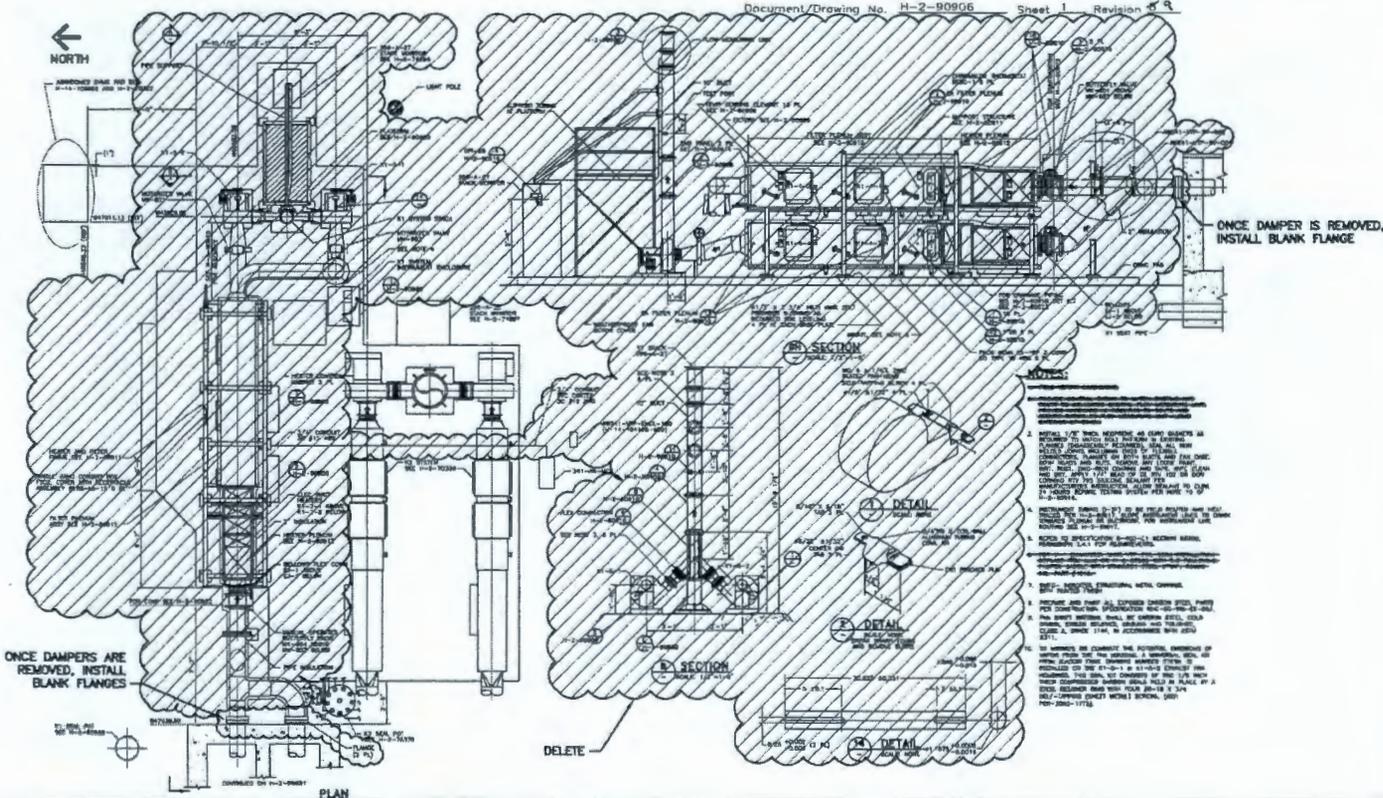
ENGINEERING CHANGE NOTICE
CONTINUATION SHEET

1a. ECH NO.: 10-001692

1b. Proj. NO.: N/A

Page 6 of 12

Document/Drawing No. H-2-80906 Sheet 1 Revision 4



PLOT DATE: 1/9/2011

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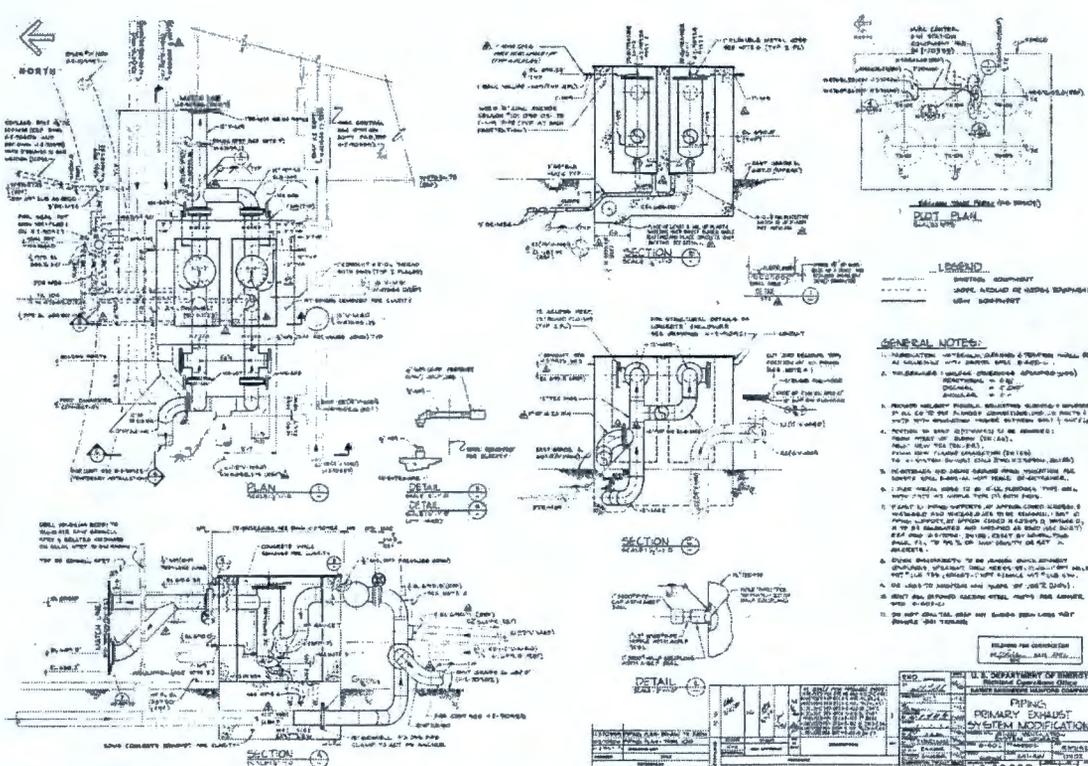
ENGINEERING CHANGE NOTICE
CONTINUATION SHEET

1a. ECN NO.: 10-001692

Page 7 of 12

1b. Proj. NO.: N/A.

Document/Drawing No. H-2-90922 Sheet 1 Revision 1



PLOT DATE: 1/25/2011

- IS: EGN NOTES:
 1. ONCE DAMPERS ARE REMOVED, INSTALL BLANK FLANGE.
 2. ONCE DAMPERS ARE REMOVED, INSTALL BLANK PLUG.

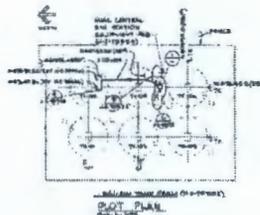
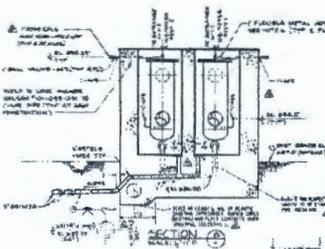
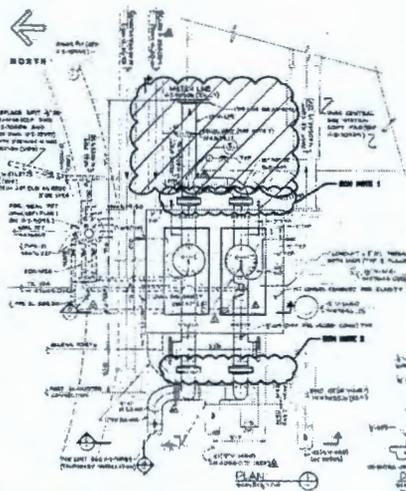
ENGINEERING CHANGE NOTICE
 CONTINUATION SHEET

1c. EGN NO.: 10-001692

Page 8 of 12

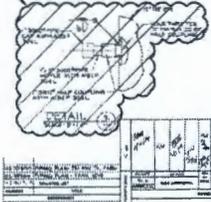
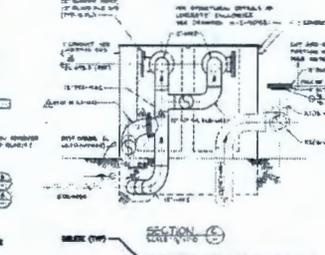
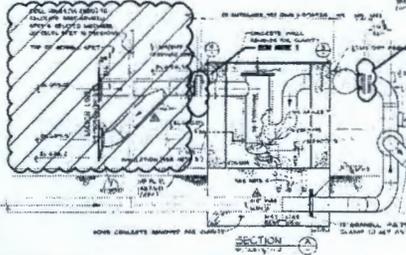
1b. Proj. NO.: N/A

Document/Drawing No. H-2-90822 Sheet 1 Revision 1



LEGEND
 --- DOTTED LINE --- IDENTIFY EQUIPMENT
 --- DASHED LINE --- IDENTIFY EQUIPMENT
 --- SOLID LINE --- IDENTIFY EQUIPMENT

- GENERAL NOTES:
 1. IDENTIFY EQUIPMENT, DAMPERS & OTHER WELLS, IN ALL VIEWS AND SHOW THE LOCATION OF EACH.
 2. THE DAMPERS & OTHER WELLS SHOULD BE IDENTIFIED BY THE FOLLOWING: EQUIPMENT NO., SERIAL NO., & SIZE.
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PLOT DATE: 1/9/2011

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| 1 | DESIGNED | 10/15/10 | J. J. [Name] | [Name] |
| 2 | DRAWN | 10/15/10 | [Name] | [Name] |
| 3 | CHECKED | 10/15/10 | [Name] | [Name] |
| 4 | APPROVED | 10/15/10 | [Name] | [Name] |

U.S. DEPARTMENT OF ENERGY
 NATIONAL ENERGY LABORATORY
 CLIMATE SCIENCE CENTER
 PIPING
 PRIMARY EXHAUST
 SYSTEM MODIFICATION

IS:

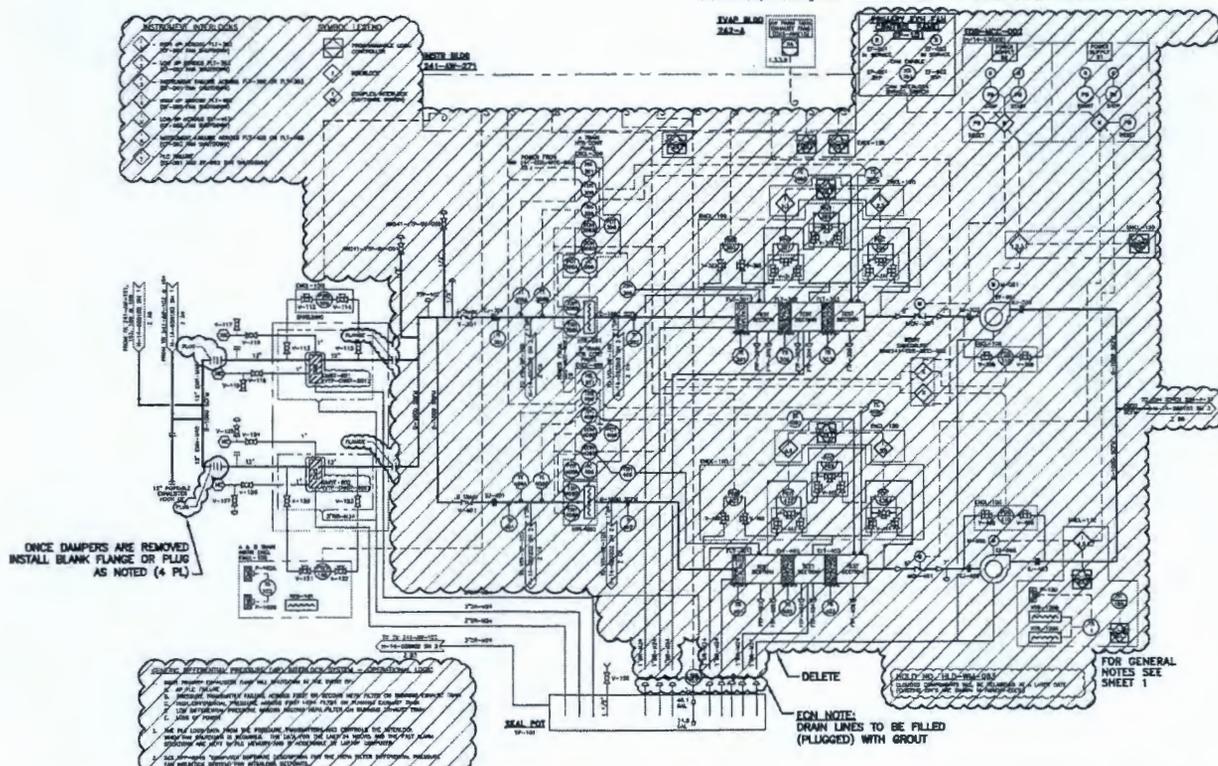
ENGINEERING CHANGE NOTICE
CONTINUATION SHEET

1a. ECN NO.: 10-001692

1b. Proj. NO.: N/A

Page 10 of 12

Document/Drawing No. H-14-020102 Sheet 2 Revision 2514



ONCE DAMPERS ARE REMOVED
INSTALL BLANK FLANGE OR PLUG
AS NOTED (4 PL)

1. All the components in this system, including the piping, valves, tanks, pumps, and seals, shall be inspected and tested in accordance with the applicable codes and standards. The inspection and testing shall be performed by a qualified person and shall be documented in a report. The report shall include the following information:

- Name of the inspector
- Date of inspection
- Location of inspection
- Results of inspection
- Signature of inspector

EGAL NOTE:
DRAIN LINES TO BE FILLED
(PLUGGED) WITH GROUT

FOR GENERAL
NOTES SEE
SHEET 1

PLOT DATE: 1/16/2011

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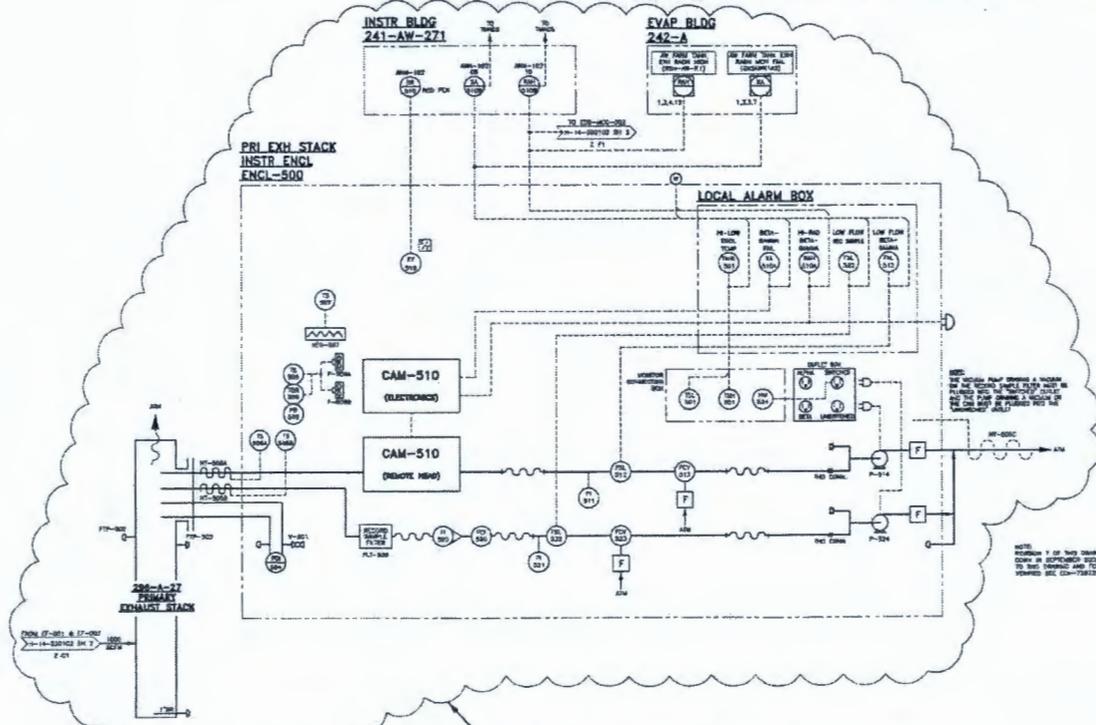
ENGINEERING CHANGE NOTICE
CONTINUATION SHEET

1a. ECN NO.: 10-001692

Page 11 of 12

1b. Proj. NO.: N/A

Document/Drawing No. H-14-02D102 Sheet 3 Revision 2



NOTE - EQUIPMENT OUT-OF-SERVICE, TO BE ISOLATED/REMOVED

PLOT DATE: 1/6/2011

NOTE:
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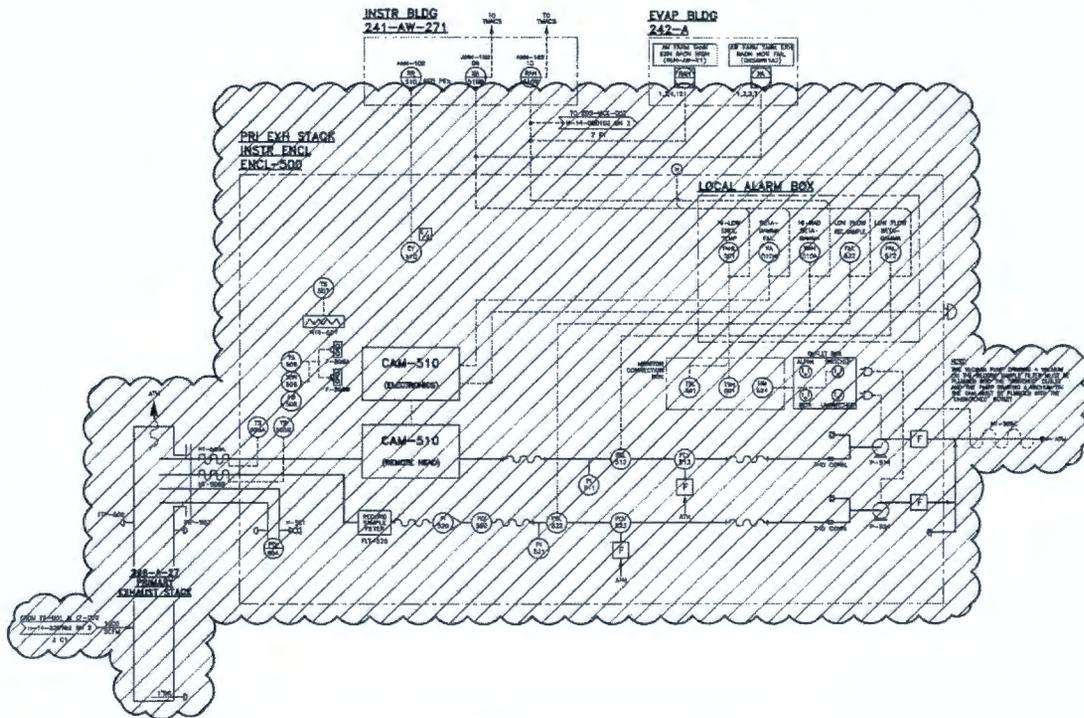
ENGINEERING CHANGE NOTICE
CONTINUATION SHEET

1a. ECR NO.: 10-001692

Page 12 of 12

1b. Proj. NO.: N/A

Document/Drawing No. H-14-020102 Sheet 3 Revision 3



PLOT DATE: 1/9/2011

296-A-27 HEPA
Filters in Burial Box

RA-11-033-01

CAUTION
RADIOACTIVE
MATERIAL

CONTENTS OF THIS BOX: RA-11-033-01

CONTENTS OF CONTAINER:
HEPA FILTERS
REMOVED FROM OLD
KJ EXHAUSTER

CONTAINER LEVELS:
SEDS: 5.000
SLASH: 1.000

HEAVY METAL LEVELS:
COPPER: 1
ZINC: 1

FINAL REMARKS:
ALL LEVELS ARE FOR
THIS CLOSED BOX

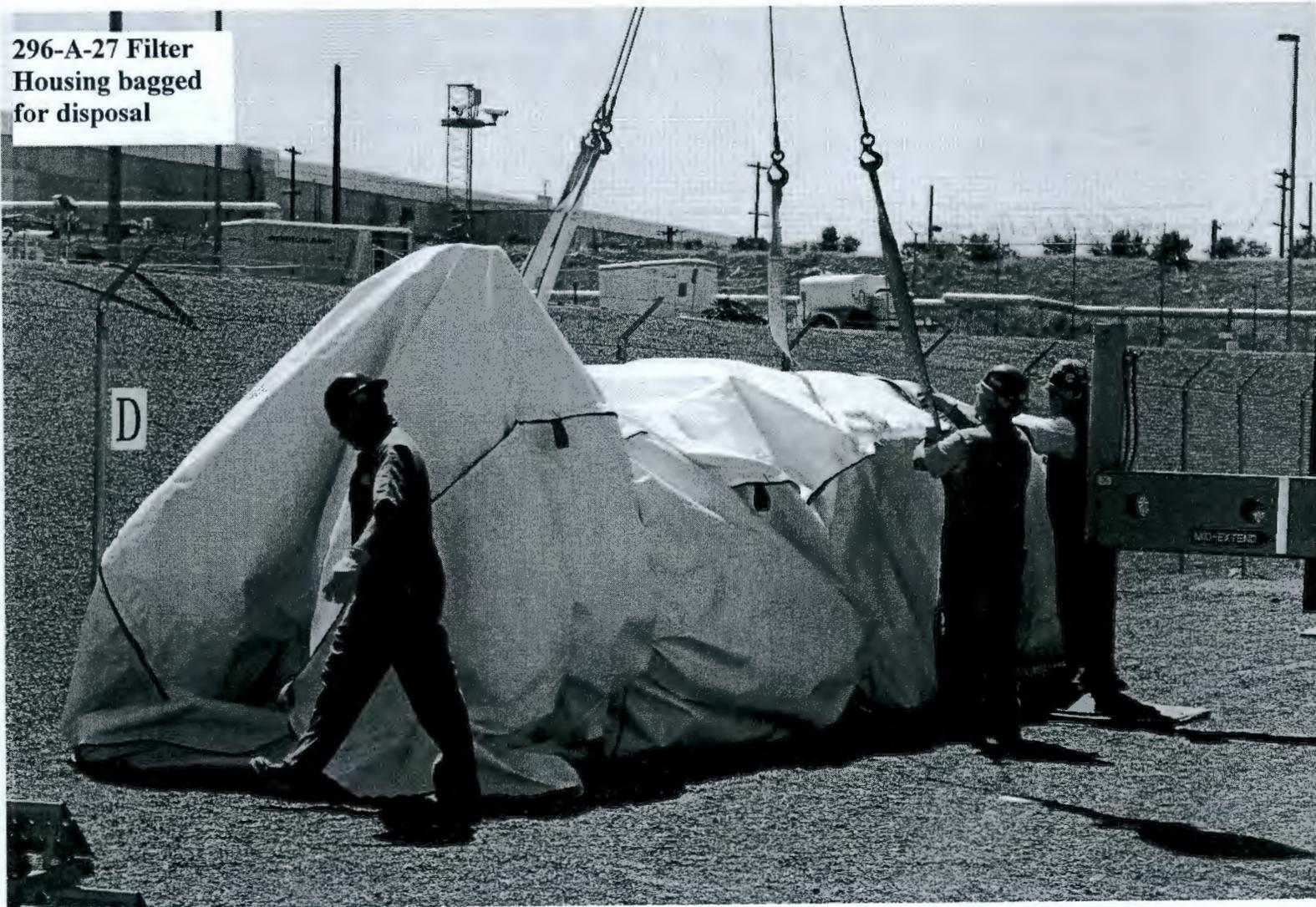
DATE: 10/10/00

INITIALS: [Signature]

296-A-27
Isolation



**296-A-27 Filter
Housing bagged
for disposal**



Report of Closure/Permit Revision

NOTE: Any increase to abated or unabated PTE requires a full NOC modification

REASON FOR CHANGE

Submittal Date: 08/31/2011

NOC Application Revision

New NOC Rev Number: _____

Condition Change/ Clarification

WDOH Condition Number: _____

AOP Condition Number: See below

ALARACT Revision

New ALARACT Rev Number: _____

PROJECT IDENTIFICATION

Project Title: Report of closure for 296-C-6, C-106 Sluicing

Current NOC Application Number: AOP Permit 00-05-006/ License Number FF-01

AEI ID Number (AOP Emission Unit Number(s)): C-106 Sluicing

Current WDOH Approval Letter Number(s): NRA 486

WDOH NOC ID Number: 236

DESCRIPTION OF CHANGE

Number of Attachments 0

Report of Closure for C-106 Sluicing

Summary/Introduction

In accordance with Washington Administrative Code 246-247-080(6), this report of closure is being submitted to the State of Washington Department of Health (WDOH) to document cessation of radionuclide emitting activities from 296-C-106, C-106 Sluicing.

The following information is provided in this document:

- Date of closure
- Remaining material
- Assessment of potential continued emissions
- Future plans
- Emissions control and monitoring

1. Date of closure:

The 296-C-6, C-106 Sluicing exhaustor is no longer operationally needed and will not be used. It has been isolated and de-energized. The NOC was obsolete on 10/22/2002 and the unit has not operated since this time. The closure date is 06/08/2011.

2. Remaining material: The 296-C-6, C-106 Sluicing has not been used since October 22, 2002. The remaining components consist of an exhaustor frame, de-entrainer, HEPA filters, and stack.

3. Assessment of potential continued emissions:

- a. The electrical power to the stack exhaust fan is disconnected.
- b. The stack exhaust fan is isolated—the inlet and outlet are capped.
- c. The pre-filters, HEPA filters and housing dampers are closed.
- d. The stack is isolated—the inlet and outlet are capped.
- e. The 296-C-6, C-106 Sluicing does not have a potential for continued emissions based on its isolation.

4. Future plans:

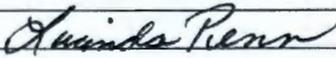
Dispose of exhauster as waste.

5. Emissions control and monitoring:

Emissions control and monitoring is not required for the inactive and isolated 296-C-6, C-106 Sluicing exhauster. The emissions control and monitoring system are inactive and have been isolated or removed.

Based on this report of closure it is requested that emission unit/notice of construction approval 200 P-296-C-6, C-106 Sluicing be removed from the Hanford Site Air Operating Permit (AOP Permit 00-05-006/ License Number FF-01).

SIGNATURES

| Reviewed by Contractor | Reviewed by RL/ORP | Approved by WDOH |
|---|--------------------|------------------|
|  | | |
| | | |
| | | |
| Date: 8/31/71 | Date: | Date: |

Tank Farm Work Instruction

CLO-WO-06-001405

241-C-EDS OPTIMIZATION

1.0 SCOPE

The equipment being worked on is identified GS.

- Apply Proper Lockout/Tagout.
- Disconnect Components.
- Install Labeling.
- Remove Lockout/Tagout.
-

2.0 LIMITATIONS / PRECAUTIONS

- 2.1. This activity has been determined to be a **Low Risk** radiological work activity and will utilize radiological limits and controls as specified on **RWP CO-001**.

NOTE

Documented Surveys are required for opening potentially contaminated systems or items, accessing previously unexposed surfaces, excavating or when required by Procedure.

- 2.2. If the work directions and/or documents are confusing, conflicting, or not understood, contact FWS for clarification. If the work instructions/procedures are incorrect, request a change prior to proceeding. (Lessons Learned Bulletin # SN-98-09)

3.0 PREREQUISITES

- 3.1. ENSURE the correct waste containers are available to perform the work activities, as stated in the "Waste Planning Checklist".
- 3.2. FWS ENSURE a walkdown is conducted using the Work Instructions and **Worksite Hazard Analysis** with as many of the work crew as possible who will be performing the job.

CLO-WO-06-001405

Tank Farm Work Instruction

NOTE

Steps- 4.2.1, thru, 4.4.2 may be worked concurrently or out of order, provided Lockout/Tagout boundaries are not by-passed.

4.0 SPECIFIC WORK INSTRUCTIONS

- 4.1. ENSURE that the Main Disconnect/Breaker for "C241-EDS-MCC-001" and "CR271-EDS-MCC-002" is isolated, tagged, and locked in accordance with the Lockout/Tag out Program.
- 4.2. HPT perform pre-job radiation and contamination survey of work area and record RSR number.

RSR Number: COF-002835 Date 8/29/06

- 4.2.1. Subsequent survey report numbers to be documented on the Work Record.

- 4.3. Disconnect at "C241-EDS-MCC-001" and "CR271-EDS-MCC-002" the Line/Load leads (respectively) of the identified compartments or breakers as identified on pages 4 and 5 of ECN-724070 R0, (reference pages 3 of ECN-724070 R0 for additional info). *and pages 4 thru 7 of ECN-724070 R1*

- 4.3.1. Tape-up/Safe-off the leads that were disconnected in step 4.3 as needed.

P+1-01
RES 9/1/06

CLO-WO-06-001405

Stoddard

RECORD COPY

2 of 4

3

Tank Farm Work Instruction

- 4.3.2. Fabricate and install on the compartments or breakers that were disconnected in step 4.3 labels to read:

P+1-01
RES 9/1/06

"SPARE"

Line (Load if applicable) Leads Disconnected
Per ECN-724070 R0 + 724070 R1

- 4.4. Disconnect in the Pull Box for "C104-EDS-ENCL-004" the Line leads for the identified Disconnects identified on page 6 of ECN-724070 R0, (reference pages 3 of ECN-724070 R0 for additional info). *and PAGES 4 thru 7 of ECN-724070 R1.*

P+1-01
RES 9/1/06

- 4.4.1. Tape-up/Safe-off the leads that were disconnected in step 4.4 as needed.

- 4.4.2. Fabricate and install on the Disconnects that were disconnected in step 4.4 labels to read:

P+1-01
RES 9/1/06

"SPARE"

Line (Load if applicable) Leads have been
Disconnected in Pull Box
Per ECN-724070 R0 + 724070 R1

- 4.5. FWS ensure that all Lockout/Tagout(s) have been removed and system returned to normal configuration.

- 4.6. HPT perform post-job radiation and contamination survey of work area.

RSR Number: COF-002835 Date 8/29/06

CLO-WO-06-001405

Tank Farm Work Instruction

5.0 POST WORK ACTIVITY TESTING

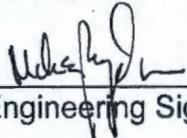
5.1. N/A.

6.0 RESTORATION ACTIONS

NOTE

STEPS WITHIN SECTION 6.0 MAY BE PERFORMED CONCURRENTLY OR IN ANY ORDER.

- 6.1. Document on the "WORK RECORD" work performed and any problems that may have been encountered.
- 6.2. **FWS** to Record on the Work Record that "The Job Site has been walked down and the area is orderly and all waste has been placed in the proper containers".
- 6.3. **Engineering Closeout** review complete, Ensure all associated ECN's have been closed and a copy of the "MODIFICATION COMPLETE" cover page has been inserted into the Work Package.



Engineering Signature

1 / 4 / 07
Date

CLO-WO-06-001405

Work Order: CLO-WO-06-001405
Title: 241-C-EDS Optimization

| | | |
|--|---|---------------------------------------|
| Date Created: 8/23/06 13:35:59 | Equipment: C241-EDS-MCC-001 | SC/I: <input type="checkbox"/> |
| Workflow: WO Standard | Planner: Stoddard, Rocky | Job Plan: |
| WO Type: 4 - MODIFICATION | Assigned: Bryant, William (Bill) H | Farm/Facility: 241C |
| State: In Approval | Phase Desig: | PM Id: |
| WO Risk: Low | Flow Status: OK | Frequency: |
| CACN: 501956 | Project Id: | Date Reqd: 8/28/06 07:00:00 |
| Priority: 3.1 Most Critical Path (Float <10 Days) | | Route Id: |

Description:

Compartments located in "C-241-EDS-MCC-001" are no longer in service and need to be disconnect and labeled "DISCONNECTED/SPARE".

DT
1-8-11

6

Work Order: CLO-WO-06-001405

Title: 241-C-EDS Optimization

Step 1 Of 1 Step Id: 001 State: In Approval Safety Class:
 Sched Start: Sched Comp: Related Step/Link:

Step Instructions:

Compartments located in "C-241-EDS-MCC-001" are no longer in service and need to be disconnect and labeled "DISCONNECTED/SPARE".

| Assets Seq | Asset Class | Asset Id | Asset Name | SC/I | Expiration Date |
|------------|-------------|------------------|----------------------|--------------------------|-----------------|
| 1 | Equipment | C241-EDS-MCC-001 | MOTOR CONTROL CENTER | <input type="checkbox"/> | |

| Trades | Crew | Trade Id: | Trade Description: | Workers | Act Hrs. | Delay Code |
|--------|-------------|--------------|--------------------|-------------|---------------|------------|
| | Maintenance | C020 TOSR | Electricians | 1 2 1 | 4 24 12 | |

Attachments: There are 4 document(s) attached to this work order

| Description | Path/Name |
|---|---|
| Header Attachment | |
| Scanned USQ TF-06-1043-S.doc | Scanned USQ TF-06-1043-S__878996.doc |
| Scanned Waste Planning Cklist.doc | Scanned Waste Planning Cklist__878997.doc |
| RWP-CO-001.003.pdf | RWP-CO-001.003__878995.pdf |
| Step Attachment | |
| CLO-WO-06-001405 RECORD Work Instructions.doc | CLO-WO-06-001405 RECORD Work Instructions__879028.doc |

Electronic Approvals:

| Date | State | Response | Profile | Name | Role |
|------------------|--------------------|----------|-------------------------|-----------------|----------------------|
| 8/23/06 13:36:00 | Ready For Planning | Approved | clo_&_wfo_ops_shift_mgi | Ficklin, Jim | |
| 8/23/06 13:55:38 | In Planning | Approved | clo_&_wfo_planner | Stoddard, Rocky | |
| 8/24/06 13:05:08 | In Approval | Approved | clo_&_wfo_planner | Stoddard, Rocky | clo_planner |
| 8/24/06 13:21:32 | In Approval | Approved | clo_rad_con | Gray, Keith W | clo_rad_con |
| 8/24/06 14:17:43 | In Approval | Approved | CLO & WFO Resp. Eng. | Bewick, Joe | clo & wfo resp. eng. |
| 8/24/06 14:42:02 | In Approval | Approved | clo_safety | Bean, Tonya | clo_safety |
| 8/24/06 15:15:31 | In Approval | Approved | clo&wfo_radcon_&_env | Doss, Shelly D | clo_environmental |
| 8/28/06 15:14:07 | In Approval | Approved | clo_&_wfo_fws | Hay, Mike | clo_field_work_suprv |

FWC

FWS Completed By: WAB FWC Date: 8-29-06 Update Job Plan (Y/N): _____
 Completed Satisfactorily(yes,no): X 9-1-06 Asset Condition: _____

Comments: _____

RPP WORK RECORD

1. Document Number:

CLO-WO-06-001405

2. Work Item Title: 241-C-EDS Optimization

| Date | Turnover, Problem Description, Action Taken | Feed Back (X) | Name | Craft/Resource Type | Hours |
|----------|---|---------------|--------------|---------------------|-------|
| 8-29-06 | HELD GENERAL PRE JOB | | | | |
| | STARTED DISCONNECT | | W.H.B. | MO10 | 2 |
| 9/1/06 | PEN + INK-01: Modified STEPS | | | CO20 | 16 |
| | 4.3. ON PAGE 2 AND 4.3.2. + 4.4.+4.4.2. | | | T050 | 8 |
| | ON PAGE 3 of WORK INSTRUCTIONS to | | | | |
| | INCORPORATE FCN-724070 R1 AND THE | | | | |
| | CHANGES REFLECTED WITHIN IT. | | RE. Stoddard | PLANNER | |
| | FWS | | W.H.B. | MO10 | |
| | ENGINEER | | JA. Bewick | ENG | |
| | | | JA BEWICK | | |
| | | | | | |
| 9-1-06 | WORK COMPLETE NO. WASTE | | | | |
| | WORK SITE CLEAN | | W.H.B. | MO10 | 2 |
| | | | | CO20 | 8 |
| | | | | T050 | 4 |
| 01/05/07 | Performed Post Review ON WORK | | | | |
| | Package. | | RE. Stoddard | Planner | |
| | | | | | |
| 1/8/07 | Scanned completed up into Champs 30 MS. | | | | |
| | (Record will be in FOMS System) | | DT | clerk | |
| | | | | | |
| | | | | | |
| | | | | | |
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| | | | | | |
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| | | | | | |
| | | | | | |

Summary by Craft/Resource Type

| Craft/Resource Type | Total Hours | Craft/Resource Type | Total Hours |
|---------------------|-------------|---------------------|-------------|
| | | | |
| | | | |
| | | | |
| | | | |

8

COPY

| | | | | | |
|--|-------------------------|-----------------------|---|--|-------------------------------|
| RADIOLOGICAL WORK PERMIT | | | Contractor: CH2M HILL Hanford Group, Inc. | | RWP Number CO-001, Rev.004 |
| General: <input checked="" type="checkbox"/> | Start Date 8/29/2006 | End Date 8/28/2007 | Technical Document Number(s): Various | | AMW Number N/A |

| | |
|---|---|
| Job Location: All Closure Operations and Support work areas. | Brief Job Description and Type of Area: All Low Risk construction and plant forces activities. • Health Physics Routines • Housekeeping including laundry activities and removal of contaminated specks, weed fragments and animal droppings • Excavation < 12" excluding excavation in known radioactive spill areas, cribs, ponds, or ditches • Minor Decontamination (wiping and solvents only) • Preventive and Corrective Maintenance • RWR and WRCSOF jobs screened by RadCon • Waste transfer operations and Operation of support equipment and Waste Retrieval Pumping Tours. <u>This RWP does not permit: breaching of waste transfer lines or primary tank risers; removal of waste transfer system pit cover blocks or shield plugs that expose penetrations > 6" area; work in open waste transfer system pits unless specifically approved by Radiological Control SME.</u> RBA/RA/CA/SCA/JURMA/RMA |
|---|---|

| Radiation Emitted | Estimated Dose Rates | Estimated Contamination Levels | Job Dose Estimate | Risk Value |
|--|---|--|---|------------|
| <input checked="" type="checkbox"/> Alpha | General Area: <5 mrem/hr | Beta/Gamma: <100,000 dpm/100 cm ² | <200 person-mrem per task | Low |
| <input checked="" type="checkbox"/> Beta | Maximum Contact: <100 mrem/hr | Alpha: <20 dpm/100 cm ² | | |
| <input checked="" type="checkbox"/> Gamma | Radiological Worker <input type="checkbox"/> I <input type="checkbox"/> II | | Internal Dosimetry Requirements | |
| <input checked="" type="checkbox"/> Neutrons | Training Req. <input checked="" type="checkbox"/> I <input type="checkbox"/> II | | <input type="checkbox"/> 3 minute WBC <input checked="" type="checkbox"/> 10 minute WBC <input type="checkbox"/> Urinalysis/Isotopes <input type="checkbox"/> Chest Count | |

| DOSIMETRY | | PERSONAL PROTECTIVE EQUIPMENT | | | SURVEY REQUIREMENTS | |
|-------------------------------------|----------------------|-------------------------------|---------------------------|-----|-------------------------|--------------------------------|
| <input checked="" type="checkbox"/> | HSD-TLD | SI6 | Coveralls | | | Grab Air Sampling Required |
| | HOND-TLD | SI6 | Waterproof Suit | SI6 | Canvas Boots | Lapel Air Sampling Required |
| | Pocket Dosimeter | | Goretex Suit | SI6 | Rubber Overshoes | SI7 Auto. Survey Device |
| | Electronic Dosimeter | | Cap | | Rubber Boots | SI7 Self Survey (if qualified) |
| | Finger Rings | SI6 | Hood | | Face Shield | SI7 HPT Exit Survey Required |
| | Time Keeping | SI6 | Surgeon's Gloves | | Full Face Respirator | |
| <input checked="" type="checkbox"/> | Entry Control System | SI6 | Leather Gloves | | PAPR | HPT COVERAGE |
| <input checked="" type="checkbox"/> | Brick | SI6 | Canvas & Surgeon's Gloves | | Supplied Air Respirator | SI4 Continuous |
| <input checked="" type="checkbox"/> | 30Day ACES Auth. | SI6 | Waterproof Gloves | | SCBA | Intermittent |
| | | SI6 | Arm Sleeves | | Undressing Assistance | |

| SPECIAL INSTRUCTIONS | |
|---|--|
| <p>1. VOID LIMITS CA: ≥ 100,000 dpm/100cm² beta-gamma and/or ≥210 dpm/100 cm² alpha. RA: Whole body dose rate ≥ 100 mrem/hr at 30 cm. SCA: ≥ 1,000 dpm/100cm² Beta/Gamma transferable contamination.</p> <p>2. SAFE CONDITION LEVELS • None identified</p> <p>3. ACTION LEVELS • None identified</p> <p>4. HPT COVERAGE • Continuous coverage is required for opening potentially contaminated systems or items; accessing previously unexposed surfaces; excavating or when required by procedure, ALARACT or NOC and for the removal of radiological controls.</p> <p>5. DOSIMETRY/ACES • N/A</p> <p>6. PERSONNEL PROTECTIVE EQUIPMENT • A minimum of 1 pair of surgeon's gloves will be worn when breaching potentially contaminated systems or enclosures outside of a CA. Handling of any materials removed from such areas requires this minimum level of PPE until items have been surveyed by a HPT. • Gloves required when reaching into a CA to perform contamination release surveys or removing items from the CA that have been surveyed and found to be free of contamination by the HPTs. • Single set of PPE required for whole body entry into a CA. Leather gloves, additional pair(s) of surgeon's gloves, leather gloves, silver shield gloves or electrician's gloves may be substituted for canvas gloves. • A hood will be worn when the workers head has a potential to contact contaminated surfaces such as when working inside potentially contaminated equipment or working overhead on potentially contaminated surfaces.</p> | <p>• Rain jacket and/or rain pants are required to protect cloth personal protective equipment if there is a potential for it to become wet due to environmental conditions. Only those portions of cloth personal protective equipment that are at risk of becoming wet need to be covered.</p> <p>7. SURVEY: • Use auto survey device when exiting areas where PPE has been worn. If auto survey device is inoperable or unavailable, perform whole body survey. Perform a follow-up survey in an automated survey device. HPT survey required if not self survey qualified. • Hand & foot survey (minimum) required for exit from RBA established for contamination control. • HPT to perform both beta-gamma and alpha surveys on the outer packaging of all equipment removed from pits. • Alpha survey of personnel required if alpha contamination is detected during the performance of work. • HPT to perform alpha survey whenever beta-gamma contamination is detected. • The following areas require both beta-gamma and alpha surveys: ○ 244-TX/242-T, 242-S Evaporator, 241-EW-151, 241-TX-155, 244-AR; 241-ER-151. ○ Outside of fenced Tank Farm Boundaries (e.g., diversion boxes, swab risers, and similar equipment) ○ Isolated CAs</p> <p>8. AIR SAMPLING • None required</p> <p>9. SPECIAL PREJOB BRIEFING • None identified</p> <p>10. OTHER • NA</p> |

| | | | |
|--|----------------------------|---------------------|--|
| RWP Prepared By: KW Gray <i>[Signature]</i> Phone: 373-4286 | | HPT Phone: 373-3353 | |
| Line Mgt. Print: <i>[Signature]</i> Sign: <i>[Signature]</i> Phone: 438-062 | Date: 8/29/06 | | |
| RC Sup. Initial: <i>[Signature]</i> RC Dir. Print: <i>[Signature]</i> Sign: KW Gray <i>[Signature]</i> Phone: 938-9306 | Date: 8/29/06 | | |
| Acknowledged by: AJRG Chair (High Risk) Print: Sign: Date: | Other: Print: Sign: Date: | | |
| RWP Field Change Approvals: Line Mgt. Print: Sign: Date: | RC Mgt. Print: Sign: Date: | | |

1. Lockout/Tagout Number
CO-2006-033

CH2M HILL LOCKOUT/TAGOUT AUTHORIZATION

2. Page 1 of 2

3 ^{ver} 9/25/06

3. System 241-C Electrical Distribution System

4. Controlled Drawings, ECNs, Documents
H-2-2126 sh 3, H-14-030013 sh 1,2,3;

5. Lockbox Location(s) and Lock Number(s)
Middle C Farm Change Trailer/
A161 Lock box # 2

| 6. Work Authorization/ Documentation | 7. Applicable Tag Numbers | 8. Reason for Lockout/Tagout | 9. Personnel Hazard | 10. Technical Review Sign/ Date | 11. Lockout/Tagout Authorized Sign/Date | 12. Lockout/Tagout Work Complete Sign/Date |
|--------------------------------------|---------------------------|--|---------------------|---------------------------------|---|--|
| CLO-WO-06-1066 | 1 | Clean and Inspect Electrical Equip | Electrical Shock | <i>[Signature]</i> 8/24/06 | <i>[Signature]</i> 8/24/06 | |
| CLO-WO-06-1044 | 1 | Clean and Inspect Electrical Equip | Electrical Shock | <i>[Signature]</i> 8/24/06 | <i>[Signature]</i> 8/24/06 | |
| CLO-WO-06-1011 | 1 | Clean and Inspect Electrical Equip | Electrical Shock | <i>[Signature]</i> 8/24/06 | <i>[Signature]</i> 8/24/06 | |
| CLO-WO-06-1012 | 1 | Clean and Inspect Electrical Equip | Electrical Shock | <i>[Signature]</i> 8/24/06 | <i>[Signature]</i> 8/24/06 | |
| CLO-WO-06-1007 | 2 | Clean and Inspect Electrical Equip | Electrical Shock | <i>[Signature]</i> 8/24/06 | <i>[Signature]</i> 8/24/06 | 8-29-06 <i>[Signature]</i> |
| CLO-WO-06-1008 | 3 | Clean and Inspect Electrical Equip | Electrical Shock | <i>[Signature]</i> 8/24/06 | <i>[Signature]</i> 8/24/06 | 8-29-06 <i>[Signature]</i> |
| CLO-WO-06-1405 | 1 | Disconnect Unused Electrical Equipment | Electrical Shock | <i>[Signature]</i> 8/24/06 | <i>[Signature]</i> 8/24/06 | |

13. Tag No. 1, 2, 3
14. Special Instructions
The controlling organization lock on the lockbox indicates that the equivalent protection is still in place.

15. Comments

16. Surveillance Record

Required Surveillance Period: MONTHLY

| Initials | Date |
|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

[Handwritten mark]

17. Lockout/Tagout Number
CO-2006-033

CH2M HILL LOCKOUT/TAGOUT AUTHORIZATION RECORD SECTION

| 19. Tag No. | 20. Component Tagged | 21. Location | 22. Lock Number | 23. Required Position or Condition | 24. Authorized By Sign/Date | 25. Installed By Sign/Date | 26. Independently Verified By Sign/Date | 27. Safe Condition Check By Sign/Date | 28. Removal Approval Sign/Date | 29. Restoration Position/Condition | 30. Removed By Sign/Date |
|-------------|----------------------|---------------------|-----------------|------------------------------------|-----------------------------|-------------------------------|---|---------------------------------------|--------------------------------|------------------------------------|--------------------------|
| 1 | C8X544 | CR Elec. TRSFMR | N/A | Fuses Pulled | <i>Dr J</i> 8/29/06 | <i>Donald R...</i> 8/29/06 | <i>Dr J</i> 8-29-06 | <i>Dr J</i> 8-29-06 | | | |
| 2 | C8X642 | Middle C Change Trl | N/A | Fuses Pulled | <i>Dr J</i> 8/29/06 | <i>Donald R...</i> 8/29/06 | <i>Dr J</i> 8-29-06 | <i>Dr J</i> 8-29-06 | <i>Dr J</i> 8/29/06 | Fuses Pulled | <i>Dr J</i> 8-29-06 |
| 3 | C8X814 | Upper C Change Trl | N/A | Fuses Pulled | <i>Dr J</i> 8/29/06 | <i>Donald R...</i> 8/29/06 | <i>Dr J</i> 8-29-06 | <i>Dr J</i> 8-29-06 | <i>Dr J</i> 8/29/06 | Fuses Pulled | <i>Dr J</i> 8-29-06 |
| 4 | AN271-EDS-BKR-125 | AN271-EDS-MCC-001 | A159 | OFF | <i>Dr J</i> 8/29/06 | <i>Donald R...</i> 8/29/06 | <i>Dr J</i> 8-29-06 | <i>SK Bell</i> 8/29/06 | | | |

| 31. Tag No | 32. Safe Condition Check |
|------------|--|
| 1 | Zero electrical energy at CR271-EDS-MCC-002. |
| 2 | Zero electrical energy at MO-512 Change Trailer. |
| 3 | Zero electrical energy at MO-822 Change Trailer. |
| 4 | Zero electrical energy at AN271-EDS-DS-120. |

WASTE PLANNING CHECKLIST - CH2M HILL

 Generic

 Expiration Date: (Generic)
N/A

A. WORK PACKAGE PREPARER COMPLETES

 Work Package No.: CLO-WO-06-001405/ Planned Start Date: 8/28/2006

 Preparer's Name: Rockey Stoddard Project No.: N/A Phone No.: 372-0111

 Disconnect Lines/Loads from Abandoned Ckts. 241, C Farm
 Work Description (Bldg. No., System, Tank No., Room No.)

| | YES | NO | COMMENTS |
|---|-----------------------|----------------------------------|---|
| 1. Will waste be generated? | <input type="radio"/> | <input checked="" type="radio"/> | If NO, checklist is complete. Sign checklist. |
| 2. Will waste be generated in a radiological buffer area or contamination area? | <input type="radio"/> | <input type="radio"/> | |
| 3. Will equipment such as risers or cover blocks be removed? | <input type="radio"/> | <input type="radio"/> | |
| 4. Will waste come in contact with tank waste? | <input type="radio"/> | <input type="radio"/> | |
| 5. Will work involve soil removal? | <input type="radio"/> | <input type="radio"/> | |
| 6. Will there be any aerosol can(s) disposed of? | <input type="radio"/> | <input type="radio"/> | |
| 7. Will asbestos waste be disposed of? | <input type="radio"/> | <input type="radio"/> | |
| 8. Will HEPA filters be disposed of? | <input type="radio"/> | <input type="radio"/> | |
| 9. Will chemical products or paint be used or disposed of? | <input type="radio"/> | <input type="radio"/> | |

10. The following waste minimization techniques will be used:

(a) List "ALL" MSDS numbers and their product names:

| MSDS No. | Chemical or Product Name | MSDS No. | Chemical or Product Name |
|----------|--------------------------|----------|--------------------------|
| | | | |

11. General description of the waste:

Estimate quantity of waste that will be generated: _____ gal / lbs. [circle one] _____ per day / week [circle one]

Estimate length of job: _____ day(s) / week(s) [circle one]

B. WASTE MANAGEMENT COMPLETES

| | YES | NO | COMMENTS |
|--|-----------------------|-----------------------|----------|
| 1. Is waste regulated as a dangerous waste? | <input type="radio"/> | <input type="radio"/> | |
| 2. Disposition Instruction: | | | |
| 3. Facility Operations has been notified to take samples? (N/A, if not required) | <input type="radio"/> | <input type="radio"/> | |
| 4. Is a container already available for each disposition in B.2? | <input type="radio"/> | <input type="radio"/> | |
| 5. Does the quantity of waste in A.11 exceed capacity of the available container(s)? | <input type="radio"/> | <input type="radio"/> | |
| 6. Identify satellite accumulation area (SAA) or accumulation area container(s) locations: | | | |

 Prepared By: (Signature) Rockey E. Stoddard Organization: _____

(Printed Name) _____ (Title) _____ Review Date: _____

13

WORK RELEASE CHECKLIST FOR OE'S

(For Operations Pre-Release Review)

Work Package No.: CLO-WO-06-01405 Reviewed By: R. Schubert Date: 8/29/06

Title: 241-C-EDS Optimization

RWR: _____

Document Check:

- Work Instructions
- Data Sheets
- JCS Partial Release Sheet (J-9 or A-6001-819)
- BOM
- CACN listed and correct
- Hold Points
- Waste Planning Checklist
- SJHA / JHA / JSA
- Pre-Job Safety Meeting form
- Attendance Roster
- RWP
- ALARACT
- OTP (Operational Test Procedure)
- ATP (Acceptance Test Procedure)
- USQ Screening (No. TF-06-1043-5)
- ECNs (# 72407020) (# _____)
(# _____)
- Reference Drawings
- Lockout / Tagout Authorization or AWT form prepared
- Asbestos Work Permit / Negative Exposure Assessment
- Core-Drill / Tie-in Permit
- Hot Work Permit (fire watch required)
- Confined Space Entry Permit
- Non-Permit Confined Space monitoring form
- Excavation Permit (ground scan or explanation why none)
- EEWP
- Procedures
- Vehicle Route Map
- Critical Lift Procedure
- Hoisting and Rigging Information
- MSDS Sheets
- Glove Bag / Containment Form
- Ignition Source Control Requirements Screening
- Standing Orders
- ALARA Management Worksheet

Limiting Conditions for Operation (LCOs):

- 3.1.1 Transfer Leak Detection Systems
- 3.1.2 Backflow Prevention Systems
- 3.2.1 DST Primary Ventilation Systems
- 3.2.2 SST Passive Ventilation Systems

Administrative Controls (ACs):

- 5.10 Flammable Gas Controls
- 5.11 Transfer Controls
- 5.12 Administrative Lock Controls
- 5.13 Bulk Chemical Addition Controls
- 5.14 Dome Loading Controls
- 5.15 Tank Farm Installed Instrumentation
- 5.16 Corrosion Mitigation Program
- 5.17 Vacuum Retrieval Controls

Comments:

WORK RELEASE CHECKLIST FOR OE'S (continued)

(For Operations Pre-Release Review)

Work Package No.: CLO-WO-06-01405 Reviewed By: Reed muth Date: 8/29/06

RWR

Title: 241-C-EDS Optimization

Please Explain all "NO" responses in the Comment section below.

| | | YES | NO | N/A |
|-----|---|----------------------------------|-----------------------|----------------------------------|
| 1. | Is the USQ and revision listed in the WP, or in Block 22 of the JCS Work Document? RWRs (Block 17) | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. | Do all changes to the WP/RWR include an USQ assignment (screening, determination or Cat-X) by Engineering or Nuclear Safety & Licensing (NS&L)? | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> |
| 3. | Does the referenced USQ (specific, not Cat-X) actually cover the WP/RWR, not just the ECN? | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. | Is configuration of equipment and systems properly identified for safe operation while the work is being performed? | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. | Is operability of the equipment and systems properly restored as part of the retesting? | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> |
| 6. | Are the Lock and Tag steps required to install and remove included in the work document and are the forms complete and in the WP? | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. | Are TSR, LCO, OSD, and AB requirements properly included? (Note for LCO entry/exit.) | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> |
| 8. | Was Safety Classification of the SSC's (Structures, Systems and Components) identified in the WP/RWR correctly? | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. | Have appropriate final inspections or retest instructions been included? (SS/SC must address retest.) | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> |
| 10. | Are Partial Release Sheets Prepared? | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> |
| 11. | Are work scope boundaries clear and the forms complete and in the WP? | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Comments:

S
S

| | |
|---|-------------------------|
| CH2M HILL ENGINEERING CHANGE NOTICE | 1a. ECN 724070 R 1 |
| Page 1 of 7 <input type="checkbox"/> DM <input checked="" type="checkbox"/> FM <input type="checkbox"/> TM | 1b. Proj. ECN N/A - - R |

| | | |
|---|--|---|
| 2. Simple Modification <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 3. Design Inputs - For full ECNs, record information on the ECN-1 Form (not required for Simple Modifications) | 4. Date 08/30/06 |
| 5. Originator's Name, Organization, MSIN, & Phone No. Jessica R Hahn, COSE, S7-80, 373-1332 | | 6. USQ Number No. TF - 06 - 1071 - S R - 0 <input type="checkbox"/> N/A |
| 7. Related ECNs ECN-724070-R0 ECN-723552-R0 | 8. Title 241-C EDS Optimization | 9. Bldg. / Facility No. 241-C |
| 10. Equipment / Component ID None | 11. Approval Designator N/A | 12. Engineering Documents/Drawings to be Changed (Incl. Sheet & Rev. Nos.) H-14-030013 Sh. 2, Rev. 9; Sh. 3, Rev. 6; Sh. 9, Rev. 6 |
| 13. Safety Designation <input type="checkbox"/> SC <input type="checkbox"/> SS <input checked="" type="checkbox"/> GS <input type="checkbox"/> N/A | 14. Expedited/Off-Shift ECN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 15a. Work Package Number CLO-WO-06-1405 |
| 15b. Modification Work Completed <i>MJ Bryden</i> SEP 12 MJ BRYDEN 9.12.06 <small>Responsible Engineer / Date</small> | 15c. Restored to Original Status (TM) LU00 STA 3 N/A 18 <small>Responsible Engineer / Date</small> | 16. Fabrication Support ECN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

17. Description of the Change (Use ECN Continuation pages as needed)

Problem: There are numerous pieces of equipment in the C Farm that are no longer being used nor have a future use planned for them that require large amounts of craft resources to do regular preventative maintenance. The equipment is seen as a potential safety hazard in the future because of its age and condition in the field. The equipment, if left energized, could represent a potential electrical hazard to the craft personnel if asked to operate such equipment (i.e. disconnects, breakers, and pump contactors).

Solution: The electrical equipment should be determined from the source and electrically isolated to minimize the potential electrical hazards in the farm. This change will also allow the craft personnel to discontinue the electrical PMs on the equipment and save valuable resource time and money.

Analysis: The equipment is no longer in use and has no future scope related to operations or projects.

Testing: N/A

NOTE: Page 4 of this ECN replaces page 5 of ECN 724070-R0, and pages 4 and 5 of this ECN replace the corresponding portions of page 7 of ECN-723552-R0.

| | |
|---|--|
| <p>18. Justification of the Change (Use ECN Continuation pages as needed)</p> <p>The electrical equipment in C Farm has become old and presents potential safety hazards to our craftsmen if asked to work on these pieces of equipment. In an effort to optimize the electrical systems in the tank farms, the equipment will be disconnected from the source and removed from the PM data sheets to save craft resources and company money from doing unnecessary maintenance on obsolete equipment.</p> | <p>19. ECN Category</p> <p><input type="checkbox"/> Direct Revision <input checked="" type="checkbox"/> Supplemental <input type="checkbox"/> Void/Cancel</p> <p>ECN Type</p> <p><input type="checkbox"/> Supersedeure <input checked="" type="checkbox"/> Revision</p> |
|---|--|

| 20. Distribution | | | |
|------------------|-------|----------|-------|
| Name | MSIN | Name | MSIN |
| MJ BRYDEN | S7-87 | DG BAIDE | S7-24 |
| JA BEWICK | S7-24 | | |
| WT THOMPSON | S7-87 | | |
| LS KROGSRUD | S7-24 | | |
| DB PARKMAN | S7-87 | | |
| TH NGUYEN | S7-24 | | |
| RE STODDARD | S7-92 | | |

Release Stamp

AUG 31 2006

DATE: 3 HANFORD ID: 18
 STA: 3 RELEASE

ECN 724070 R 1 17

SEP 12 2006
 STA 3
 Page 2 of 7

CH2M HILL ENGINEERING CHANGE NOTICE

1a. ECN 724070 R 1

DM FM TM

1b. Proj. ECN N/A - - R

21. Revisions Planned (include a brief description of the contents of each revision)

NONE

Note: All revisions shall have the approvals of the affected organizations as identified in block 11 "Approval Designator," on page 1 of this ECN.

22. Commercial Grade Item Dedication Numbers (associated with this design change)

NONE

23. Engineering Data Transmittal Numbers (associated with this design change, e.g., new drawings, new documents)

NONE

24. Other Non Engineering (not in HDCS) documents that need to be modified due to this change

| Type of Document | Document Number | Update Completed On | Responsible Engineer (print/sign and date) |
|--------------------------|--------------------|---------------------|--|
| Alarm Response Procedure | N/A | | |
| Operations Procedure | N/A | | |
| Maintenance Procedure | N/A | | |
| Type of Document | Document Number | Type of Document | Document Number |
| Data Sheets | WT-07716, WT-07283 | | |
| | | | |
| | | | |
| | | | |

25. Field Change Notice(s) Used?
 Yes No
 If Yes, Record information on the ECN-2 Form, attach form(s), include a description of the interim resolution on ECN Page 1, block 17, and identify permanent changes.

NOTE: ECNs are required to record and approve all FCNs issued. If the FCNs have not changed the original design media then they are just incorporated into the design media via an ECN. If the FCN did change the original design media then the ECN will include the necessary engineering changes to the original design media.

26. Design Verification Required?
 Yes No
 If Yes, as a minimum attach the one page checklist from TFC-ENG-DESIGN-P-17.

27. Approvals

| Facility/Project Signatures | Date | A/E Signatures | Date |
|--|---------|--|---------|
| Resp. Engineer MJ BRYDEN <i>[Signature]</i> | 8-31-06 | Originator/Design Agent JR HAHN <i>[Signature]</i> | 8-31-06 |
| Resp. Manager WT THOMPSON <i>[Signature]</i> | 8-31-06 | Professional Engineer | |
| Quality Assurance | | Project Engineer | |
| IS&H Engineer | | Quality Assurance | |
| NS&L Engineer | | Safety | |
| Environ. Engineer | | Designer | |
| Engineering Checker JA BEWICK <i>[Signature]</i> | 8-31-06 | Environ. Engineer | |
| Other | | Other | |
| Other | | Other | |
| Other | | DEPARTMENT OF ENERGY / OFFICE OF RIVER PROTECTION | |
| Other | | Signature or a Control Number that tracks the Approval Signature | |
| Other | | ADDITIONAL SIGNATURES | |
| Other | | | |
| Other | | | |

18

**CH2M HILL ENGINEERING CHANGE NOTICE
CONTINUATION SHEET**

1a. ECN 724070 R 1

Page 3 of 7.

1b. Proj. ECN N/A

Document/Drawing No. N/A

Sheet N/A

Revision N/A

Description of Change continued:

H-14-030013 Sh. 2, R. 9

The Motor Control Center (MCC) CR271-EDS-MCC-002 is a cubicle system that allows the breakers to be removed from the cubicle by disconnecting the breakers' line side wires from the MCC bus. Complete the disconnection on the designated cubicles as shown on page 4 of this ECN.

Update MCC Legend to reflect A1, A3, B1, E1, E2, and G3 as spaces on page 5 of this ECN.

H-14-030031 Sh. 3, R. 6

The Motor Control Center (MCC) CR271-EDS-MCC-002 is a cubicle system that allows the breakers to be removed from the cubicle by disconnecting the breakers' line side wires from the MCC bus. Complete the disconnection on the designated cubicles as shown on page 6 of this ECN.

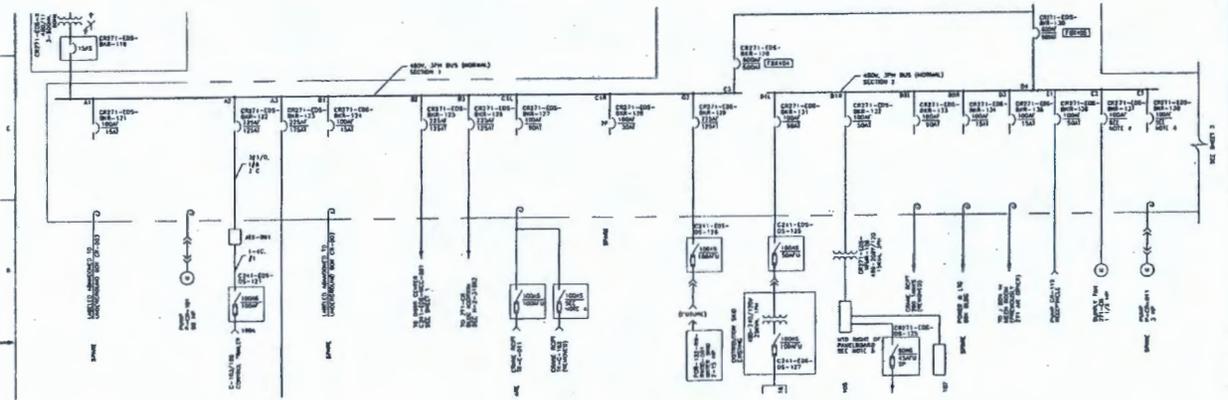
H-14-030013 Sh. 9, R. 6

Revise panelboard schedule to show circuits 25, 29, and 31 as spare and update load values as shown on page 7.

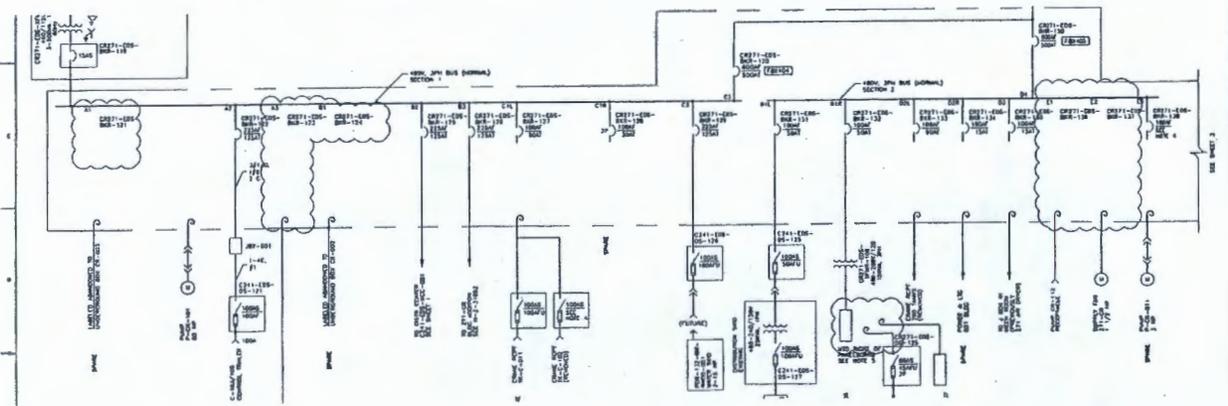
Note: An AutoCAD page may be used in place of this form (the header section items must be included on the AutoCAD page).

THIS PAGE REPLACES PAGE 5 OF ECN-724070-RO
AND CORRESPONDING PORTION OF PAGE 7 OF
ECN-723552-RO

WAS:



IS: REMOVE BREAKERS AND DISCONNECT EQUIPMENT SHOWN



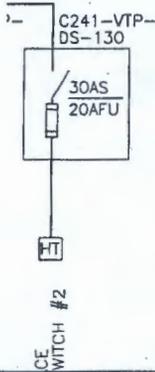
20

Document/Drawing No. H-14-030013 Sheet 2 Revision 9

ECN NOTE: DELETE OR REVISE CLOUDED AREAS ONLY

THIS PAGE REPLACES CORRESPONDING PORTION OF PAGE 7 OF ECN-723552-RO

WAS: /106
IAUSTER
D



| | | | |
|-----|--|-----|--|
| A1 | SPARE | E4 | COMPRESSOR BUILDING 241-C-701 SEE NOTE |
| A2 | C-103/105 CONTROL TRAILER | F1 | SPARE |
| A3 | C-105/106 EXHAUST SKID (BREAKER HANDLE LOCATED INSIDE) | F2 | SPARE |
| B1 | SPARE | F3 | SPARE |
| B2 | DISTR CENTER MCC-001 | F4 | SPARE |
| B3 | CR-271 BUILDING ADDITION | G1 | SPARE |
| C1L | SPARE | G2 | SPARE |
| C1R | SPARE | G3 | LOADOUT BLDG 801-C |
| C2 | C241-EDS-DS-126 & RECEPTACLE | G4 | PANELBOARD EDS-DP-110 |
| C3 | MCC-002 SECTION 1 | G5 | SPARE |
| D1L | C241-EDS-DS-125 & RECEPTACLE | H1 | PANELBOARD EDS-DP-111 & 112 |
| D1R | PANELBOARD EDS-DP-106 | H2 | PANELBOARD C241-EDS-DP-114 |
| D2L | SPARE | H3L | EMERGENCY BUS |
| D2R | SPARE | H3R | EMERGENCY BUS GENERATOR |
| D3 | SPARE | I1 | SPARE |
| D4 | INCOMING FEEDER SECTION NO. 2 | I2 | SPARE |
| E1 | CF-112 PUMP RECEPTACLE SEE NOTE | I3 | MINI-POWER ZONE CR244-EDS-DP-101 |
| E2 | CR-271 SUPPLY FAN SEE NOTE | I4 | SPARE |
| E3 | SPARE SEE NOTE | I5 | SPARE |

TEMPORARY

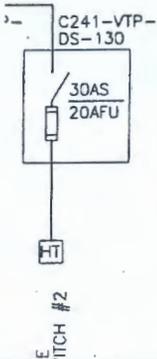
SECTION

| | |
|----|----|
| | |
| A1 | B1 |
| | |
| A2 | B2 |
| | |
| A3 | B3 |

MCC LEGEND

IS: MODIFY LEGEND TO REFLECT SPARES

/106
IAUSTER
D



| | | | |
|-----|---------------------------------------|-----|--|
| A1 | SPACE | E4 | COMPRESSOR BUILDING 241-C-701 SEE NOTE |
| A2 | C-103/105 CONTROL TRAILER | F1 | SPARE |
| A3 | SPACE (BREAKER HANDLE LOCATED INSIDE) | F2 | SPARE |
| B1 | SPACE | F3 | SPARE |
| B2 | DISTR CENTER MCC-001 | F4 | SPARE |
| B3 | CR-271 BUILDING ADDITION | G1 | SPARE |
| C1L | SPARE | G2 | SPACE |
| C1R | SPARE | G3 | SPACE |
| C2 | C241-EDS-DS-126 & RECEPTACLE | G4 | PANELBOARD EDS-DP-110 |
| C3 | MCC-002 SECTION 1 | G5 | SPARE |
| D1L | C241-EDS-DS-125 & RECEPTACLE | H1 | PANELBOARD EDS-DP-111 & 112 |
| D1R | PANELBOARD EDS-DP-106 | H2 | PANELBOARD C241-EDS-DP-114 |
| D2L | SPARE | H3L | EMERGENCY BUS |
| D2R | SPARE | H3R | EMERGENCY BUS GENERATOR |
| D3 | SPARE | I1 | SPARE |
| D4 | INCOMING FEEDER SECTION NO. 2 | I2 | SPARE |
| E1 | SPACE | I3 | MINI-POWER ZONE CR244-EDS-DP-101 |
| E2 | SPACE | I4 | SPARE |
| E3 | SPACE SEE NOTE | I5 | SPARE |

TEMPORARY

SECTION

| | |
|----|----|
| | |
| A1 | B1 |
| | |
| A2 | B2 |
| | |
| A3 | B3 |

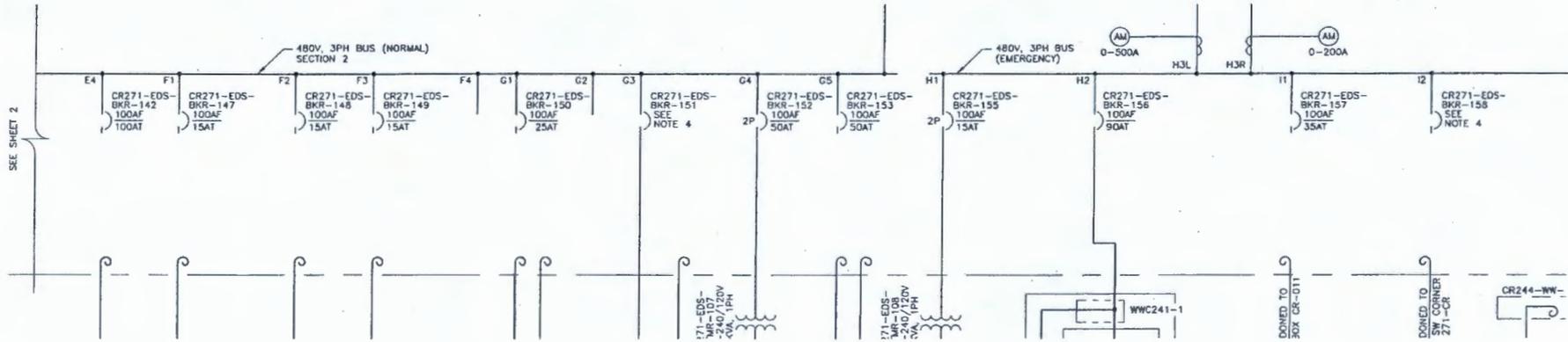
MCC LEGEND

21

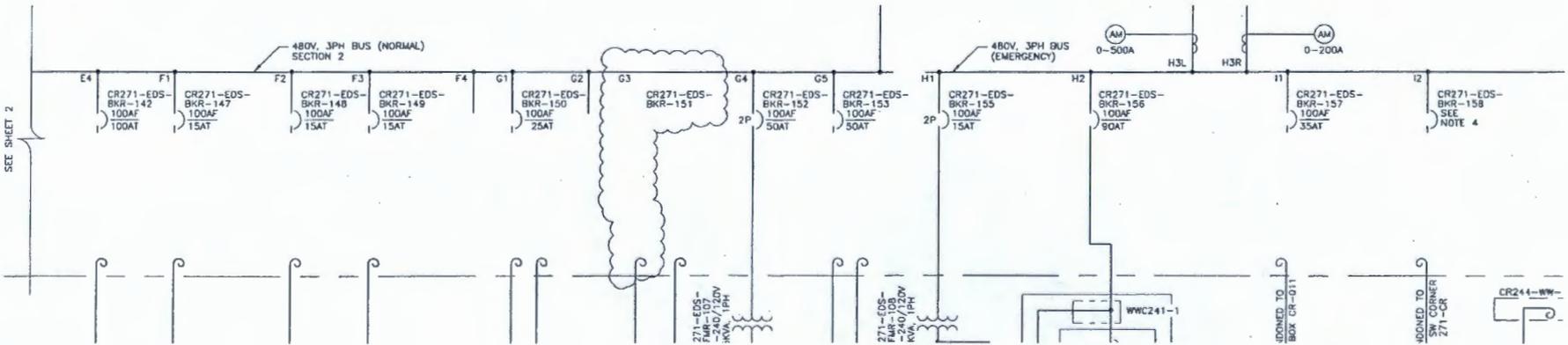
Document/Drawing No. H-14-030013 Sheet 3 Revision 6

ECN NOTE: DELETE OR REVISE CLOUDED AREAS ONLY

WAS:



IS: DISCONNECT EQUIPMENT AND REMOVE BREAKER AS INDICATED



22

ENGINEERING CHANGE NOTICE CONTINUATION SHEET

1a. ECN 724070 R1

PAGE 7 OF 7

1b. Proj. N/A
ECN

Document/Drawing No. H-14-030013 Sheet 9 Revision 6

ECN NOTE: DELETE OR REVISE CLOUDED AREAS ONLY

WAS:

| | | | | | | | |
|--|-----|-----|---|-----|--|-----|--|
| | 900 | | HALL, LUNCHRM, CNTRL RM RCPT | 19 | | 20 | OUTSIDE LIGHT A |
| | - | | SPARE | 21 | | 22 | INSIDE & OUTSIDE |
| | | 540 | HALL & COMPRESSOR ROOM RCPT | 23 | | 24 | INSIDE LIGHTS |
| | 360 | | MEN'S ROOM EXHAUST FAN RCPT LUNCH ROOM 240V RECEPTACLE | 25 | | 26 | INSIDE LIGHTS |
| | | 180 | LUNCH ROOM 240V RECEPTACLE | 27 | | 28 | SPARE |
| | | 180 | 240V RCPT BEHIND INSTR PANEL, LUNCH ROOM RECEPTACLE | 29 | | | |
| | 180 | | 240V RCPT BEHIND INSTR PANEL | 31 | | 32 | 200 VA TRANSFORMER THERMOSTATS AND |
| | | 50 | TO UTILITY FIELD DATA ACQUISITION SYSTEM #86 | 33 | | 34 | SPARE |
| | | 360 | SWP ROOM RECEPTACLES | 35A | | 36A | OLD CHANGE SWITCH DISCONNECT SWITCH |
| | | - | SUPPLIES TERMINATED WIRE IN TBX ABOVE INSTRUMENT PANEL CB5 | 35B | | 36B | AT SUBSTATION |

SUBTOTAL 1440 230 1320

TOTAL WATTS PHASE A: 2660
TOTAL WATTS PHASE B: 3790
TOTAL WATTS PHASE C: 4880
TOTAL: 11,330

PARTIALLY SUPPLEMENTED
H-2-41251 SHEET

IS AN UNDETERMINED LOAD
IS TO SAME SO CORD AS
"IA" CIRCUIT 5.

IS:

| | | | | | | | |
|--|-----|-----|---|-----|--|-----|--|
| | 900 | | HALL, LUNCHRM, CNTRL RM RCPT | 19 | | 20 | OUTSIDE LIGHT A |
| | - | | SPARE | 21 | | 22 | INSIDE & OUTSIDE |
| | | 540 | HALL & COMPRESSOR ROOM RCPT | 23 | | 24 | INSIDE LIGHTS |
| | - | | SPARE | 25 | | 26 | INSIDE LIGHTS |
| | 180 | | LUNCH ROOM 240V RECEPTACLE | 27 | | 28 | SPARE |
| | - | | SPARE | 29 | | | |
| | - | | SPARE | 31 | | 32 | 200 VA TRANSFORMER THERMOSTATS AND |
| | | 50 | TO UTILITY FIELD DATA ACQUISITION SYSTEM #86 | 33 | | 34 | SPARE |
| | | 360 | SWP ROOM RECEPTACLES | 35A | | 36A | OLD CHANGE SWITCH DISCONNECT SWITCH |
| | | - | SUPPLIES TERMINATED WIRE IN TBX ABOVE INSTRUMENT PANEL CB5 | 35B | | 36B | AT SUBSTATION |

SUBTOTAL 900 230 1140

TOTAL WATTS PHASE A: 2120
TOTAL WATTS PHASE B: 3790
TOTAL WATTS PHASE C: 4700
TOTAL: 10610

PARTIALLY SUPPLEMENTED
H-2-41251 SHEET

IS AN UNDETERMINED LOAD
IS TO SAME SO CORD AS
"IA" CIRCUIT 5.

23

S S

| | |
|---|---------------------------|
| CH2M HILL ENGINEERING CHANGE NOTICE | 1a. ECN 724070 R 0 |
| Page 1 of 6 <input type="checkbox"/> DM <input checked="" type="checkbox"/> FM <input type="checkbox"/> TM | 1b. Proj. ECN N/A - - R |

| | | |
|---|--|---|
| 2. Simple Modification <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 3. Design Inputs - For full ECNs, record information on the ECN-1 Form (not required for Simple Modifications) | 4. Date 08/23/2006 |
| 5. Originator's Name, Organization, MSIN, & Phone No. Joe A. Bewick, COSE, S7-24, 372-1116 | | 6. USQ Number No. TF - 08 - 1043 - S R - 0 <input type="checkbox"/> N/A |
| 7. Related ECNs None | 8. Title 241-C EDS Optimization | 9. Bldg. / Facility No. 241-C |
| 10. Equipment / Component ID None | 11. Approval Designator N/A | 12. Engineering Documents/Drawings to be Changed (Incl. Sheet & Rev. Nos.) H-14-030013 Sh. 1 R.11, H-14-030013 Sh. 2 R. 9, H-14-030013 Sh. 3 R.8 |
| 13. Safety Designation <input type="checkbox"/> SC <input type="checkbox"/> SS <input checked="" type="checkbox"/> GS <input type="checkbox"/> N/A | 14. Expedited/Off-Shift ECN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| 15a. Work Package Number CLO-WO-06-1405 | 15b. Modification Work Completed <i>MJ Bryden</i> SEP 12 2006 <i>MJ Bryden</i> 9.12.06 | 15c. Restored to Original Status (TM) KUB STA 3 N/A 18 |
| 16. Fabrication Support ECN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | 17. Description of the Change (Use ECN Continuation pages as needed) |

17. Description of the Change (Use ECN Continuation pages as needed)
Problem: There are numerous pieces of equipment in the C Farm that are no longer being used nor have a future use planned for them that require large amount of craft resources to do regular preventative maintenance. The equipment is seen as a potential safety hazard in the future because of its age and condition in the field. The equipment if left energized could represent a potential electrical hazard to the craft personnel if asked to operate such equipment (i.e. disconnects, breakers and pump contactors).

Solution: The electrical equipment should be determined from the source and electrically isolated to minimize the potential electrical hazards in the farms. This change will also allow the craft personnel to discontinue the electrical PMs on the equipment and save valuable resource time and money.

Analysis: The equipment is no longer in use and has no future scope related to operations or projects.

Testing: N/A

18. Justification of the Change (Use ECN Continuation pages as needed)
 The electrical equipment in C Farm has become old and useless and presents potential safety hazards to our craftsman if asked to work on these pieces of equipment. In an effort to optimize the electrical systems in the tank farms the equipment will be disconnected from the source and removed from the PM data sheets to save craft resources and company money from doing unnecessary maintenance on obsolete equipment.

19. ECN Category

Direct Revision
 Supplemental
 Void/Cancel

ECN Type

Supersedeure
 Revision

| 20. Distribution | | | |
|------------------|------|------|------|
| Name | MSIN | Name | MSIN |
| JA Bewick | | | |
| MJ Bryden | | | |
| LS Krogsrud | | | |
| DB Parkman | | | |
| TH Nguyen | | | |
| DG Balde | | | |
| RE Stoddard | | | |

Release Stamp

AUG 24 2006

DATE: HANFORD

STA: 3 RELEASE ID: 18

ECN 724070 R 0 24

SEP 12 2006 18
3
Page 2 of 6

CH2M HILL ENGINEERING CHANGE NOTICE

1a. ECN 724070 R 0

DM FM TM

1b. Proj. ECN N/A - - R

21. Revisions Planned (Include a brief description of the contents of each revision)

None

Note: All revisions shall have the approvals of the affected organizations as identified in block 11 "Approval Designator," on page 1 of this ECN.

22. Commercial Grade Item Dedication Numbers (associated with this design change)

None

23. Engineering Data Transmittal Numbers (associated with this design change, e.g., new drawings, new documents)

None

24. Other Non Engineering (not in HDCS) documents that need to be modified due to this change

| Type of Document | Document Number | Update Completed On | Responsible Engineer (print/sign and date) |
|--------------------------|--------------------|---------------------|--|
| Alarm Response Procedure | N/A | | |
| Operations Procedure | N/A | | |
| Maintenance Procedure | N/A | | |
| Type of Document | Document Number | Type of Document | Document Number |
| WT-07150, WT-07114 | | | |
| DATA SHEETS | WT-07150, WT-07114 | | |

25. Field Change Notice(s) Used?

Yes No

If Yes, Record information on the ECN-2 Form, attach form(s), include a description of the interim resolution on ECN Page 1, block 17, and identify permanent changes.

NOTE: ECNs are required to record and approve all FCNs issued. If the FCNs have not changed the original design media then they are just incorporated into the design media via an ECN. If the FCN did change the original design media then the ECN will include the necessary engineering changes to the original design media.

26. Design Verification Required?

Yes No

If Yes, as a minimum attach the one page checklist from TFC-ENG-DESIGN-P-17.

27. Approvals

| Facility/Project Signatures | Date | A/E Signatures | Date |
|--------------------------------|---------|--|------|
| Resp. Engineer MJ Bryden | 8-24-06 | Originator/Design Agent | |
| Resp. Manager DG Baide | 8-24-06 | Professional Engineer | |
| Quality Assurance | | Project Engineer | |
| IS&H Engineer | | Quality Assurance | |
| NS&L Engineer | | Safety | |
| Environ. Engineer | | Designer | |
| Engineering Checker GJ Coleman | 8/24/06 | Environ. Engineer | |
| Other JA Bewick | 8/24/06 | Other | |
| Other | | Other | |
| Other | | DEPARTMENT OF ENERGY / OFFICE OF RIVER PROTECTION | |
| Other | | Signature or a Control Number that tracks the Approval Signature | |
| Other | | ADDITIONAL SIGNATURES | |
| Other | | | |

25

**CH2M HILL ENGINEERING CHANGE NOTICE
CONTINUATION SHEET**

1a. ECN 724070 R 0

Page 3 of 6

1b. Proj. ECN N/A - - R

Document/Drawing No. N/A

Sheet N/A

Revision N/A

Description of Change Continued:

H-14-030013 Sh.1 R.11

Distribution Center C241-EDS-MCC-001 is a 480V distribution panel and the loads will be removed from the load side of the breakers as shown on page 4 of this ECN.

H-14-030013 Sh.2 R.9

The Motor Control Center (MCC) CR271-EDS-MCC-002 is a cubicle system that allows the breakers to be de-energized by disconnecting the breakers' line side wires from the MCC bus and leaving the entire cubicle de-energized. Complete the disconnection on the designated cubicles as shown on page 5 of this ECN.

H-14-030013 Sh.3 R.6

The disconnection of the disconnect switches from the pull box (PB) as shown on sheet 6 of this ECN are to ensure the power is isolated to the disconnects to allow removal from the EDS preventative maintenance data sheet. Due to the lack of space the wires shown coiled outside the box is solely for the clarity of the disconnection. A flag note "X" to be added as the next available note on the drawing will state the following:

NOTE "X." WIRES ARE DISCONNECTED AND SAFED OFF INSIDE THE PULL BOX.

Document/Drawing No. H-14-030013 Sheet 3 Revision 6

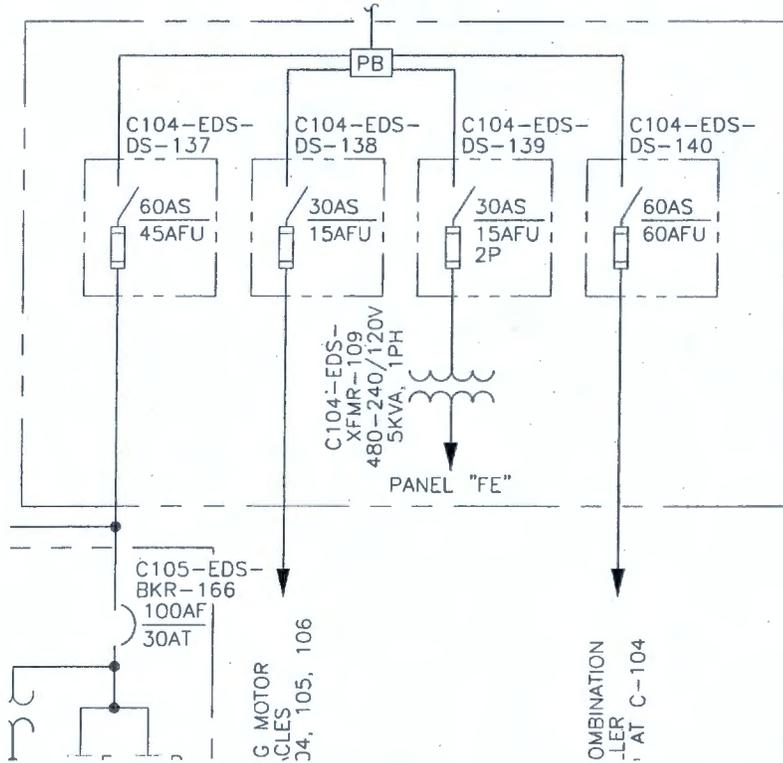
ECN NOTE: DELETE OR REVISE CLOUDED AREAS ONLY

WAS:

UTILITY
480V,
RECEP

PANEL
C241-
SEE S

NO POWER PRESENT DURING CIRCUIT VERIFICATION
POWER CABLES COULD NOT BE VERIFIED AT 241-CR-271 MCC
SEE H-2-41336

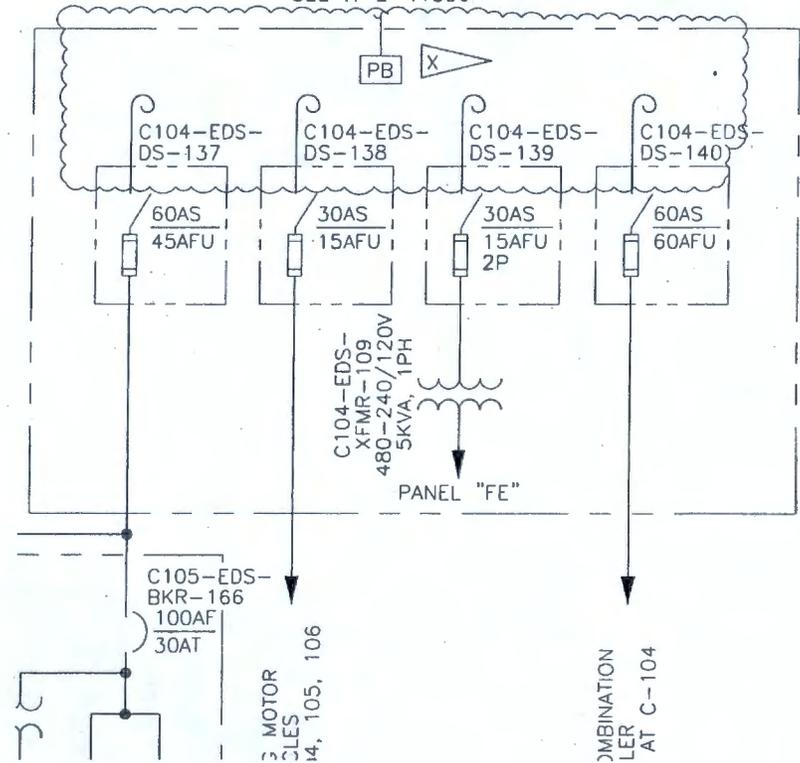


IS:

UTILITY
480V,
RECEP

PANEL
C241-
SEE S

NO POWER PRESENT DURING CIRCUIT VERIFICATION
POWER CABLES COULD NOT BE VERIFIED AT 241-CR-271 MCC
SEE H-2-41336



27

UNREVIEWED SAFETY QUESTION (USQ) SCREENING

USQ No.:

TF-06-1043-S

Rev.

0

Title: Revise Electrical Distribution in C-Farm via ECN-724070-R0 and Work Package CLO-WO-06-1405

Change Description: A substantial proportion of the electrical distribution equipment in C-farm is no longer serving operable equipment. However as long as the distribution equipment is energized it must be maintained, thus consuming scarce resources. As a result management has decided to reduce much of the unnecessary distribution equipment by disconnecting it via ECN-724070-R0. This will not affect any operational or safety-related equipment in service in C-farm. No other changes are included.

Categorical Exclusion (If applicable, check box and sign below)

- GCX-1 (USQ Evaluator)
- GCX-2 (USQ Evaluator or designated staff)
- GCX-3 (USQ Evaluator or designated staff)

Document Type(s) and Identification Number(s): ECN-724070-R0 and Work Package CLO-WO-06-1405

Project Identification

No: None

Area: East West General

Facility: SST DST AWF Other (specify):

Based on this evaluation, this change does not require a USQ determination, i.e., this has been screened out of the USQ process.

Safety basis change is required.

Initiate change in accordance with TFC-ENG-SB-C-01. Enter SBCN No.:

SIGNATURES

Trainee Preparer N/A

Print name:

Date:

Sign:

Preparer

Print name: **G.J. Coleman**

Org./MSIN: S7-24

Date: 8/24/06

Sign: (My signature below indicates that my USQ qualification is current on this date.)

Phone: 372-3849

Reviewer

Print name: **J.F. Renholds**

Org./MSIN: S7-24

Date: 8/24/06

Sign: (My signature below indicates that my USQ qualification is current on this date.)

Phone: 373-4248

Categorical Exclusion Preparer

Print name:

Org./MSIN:

Date:

Sign: (My signature below indicates that my USQ qualification is current on this date, or I am designated to sign for Categorical Exclusions [GCX-2 and GCX-3 only].)

Phone:

UNREVIEWED SAFETY QUESTION (USQ) SCREENING

USQ No.:

Rev.

TF-06-1043-S

0

USQ SCREENING

1. Does the proposed change represent a temporary or permanent change in the facility as described in the existing DSA? Yes No

Basis for No: The proposed activity revises the electrical distribution service in C-farm. The DSA does not describe the electrical distribution system in each farm thus the proposed activity does not represent a temporary or permanent change in the facility as described in the existing DSA.

2. Does the proposed change represent a temporary or permanent change in the procedures as described in the existing DSA? Yes No

Basis for No: The proposed activity revises the electrical distribution service in C-farm. There are no procedure changes involved in, or required by, this design change, therefore the proposed activity does not represent a temporary or permanent change in the procedures as described in the existing DSA.

3. Does the proposed change represent a test or experiment not described in the existing DSA? Yes No

Basis for No: The proposed activity is a design change and does not represent a test or experiment not described in the existing DSA.

CONCLUSION: The proposed activity is not a change to the facility or procedures as described, nor is it a test or experiment not described in the DSA therefore no USQ determination is required.

IMPACTS: None

REFERENCES:

CH2M HILL 2006a, *Tank Farms Documented Safety Analysis*, RPP-13033, Rev. 1-P, CH2M HILL Hanford Group, Inc., Richland, Washington.

CH2M HILL 2006b, *Tank Farms Technical Safety Requirements*, HNF-SD-WM-TSR-006, Rev. 4-Q, CH2M HILL Hanford Group, Inc., Richland, Washington.

CH2M HILL 2006c, *Unreviewed Safety Questions*, TFC-ENG-SB-C-03, Rev. D-1 (including Safety Basis Bulletins through #249), CH2M HILL Hanford Group, Inc., Richland, Washington.

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CH2M HILL ENGINEERING CHANGE NOTICE

1a. ECN 724070 R 0

Page 1 of 6

DM FM TM

1b. Proj. ECN N/A - - R

| 2. Simple Modification <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | 3. Design Inputs – For full ECNs, record information on the ECN-1 Form (not required for Simple Modifications) | | 4. Date 08/23/2006 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|--|---|------|------|------|-----------|--|--|--|-----------|--|--|--|-------------|--|--|--|------------|--|--|--|-----------|--|--|--|----------|--|--|--|-------------|--|--|--|--|
| 5. Originator's Name, Organization, MSIN, & Phone No. Joe A. Bewick, COSE, S7-24, 372-1116 | | | 6. USQ Number No. TF - 06 - 1043 - S R - 0 <input type="checkbox"/> N/A | 7. Related ECNs None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. Title 241-C EDS Optimization | | 9. Bldg. / Facility No. 241-C | 10. Equipment / Component ID None | 11. Approval Designator N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12. Engineering Documents/Drawings to be Changed (Incl. Sheet & Rev. Nos.) H-14-030013 Sh. 1 R.11, H-14-030013 Sh. 2 R. 9, H-14-030013 Sh. 3 R.6 | | | 13. Safety Designation <input type="checkbox"/> SC <input type="checkbox"/> SS <input checked="" type="checkbox"/> GS <input type="checkbox"/> N/A | 14. Expedited/Off-Shift ECN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15a. Work Package Number CLO-WO-06-1405 | 15b. Modification Work Completed _____ <small>Responsible Engineer / Date</small> | 15c. Restored to Original Status (TM) N/A _____ <small>Responsible Engineer / Date</small> | 16. Fabrication Support ECN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17. Description of the Change (Use ECN Continuation pages as needed) Problem: There are numerous pieces of equipment in the C Farm that are no longer being used nor have a future use planned for them that require large amount of craft resources to do regular preventative maintenance. The equipment is seen as a potential safety hazard in the future because of its age and condition in the field. The equipment if left energized could represent a potential electrical hazard to the craft personnel if asked to operate such equipment (i.e. disconnects, breakers and pump contactors). Solution: The electrical equipment should be determinated from the source and electrically isolated to minimize the potential electrical hazards in the farms. This change will also allow the craft personnel to discontinue the electrical PMs on the equipment and save valuable resource time and money. Analysis: The equipment is no longer in use and has no future scope related to operations or projects. Testing: N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18. Justification of the Change (Use ECN Continuation pages as needed) The electrical equipment in C Farm has become old and useless and presents potential safety hazards to our craftsman if asked to work on these pieces of equipment. In an effort to optimize the electrical systems in the tank farms the equipment will be disconnected from the source and removed from the PM data sheets to save craft resources and company money form doing unnecessary maintenance on obsolete equipment. | | | | 19. ECN Category <input type="checkbox"/> Direct Revision <input checked="" type="checkbox"/> Supplemental <input type="checkbox"/> Void/Cancel <u>ECN Type</u> <input type="checkbox"/> Supersedure <input type="checkbox"/> Revision | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20. Distribution <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:25%;">Name</th> <th style="width:15%;">MSIN</th> <th style="width:25%;">Name</th> <th style="width:15%;">MSIN</th> </tr> </thead> <tbody> <tr><td>JA Bewick</td><td></td><td></td><td></td></tr> <tr><td>MJ Bryden</td><td></td><td></td><td></td></tr> <tr><td>LS Krogsrud</td><td></td><td></td><td></td></tr> <tr><td>DB Parkman</td><td></td><td></td><td></td></tr> <tr><td>TH Nguyen</td><td></td><td></td><td></td></tr> <tr><td>DG Baide</td><td></td><td></td><td></td></tr> <tr><td>RE Stoddard</td><td></td><td></td><td></td></tr> </tbody> </table> | | | | Name | MSIN | Name | MSIN | JA Bewick | | | | MJ Bryden | | | | LS Krogsrud | | | | DB Parkman | | | | TH Nguyen | | | | DG Baide | | | | RE Stoddard | | | | Release Stamp <div style="border: 2px solid black; padding: 5px; text-align: center;"> <p style="font-size: 1.2em; font-weight: bold;">AUG 24 2006</p> <p>DATE: _____</p> <p>STA: 3</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> HANFORD RELEASE </div> <p style="font-size: 1.5em; font-weight: bold;">ID: 18</p> </div> |
| Name | MSIN | Name | MSIN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| JA Bewick | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MJ Bryden | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LS Krogsrud | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DB Parkman | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TH Nguyen | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DG Baide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RE Stoddard | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

CH2M HILL ENGINEERING CHANGE NOTICE

1a. ECN 724070 R 0

Page 2 of 6

DM FM TM

1b. Proj. ECN N/A - - R

21. Revisions Planned (Include a brief description of the contents of each revision)

None

Note: All revisions shall have the approvals of the affected organizations as identified in block 11 "Approval Designator," on page 1 of this ECN.

22. Commercial Grade Item Dedication Numbers (associated with this design change)

None

23. Engineering Data Transmittal Numbers (associated with this design change, e.g., new drawings, new documents)

None

24. Other Non Engineering (not in HDCS) documents that need to be modified due to this change

| Type of Document | Document Number | Update Completed On | Responsible Engineer (print/sign and date) |
|-----------------------------|--------------------|---------------------|--|
| Alarm Response Procedure | N/A | | |
| Operations Procedure | N/A | | |
| Maintenance Procedure | N/A | | |
| Type of Document | Document Number | Type of Document | Document Number |
| WT- ^{JAB} 08-24-06 | | | |
| DLTA SHEETS | WT-07150, WT-07714 | | |
| | | | |
| | | | |
| | | | |

25. Field Change Notice(s) Used?

Yes No

If Yes, Record information on the ECN-2 Form, attach form(s), include a description of the interim resolution on ECN Page 1, block 17, and identify permanent changes.

NOTE: ECNs are required to record and approve all FCNs issued. If the FCNs have not changed the original design media then they are just incorporated into the design media via an ECN. If the FCN did change the original design media then the ECN will include the necessary engineering changes to the original design media.

26. Design Verification Required?

Yes No

If Yes, as a minimum attach the one page checklist from TFC-ENG-DESIGN-P-17.

27. Approvals

| Facility/Project Signatures | Date | A/E Signatures | Date |
|---|---------|--|------|
| Resp. Engineer MJ Bryden <i>[Signature]</i> | 8-24-06 | Originator/Design Agent | |
| Resp. Manager DG Baide <i>[Signature]</i> | 8-24-06 | Professional Engineer | |
| Quality Assurance | | Project Engineer | |
| IS&H Engineer | | Quality Assurance | |
| NS&L Engineer | | Safety | |
| Environ. Engineer | | Designer | |
| Engineering Checker GJ Coleman <i>[Signature]</i> | 8/24/06 | Environ. Engineer | |
| Other JA Bewick <i>[Signature]</i> | 8/24/06 | Other | |
| Other | | Other | |
| Other | | DEPARTMENT OF ENERGY / OFFICE OF RIVER PROTECTION | |
| Other | | Signature or a Control Number that tracks the Approval Signature | |
| Other | | ADDITIONAL SIGNATURES | |
| Other | | | |
| Other | | | |

**CH2M HILL ENGINEERING CHANGE NOTICE
CONTINUATION SHEET**

1a. ECN 724070 R 0

Page 3 of 6

1b. Proj. ECN N/A - - R

Document/Drawing No. N/A

Sheet N/A

Revision N/A

Description of Change Continued:

H-14-030013 Sh.1 R.11

Distribution Center C241-EDS-MCC-001 is a 480V distribution panel and the loads will be removed from the load side of the breakers as shown on page 4 of this ECN.

H-14-030013 Sh.2 R.9

The Motor Control Center (MCC) CR271-EDS-MCC-002 is a cubicle system that allows the breakers to be de-energized by disconnecting the breakers' line side wires from the MCC bus and leaving the entire cubicle de-energized. Complete the disconnection on the designated cubicles as shown on page 5 of this ECN.

H-14-030013 Sh.3 R.6

The disconnection of the disconnect switches from the pull box (PB) as shown on sheet 6 of this ECN are to ensure the power is isolated to the disconnects to allow removal from the EDS preventative maintenance data sheet. Due to the lack of space the wires shown coiled outside the box is solely for the clarity of the disconnection. A flag note "X" to be added as the next available note on the drawing will state the following:

NOTE "X." WIRES ARE DISCONNECTED AND SAFED OFF INSIDE THE PULL BOX.

Note: An AutoCAD page may be used in place of this form (the header section items must be included on the AutoCAD page).

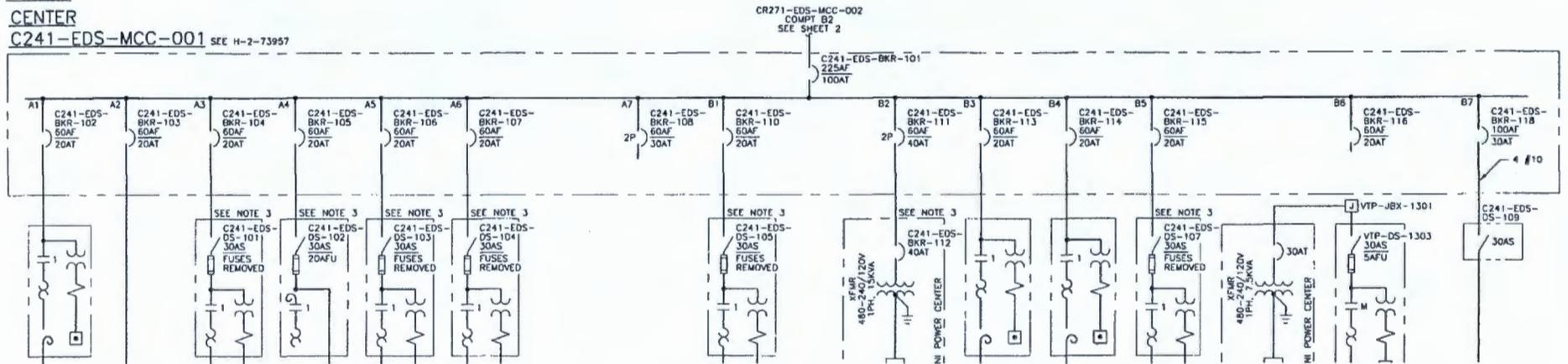
Document/Drawing No. H-14-030013 Sheet 1 Revision 11

ECN NOTE: DELETE OR REVISE CLOUDED AREAS ONLY

WAS:

CENTER

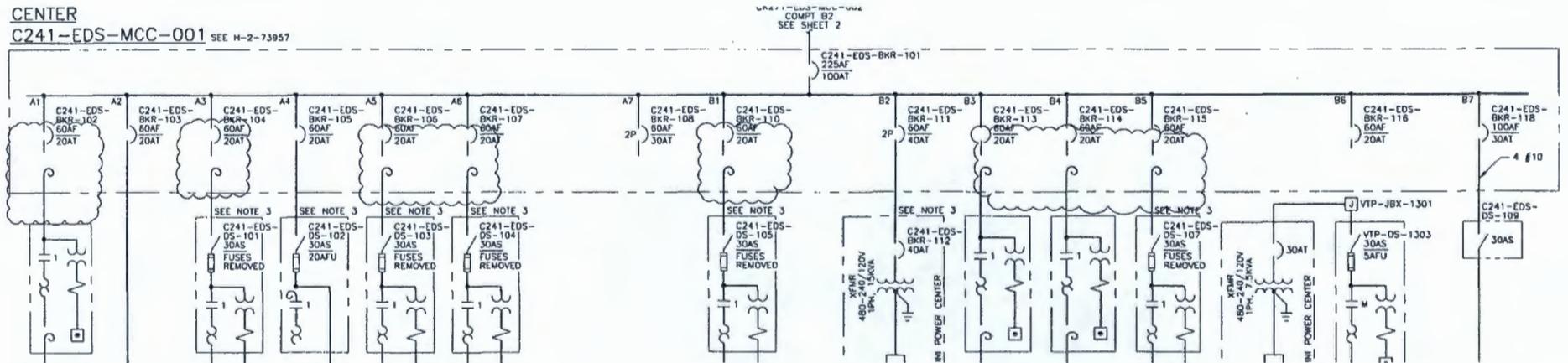
C241-EDS-MCC-001 SEE H-2-73957



IS:

CENTER

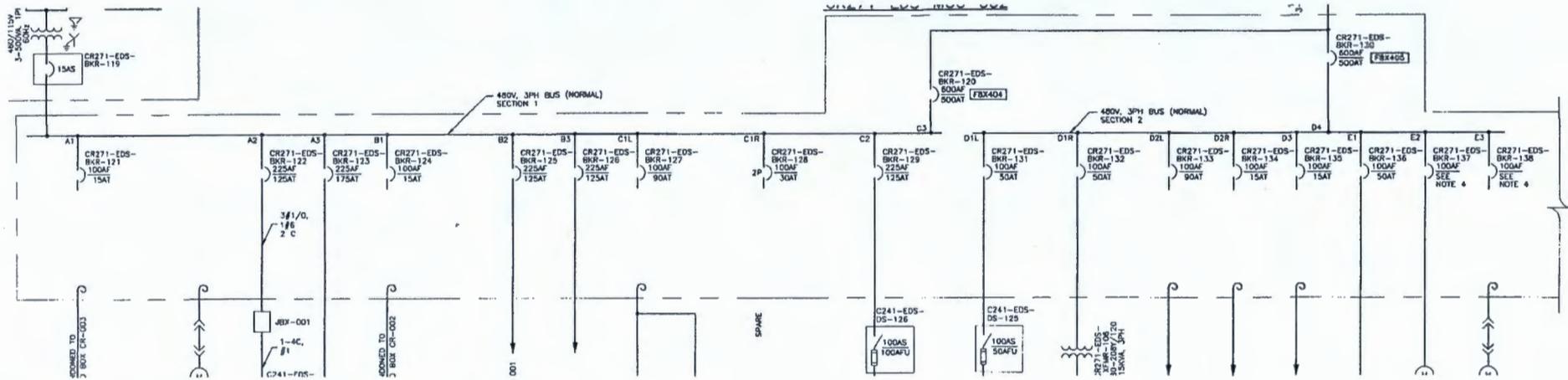
C241-EDS-MCC-001 SEE H-2-73957



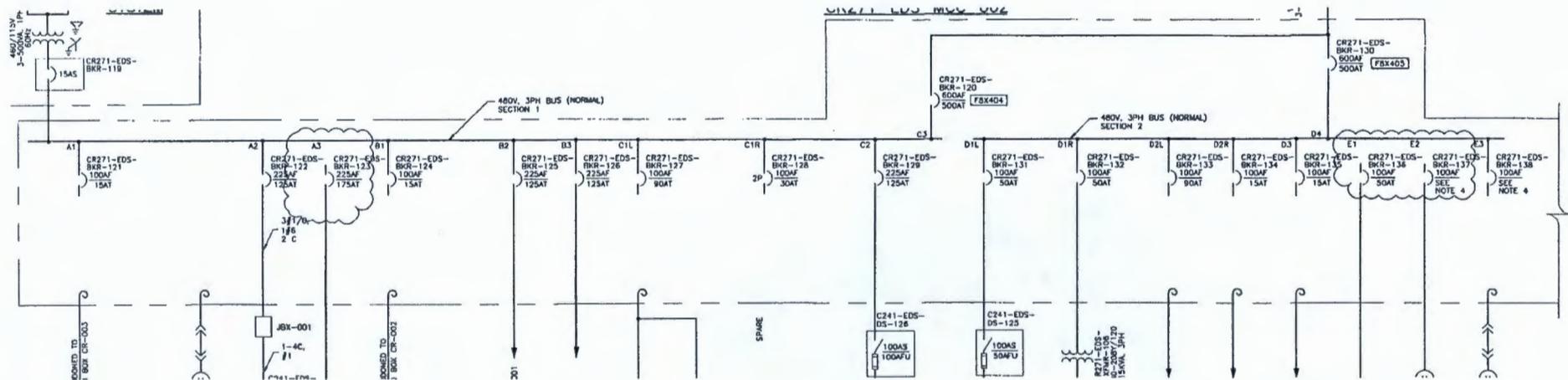
Document/Drawing No. H-14-030013 Sheet 2 Revision 9

ECN NOTE: DELETE OR REVISE CLOUDED AREAS ONLY

WAS:



IS: DISCONNECT BREAKERS FROM BUS AS SHOWN



Document/Drawing No. H-14-030013 Sheet 3 Revision 6

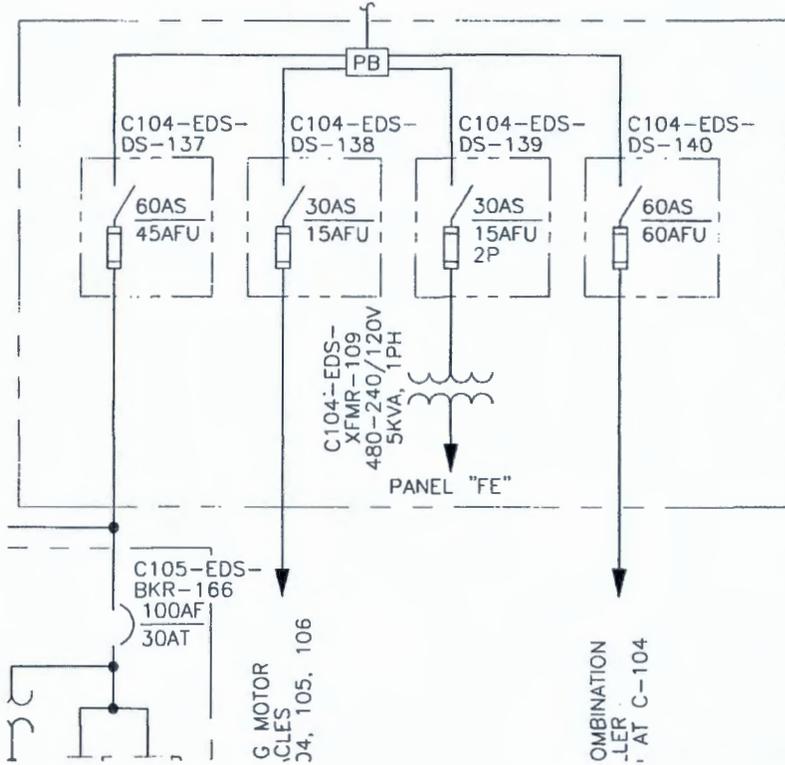
ECN NOTE: DELETE OR REVISE CLOUDED AREAS ONLY

WAS:

UTILITY
480V.
RECEP

PANEL
C241-
SEE S

NO POWER PRESENT DURING CIRCUIT VERIFICATION
POWER CABLES COULD NOT BE VERIFIED AT 241-CR-271 MCC
SEE H-2-41336

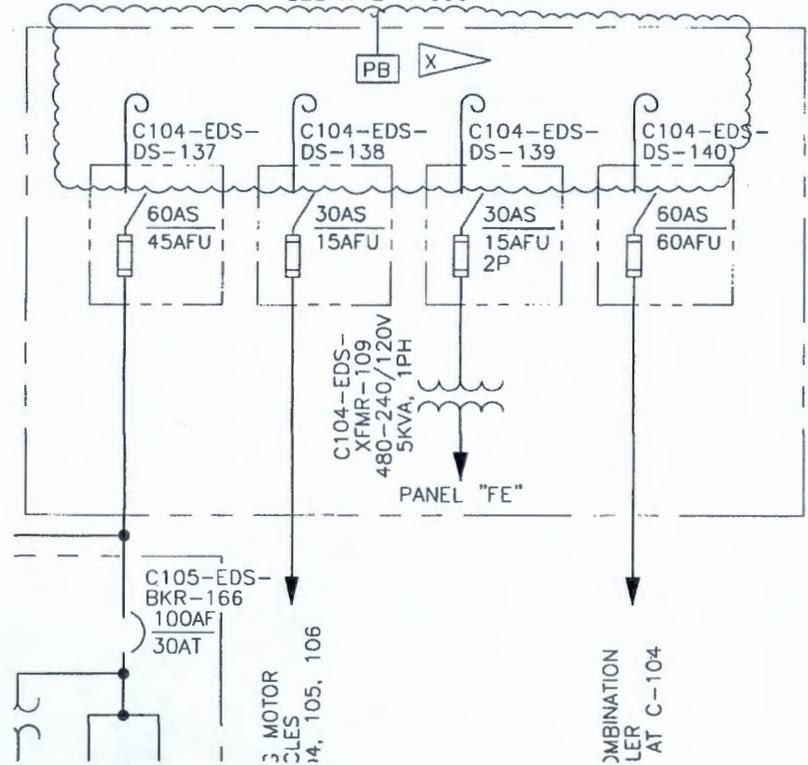


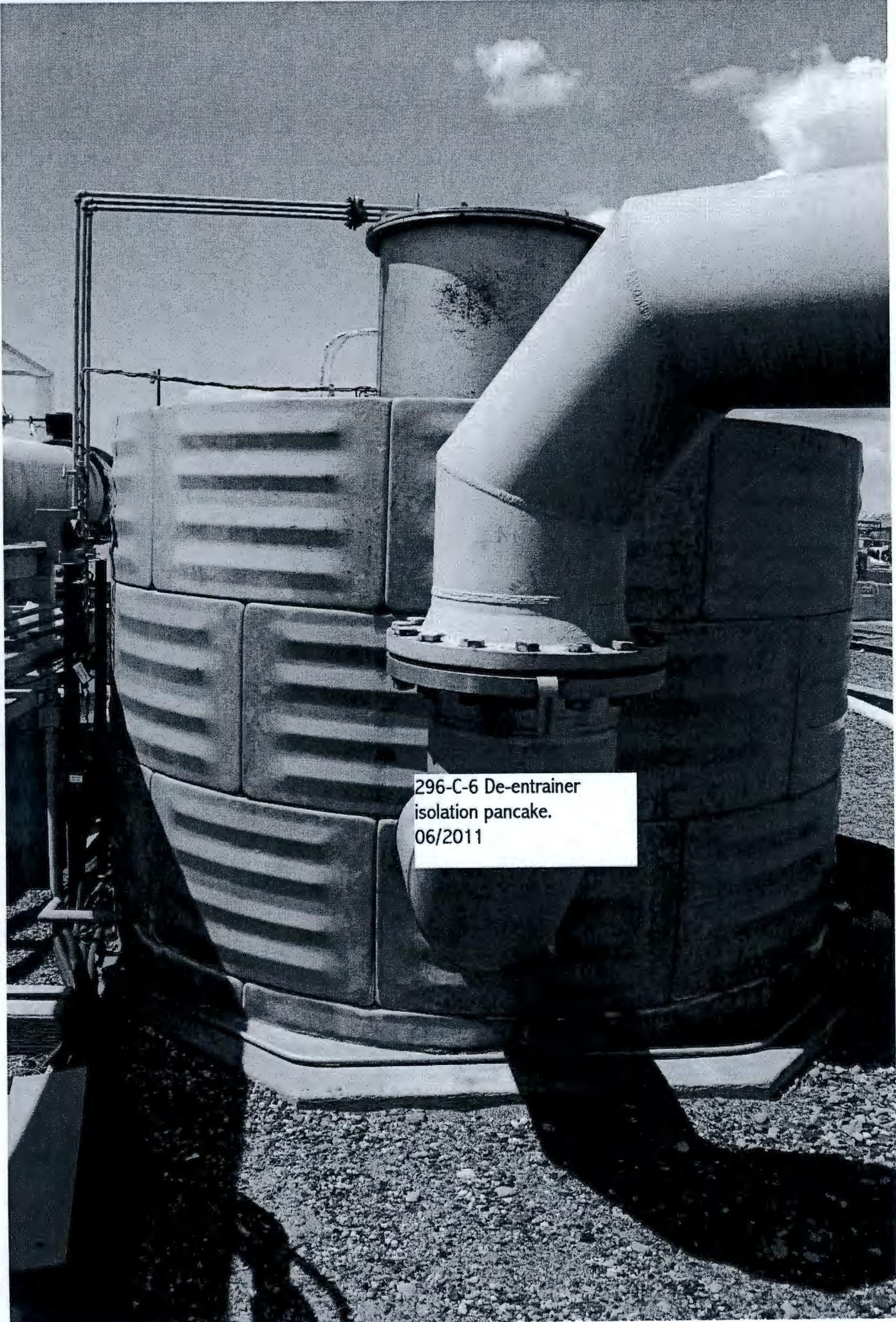
IS:

UTILITY
480V.
RECEP

PANEL
C241-
SEE S

NO POWER PRESENT DURING CIRCUIT VERIFICATION
POWER CABLES COULD NOT BE VERIFIED AT 241-CR-271 MCC
SEE H-2-41336



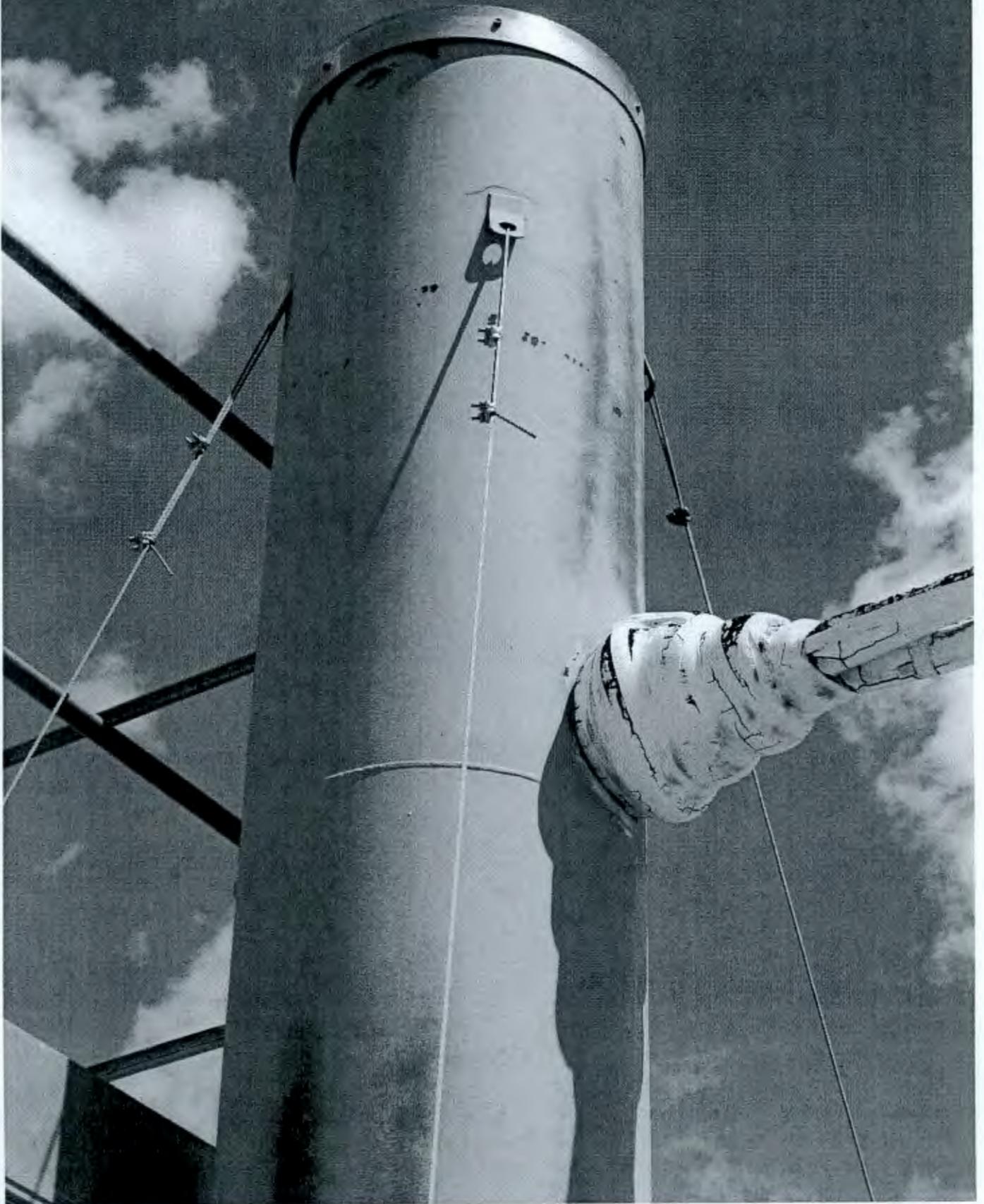


296-C-6 De-entrainer
isolation pancake.
06/2011

296-C-6 Condensate
Isolation
06/2011



296-C-6 Cap on Stack
06/2011



296-C-6 Stack Cabinet
Isolation
06/2011

C296-VTP-ENCLOSURE-500
FED FROM
C241-VTP-DS-128 H-11-030005
C241-VTP-DS-128 H-11-030005
GREATER THAN 50 VOLT SOURCES

DISCONNECTED AT
PER ECN 72407

296-C-6 Heater Isolation
06/2011

VENT HEATER NO. 1



HEATER
NO. 1

CAUTION
HOT SURFACES
DO NOT TOUCH

VENT HEATER NO. 2



HEATER
NO. 2

CAUTION
HOT SURFACES
DO NOT TOUCH

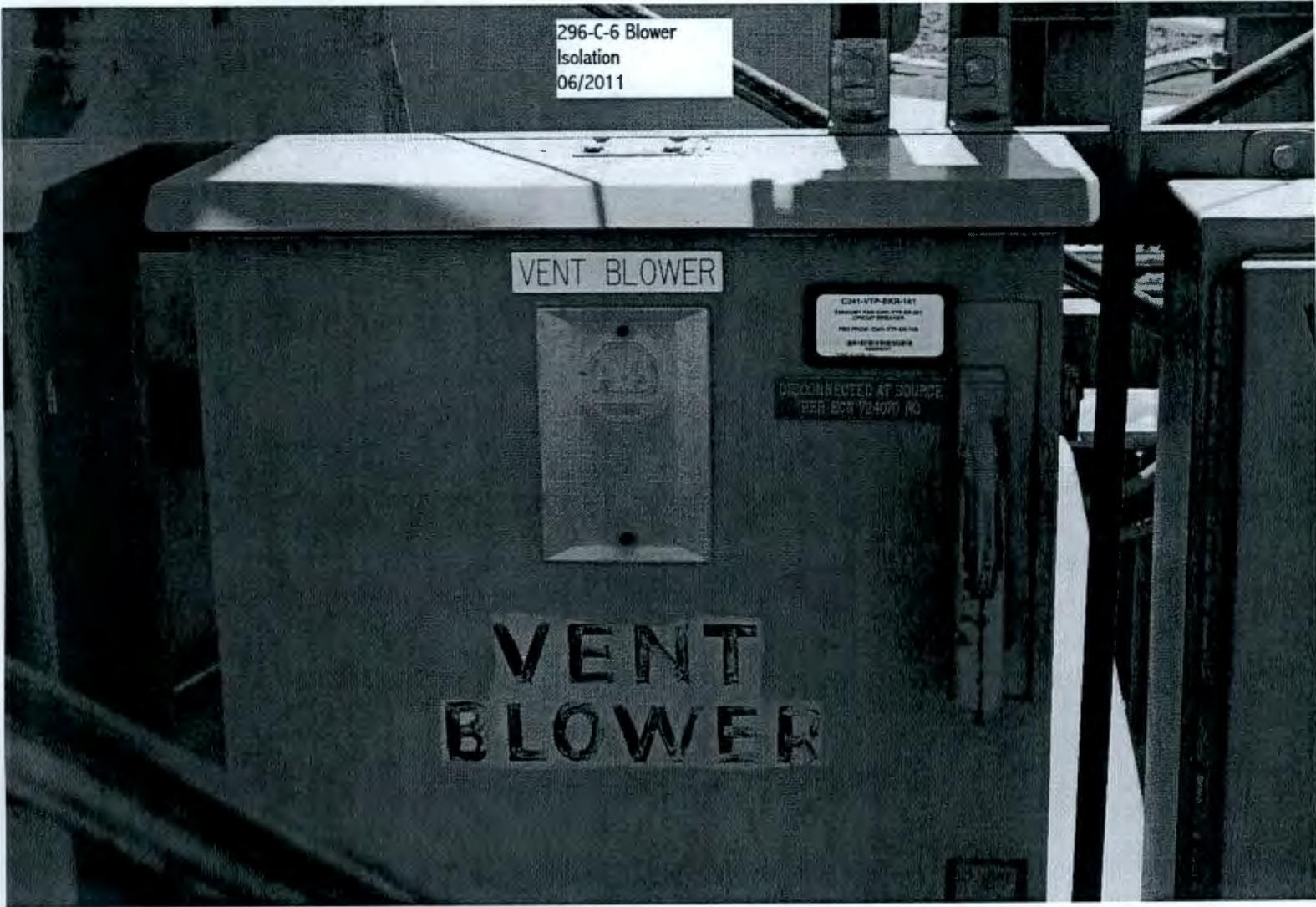
296-C-6 Blower
Isolation
06/2011

VENT BLOWER

C291-VTP-2003-101
ELECTRIC CONTROL PANEL
FBI PROJECT CAL-07-00-000
SERIES 10000000

DISCONNECTED AT SOURCE
PER ECR 724070 10

VENT
BLOWER



Report of Closure/Permit Revision

NOTE: Any increase to abated or unabated PTE requires a full NOC modification

REASON FOR CHANGE

Submittal Date: 08/31/2011

NOC Application Revision

New NOC Rev Number: _____

Condition Change/ Clarification

WDOH Condition Number: _____

AOP Condition Number: See below

ALARACT Revision

New ALARACT Rev Number: _____

PROJECT IDENTIFICATION

Project Title: Report of closure for P-Vadose-002, Air Rotary Drilling

Current NOC Application Number: AOP Permit 00-05-006/ License Number FF-01

AEI ID Number (AOP Emission Unit Number(s)): P-Vadose-002

Current WDOH Approval Letter Number(s): AIR 10-801

WDOH NOC ID Number: 539

DESCRIPTION OF CHANGE

Number of Attachments 0

Report of Closure for P-Vadose-002

Summary/Introduction

In accordance with Washington Administrative Code 246-247-080(6), this report of closure is being submitted to the State of Washington Department of Health (WDOH) to document cessation of radionuclide emitting activities from P-Vadose-002. NOC 785 will remain open under EU ID 486 only.

The following information is provided in this document:

- Date of closure
- Remaining material
- Assessment of potential continued emissions
- Future plans
- Emissions control and monitoring

1. Date of closure:

The P-Vadose-002 emission unit is no longer operationally needed and will not be used. The closure date is 06/08/2011.

2. Remaining material: The P-Vadose-002 was vendor equipment. Upon completion of the work scope, the vendor took their equipment.

3. Assessment of potential continued emissions:

- a. The unit is vendor owned and is not on site.
- b. The unit is vendor owned and is not on site.
- c. The unit is vendor owned and is not on site.
- d. The unit is vendor owned and is not on site.
- e. The P-Vadose-002 does not have a potential for continued emissions.

4. Future plans:

There are no plans to use the equipment.

5. Emissions control and monitoring:

Emissions control and monitoring is not required for the inactive and isolated P-Vadose-002. The unit is vendor owned and is no longer on site.

Based on this report of closure it is requested that emission unit P-Vadose-002 be removed from the Hanford Site Air Operating Permit (AOP Permit 00-05-006/ License Number FF-01).

SIGNATURES

| Reviewed by Contractor | Reviewed by RL/ORP | Approved by WDOH |
|------------------------|--------------------|------------------|
| <i>Aurinda Penn</i> | | |
| | | |
| Date: 8/31/11 | Date: | Date: |

Report of Closure/Permit Revision

NOTE: Any increase to abated or unabated PTE requires a full NOC modification

REASON FOR CHANGE

Submittal Date: 08/31/2011

NOC Application Revision

New NOC Rev Number: _____

Condition Change/ Clarification

WDOH Condition Number: _____

AOP Condition Number: See below

ALARACT Revision

New ALARACT Rev Number: _____

PROJECT IDENTIFICATION

Project Title: Report of closure for P-Vadose-003, Air Hammer Drilling

Current NOC Application Number: AOP Permit 00-05-006/ License Number FF-01

AEI ID Number (AOP Emission Unit Number(s): P-Vadose-003

Current WDOH Approval Letter Number(s): AIR 10-801

WDOH NOC ID Number: 541

DESCRIPTION OF CHANGE

Number of Attachments 0

Report of Closure for P-Vadose-003

Summary/Introduction

In accordance with Washington Administrative Code 246-247-080(6), this report of closure is being submitted to the State of Washington Department of Health (WDOH) to document cessation of radionuclide emitting activities from P-Vadose-003. NOC 785 will remain open under EU ID 486 only.

The following information is provided in this document:

- Date of closure
- Remaining material
- Assessment of potential continued emissions
- Future plans
- Emissions control and monitoring

1. Date of closure:

The P-Vadose-003 emission unit is no longer operationally needed and will not be used. The closure date is 06/08/2011.

2. Remaining material: The P-Vadose-003 was vendor equipment. Upon completion of the work scope, the vendor took their equipment.

3. Assessment of potential continued emissions:

- a. The unit is vendor owned and is not on site.
- b. The unit is vendor owned and is not on site.
- c. The unit is vendor owned and is not on site.
- d. The unit is vendor owned and is not on site.
- e. The P-Vadose-003 does not have a potential for continued emissions.

4. Future plans:

There are no plans to use the equipment.

5. Emissions control and monitoring:

Emissions control and monitoring is not required for the inactive and isolated P-Vadose-003. The unit is vendor owned and is no longer on site.

Based on this report of closure it is requested that emission unit/notice of construction approval P-Vadose-003 be removed from the Hanford Site Air Operating Permit (AOP Permit 00-05-006/ License Number FF-01).

SIGNATURES

| Reviewed by Contractor | Reviewed by RL/ORP | Approved by WDOH |
|------------------------|--------------------|------------------|
| <i>Aucinda Penn</i> | | |
| | | |
| Date: 8/31/11 | Date: | Date: |

Report of Closure/Permit Revision

NOTE: Any increase to abated or unabated PTE requires a full NOC modification

REASON FOR CHANGE

Submittal Date: 08/31/2011

NOC Application Revision

New NOC Rev Number: _____

Condition Change/ Clarification

WDOH Condition Number: _____

AOP Condition Number: See below

ALARACT Revision

New ALARACT Rev Number: _____

PROJECT IDENTIFICATION

Project Title: Report of closure for P-244CR-003, 244-CR Vault Passive Filter B

Current NOC Application Number: AOP Permit 00-05-006/ License Number FF-01

AEI ID Number (AOP Emission Unit Number(s)): P-244CR-003

Current WDOH Approval Letter Number(s): AIR 10-1103

WDOH NOC ID Number: 714

DESCRIPTION OF CHANGE

Number of Attachments 0

Report of Closure for P-244CR-003

Summary/Introduction

In accordance with Washington Administrative Code 246-247-080(6), this report of closure is being submitted to the State of Washington Department of Health (WDOH) to document cessation of radionuclide emitting activities from P-244CR-003.

The following information is provided in this document:

- Date of closure
- Remaining material
- Assessment of potential continued emissions
- Future plans
- Emissions control and monitoring

1. Date of closure:

The P-244CR-003, 244-CR Vault Passive Filter B has not been installed and there are no future plans to install the passive filter. The closure date is 06/08/2011.

2. Remaining material: The P-244CR-003, 244-CR Vault Passive Filter B has not been installed and there are no future plans to install the passive filter.

3. Assessment of potential continued emissions:

- a. The unit is not installed.
- b. The unit is not installed.
- c. The unit is not installed.
- d. The unit is not installed.
- e. The P-244CR-003, 244-CR Vault Passive Filter B does not have a potential for continued emissions.

4. Future plans:

There are no plans to install the passive filter.

5. Emissions control and monitoring:

Emissions control and monitoring is not required P-244CR-003, 244-CR Vault Passive Filter B as it has not been installed.

Based on this report of closure it is requested that emission unit/notice of construction approval P-244CR-003, 244-CR Vault Passive Filter B be removed from the Hanford Site Air Operating Permit (AOP Permit 00-05-006/ License Number FF-01).

SIGNATURES

| Reviewed by Contractor | Reviewed by RL/ORP | Approved by WDOH |
|------------------------|--------------------|------------------|
| <i>Aucinda Penn</i> | | |
| | | |
| | | |
| Date: 8/31/11 | Date: | Date: |