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

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




Date Cancelled _____ Date Disapproved _____

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Additional Information _____

Attachment for Ecology

1. Manifest A3229
2. PUREX Organic Solvent Loadout and Disposal WP-P-92-027
3. Chronological Order of Events August 17 to September 1, 1993
4. Memorandum from K. M. Wendt, WINCO, to M. B. Hinman, DOE-ID, dated August 31, 1993.
5. Steps taken to adhere to WAC 173-303-141.

Post-it[®] brand

Fax Transmittal Memo 7672



No. of Pages 1

Today's Date 8/30

Time 11:00

To Dave Favven

From MIKE ROMSOS

Company WHC

Company WHC

Location Puget

Location

Dept. Charge

Fax # 373-4539

Telephone #

Fax #

Telephone # 2-0510

Comments

Original Disposition: Destroy Return Call for pickup

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039 Expires 9-30-92

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. WA7890008967		Manifest Document No. A3229		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address DEPARTMENT OF ENERGY, RICHLAND OPERATIONS P.O. BOX 550, 2355 STEVENS DR., T3-04, RICHLAND, WA 99352		4. Generator's Phone (509) 372-0510(w)/967-2335(h) att: MR ROMSOS		5. Transporter 1 Company Name KINDRICK TRUCKING CO.		6. US EPA ID Number TN0987766078		7. State Manifest Document Number	
7. Transporter 2 Company Name NONE		8. US EPA ID Number		9. Designated Facility Name and Site Address WINCO, ATT: MS. JUDY BURTON P.O. BOX 4000-5230 IDAHO FALL, ID 83403		10. US EPA ID Number ID4890008952		8. State Generator's ID	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.	
a. RU Radioactive Material, low specific activity, n.o.s.; UN2912 (normal form, liquid, phosphate)		1. TT				K		W102	
b. (contains: Tri-butyl phosphate - 25% Normal paraffin hydrocarbon - 75%)									
c. RuRh 106, CePr 144, Cs 134, Cs 137, Ru 103, Co 60, Nb 95, and Zr 95)									
d.									
14. Additional Descriptions for Materials Listed Above This material is managed as a solid waste under Washington State Regulations (not RCRA). Total activity = 2.227E-01 Ci (excluding daughters with T 1/2 < 10 days). Reference: SDAR 16-9T-7YM-0301.						15. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information RETURN TO GENERATOR IF NOT DELIVERED, IN EMERGENCY CONTACT (509) 373-3800. TRUCK PLACARDED: "RADIOACTIVE" CARRIER POSSESSES DOT 1990 P5800.5 ERG HANDBOOK (driver initials)									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. On behalf of DOE-RO									
Printed/Typed Name					Signature				
Month Day Year					Month Day Year				

TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials		
	Printed/Typed Name	Signature	Month Day Year
FACILITY	18. Transporter 2 Acknowledgement of Receipt of Materials		
	Printed/Typed Name NONE	Signature NA	Month Day Year
	19. Discrepancy Indication Space		
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.			
Printed/Typed Name	Signature	Month Day Year 	

ORIGINAL-RETURN TO GENERATOR

PUREX Organic Solvent Loadout and Disposal

I. SYSTEM DESCRIPTION

At the conclusion of the PUREX Stabilization Campaign in April 1990, the tributyl phosphate (TBP) and normal paraffin hydrocarbon (NPH) organic solvent mixtures, which were utilized during normal plant operations, were stored in tanks TK-G5 and TK-R7. On December 21, 1992 DOE-HQ eliminated the PUREX operation as an option for processing N-Reactor fuel and instructed DOE-RL to proceed with shutdown planning and terminal cleanout activities of the PUREX facility (Reference 1). On January 11, 1993, the Richland Field Office approved termination of the PUREX Plant and directed Westinghouse Hanford Company (WHC) to proceed immediately with shutdown planning and execution of terminal cleanout activities (Reference 2). The removal of this slightly contaminated organic solvent from the facility has been identified as a required terminal cleanout activity.

The organic solvent will be removed from the facility and transferred to vendor-supplied tanker trucks for shipment to a licensed incinerator for destruction. This effort has been reviewed by PUREX Process Engineering, PUREX Systems Engineering, North Facilities Safety Assurance, Environmental Permits Section and Systems Safety Analysis and has been found to be covered under the existing Safety Analysis documentation for PUREX (References 3, 4, and 5). This effort does not deviate from routine operations within the scope of the PUREX Safety Analysis Report and no further safety analysis is required.

This work procedure describes the steps and methodology of identifying and preparing the transfer line, routing the organic solvent out of the facility, and loading the vendor supplied tanker trucks. In preparing the transfer line, valves will be locked and tagged closed and blanks and blind flanges strategically installed to assure a dedicated route. By utilizing a dedicated transfer route, the incidence of misroutings and leaks will be substantially reduced.

This work procedure is a one-time procedure for transferring all of the organic out of 202-A and flushing the associated systems. All changes to this work procedure shall be red-lined in accordance with GA-3.2, "Operating Procedures", with PUREX Process Engineering acting as the Operations Designate. All steps shall be initialled and dated in the space provided when each assignment is completed. Tasks in this procedure may be performed in any alternative order as specified by the cognizant engineer. If a task must be repeated, additional blue copies of this work plan will be required to prevent procedural errors.

II. SAFETY

A thorough review and evaluation of all applicable safety documentation has been completed. It was determined that the efforts outlined in this work procedure do not require additional safety analysis documentation, for the activities do not significantly increase the probability or consequences of accidents evaluated in existing safety analyses, do not create the possibility of a significant accident not previously evaluated by safety analyses, and do not decrease the margin of safety defined in the basis for any technical specification or operational safety requirement. Additionally, the loadout activities do not merit an Operational Safety Requirement per requirements of WHC-CM-4-46; handling of flammable organic solvents is currently controlled by the PUREX Process Control Manual (WHC-CM-5-24). The applicable sections of this manual are:

OSR Requirements

- Section 5.6.2 — Temperature control below the flashpoint of the solvent
- Section 5.6.5 — Use of pumps for organic solvent transfers, whenever practicable.
- Section 5.6.6 — Prohibits use of submersible jets for the transfer of solutions which may contain organic
- Section 5.6.7 — Agitator blades shall be submerged at least 6 inches below the liquid surface in vessels containing organic solvents, or the agitator shall be turned off.
- Section 5.6.12 — Monitoring and surveillance of sumps along the transfer route. Periodic inspections (nominally monthly) of pressurized organic headers.
- Section 5.6.13 — Prompt cleanup of all spills
- Section 5.6.14 — Solvent-extraction processing operations shall not commence unless the primary temperature measurement/control instruments and sump alarms listed in Tables I-5-1 and I-5-2 (see Appendix G), respectively are operating properly and acceptable alternates are operable.
- Section 5.6.15 — Instrument operability, as applicable to Tk-G5 and Tk-R7.

Sections 12.6.32, -.33, and -.34 -- Fire detection and protection systems in the canyon along the transfer route shall be operational and calibrated.

Verify location and operability of safety showers and eye washes stations prior to commencing any activities involving breaking of chemical transfer lines.

Verify valve lineups before each transfer to ensure against misroutings.

If an emergency occurs, immediately contact shift manager.

Keep a look out for leaks, spills, etc. when performing transfers. Ensure that you protect yourself in case a spill or leak is found. In case of spill or leak, immediately evacuate the area, and follow PO-020-290. Wear the proper personal protective equipment as specified by supervision or the appropriate Material Safety Data Sheets (MSDS).

CAUTION - If any rise of liquid level is indicated in any location other than receiving tank, immediately terminate the transfer and notify supervision.

Applicable Safety Documents - Provisions of WHC Radiological Control Manual, WHC-CM-1-6, and Industrial Safety Manual, WHC-CM-4-3, Vol-1, apply to all work performed under this procedure. Follow all Master and PUREX Safety Rules.

III. TOOLS AND EQUIPMENT

As Necessary:

Acid Suit

Air Hose (w/quick disconnects)

Blind flanges

Dixon Quick Couplers (hose to male pipe thread)

Face Shield and Safety Glasses or Goggles

Full-Face Respirator

Normal Paraffin Hydrocarbons (NPH)

MSDS #12648

Organic spill stabilization and recovery kits

PO-020-290

Rubber Gloves

Rubber Boots

Temporary pancake blanks

Temporary Fire Fighting equipment, as specified by Hanford Fire

Department, is available and ready for use.

Tributyl Phosphate (TBP)

MSDS #1739

Water Hose (w/quick disconnects)

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V. PRE-START ACTIVITIES

The transfer of the organic solvent from the 202-A building will utilize existing piping and specially installed canyon jumpers. All solvent will be moved through Tank Tk-G5. This will require isolation/removal of several valves in R-cell and the installation of a blank in the recycled organic solvent header (HDR #7501) where this line exits the sample gallery pipe trench near canyon penetration K-G102 in the sample gallery. This blank will ensure a dedicated route exists through the sample gallery from Tk-R7 to Tk-G5. The solvent will then be pumped out of Tk-G5, through a series of canyon jumpers to the 203-A pumphouse. An existing valve located in the 203-A pumphouse, P003-06 in the Tk-K6 to 203-A transfer line, will be removed and a new section of piping will be installed to route the solvent to the pumphouse door (see ECN #19002).

From this point, a flex hose will be used to load the material onto the vendor supplied tanker trucks. The installation and leak check of the route through the canyon cells and out to the 203-A building will assure a dedicated transfer line for this material. By utilizing a dedicated transfer route, the incidence of misroutings and leaks will be substantially reduced.

The pre-start activities have been divided into three sections, dependent upon their location. Completion of these activities are required to provide a dedicated transfer route from the organic solvent storage tanks Tk-G5 and Tk-R7 to the UNH tanker trailer loadout station. Once the entire route has been verified intact, a hydrostatic leak check will be performed to ascertain the integrity of the route. The canyon activities are detailed on Canyon Change Order (CCO-93-003). Installation of the blanks/blind flanges in the recycled organic header and the isolation/removal of valves, installation of the new section of piping, and the hydrostatic leak test will be performed per instructions in this work plan. Completion of all these activities will be verified in this work procedure for task continuity and pre-start confirmation.

A. CANYON ACTIVITIES

A canyon route has been determined (see Appendix E) which will allow the transfer of the organic out of Tk-G5 to wall nozzle K-G4, which is the canyon penetration for the Tk-K6 to 203-A building UNH transfer line (line number K148-3"-M9-P). This canyon route was chosen based upon its lack of previous use and ease of installation. The installation of the route will be performed per the instructions in the Canyon Change Order (CCO-93-003). For continuity and pre-start confirmation, verification of the route will be documented by this work procedure.

- DHP 1. Verify installation of jumper from gallery wall nozzle G-G80 to Tk-G5 nozzle H.
- DHP 2. Verify installation of flex jumper from pump P-G5-1 to the hot pipe trench wall nozzle G-T50. This jumper will be removed from nozzle G-T50 and a blank installed when the leak test is conducted in Section V.D, below. This verification should be performed following the satisfactory completion of the leak test.
- DHP 3. Verify installation of flex jumper from nozzle J-T58 to nozzle J-T55.
- DHP 4. Verify installation of flex jumper from nozzle K-T59 to nozzle K-T58.
- DHP 5. ~~Verify installation of flex jumper from nozzle K-T17 to nozzle K-T15.~~

(req'd jumper in place, leak check it)

R/O I.L.C

JDF DHP 5

8/10/93

(Hb)

DLF

6. Verify installation of flex jumper from nozzle K-T3 to nozzle K-G4. Nozzle K-G4 is the canyon penetration for the Tk-K6 to 203-A building UNH transfer line (line number K148).

DLF

7. Ensure pumps P-G5-1 and P-G5-2 have power on and breakers are unlocked (work package/CCO may be required).

DLF

8. OSR Requirement (LCO 5.6.15) - Verify the operability of TR-G5, and alternate (TK-G5 coil steam off) and TR-R7, and alternate (TK-R7 coil steam off) as defined in LCO 5.6.15, Table I-5-1.

DLF

9. OSR Requirement (LCO's 12.6.32, -.33, and -.34) - Ensure that the fire detection and protection systems in the canyon along the transfer route shall be operational and calibrated.

DLF

10. Verify that all instruments are calibrated and functioning.

B. SAMPLE GALLERY ACTIVITIES

The organic solvent currently in Tk-R7 will be batch transferred to Tk-G5 using the recycled organic header (Hdr #7501) A series of blanks will be installed and auxiliary lines isolated or removed in order to establish a dedicated route from Tk-R7 to Tk-G5. The following steps will be used both to guide and document the installation of the blanks and isolation/removal of the auxiliary lines and valves.

CAUTION: Care shall be exercised during the installation of the blanks and removal of the piping due to the potential for organic holdup in these lines. Prior to commencing these tasks, organic spill containment and recovery kits shall be prepared and ready for use at the work site to allow immediate response to any leakage or spill.

*** HPT HOLD POINT ***

A pre-job safety meeting shall be held before the start of this portion of the work plan. This meeting is to insure that all involved personnel receive adequate knowledge and instruction to perform this work plan safely, discuss hold points, radiological conditions and the RWP.

HPT initials/date *DLF* 8-9-93

(HP)

*** HPT HOLD POINT ***

Set dose and contamination levels prior to and upon opening lines in sample gallery.

HPT initials/date *DLF* 8-9-93

(HP)

DLF

1. Ensure a job specific RWP for sample gallery blanking has been prepared and attached to work package.



8/12/93 Impact Level 4

Blair Jensen R. P. 8/12/93

*** HPT HOLD POINT ***



SET DOSE AND CONTAMINATION LEVELS PRIOR TO AND UPON
OPENING LINES IN SHIP-PIE GALLERY

HPT INITIALS / DATE

SA 8-30-93 Per Survey Card # 134404

~~2. In the sample gallery, near wall penetration K-G102, remove the T-shaped spool piece between valves K-S11-07, K-S11-08, and 2" riser located near column 11 from the recycled header (see ECN #190024). Install isolation blind flanges. (Valves K-S11-07 and K-S11-08 are presently blanked permanently) *ECN 190024 is not applicable*~~

Adas 8/6/93 3. In the sample gallery, remove the piping and check valve between valves G-S22-09 and G-S22-10. Install two blind flanges in its place (see ECN #190023). This will isolate the fresh organic header (Hdr #7011) from the recycled organic header (Hdr #7510).

HP

Adas 8/6/93 4. Remove STANDBY BLANK AT G-G80. THIS BLANK SHALL BE SET ASIDE FOR REINSTALLATION AT completion of R-CELL ACTIVITIES *Robbin Duncan 8/9/93 Impact Level 4*

*** HPT HOLD POINT *** *the transfer 8/9/93 Robbin Duncan Impact Level 4*
 A pre-job safety meeting shall be held before the start of this portion of the work plan. This meeting is to insure that all involved personnel receive adequate knowledge and instruction to perform this work plan safely, discuss hold points, radiological conditions and the RWP.
 HPT initials/date EJ 8-8-93

HP

*** HPT HOLD POINT ***
 Set dose and contamination levels prior to and upon opening lines in R-Cell.
 HPT initials/date EJ 8-8-93

HP

- RPM* 1. Ensure a job specific RWP for R-Cell has been prepared and attached to the work package.
 * 1.A, SEE BELOW.
RPM 2. In R-cell, remove the following valves and install blind flanges as shown in Table 1 (see ECN #192785). The removal of these valves will provide a dedicated transfer line from Tk-R7 to the organic transfer pumps, P-R5-1 and P-R5-2.

TABLE 1. (VALVE REMOVAL)

REMOVE VALVES	FUNCTION	OPERATOR	VERIFIER
TK-R5-107	TK-R5 TO P-R5-1/P-R5-2	<i>RR</i>	<i>JDF</i>
TK-R5-109	TK-R5 TO P-R5-1/P-R5-2	<i>RR</i>	<i>JDF</i>
TK-R7-111	TK-R7 TO P-R5-3/P-R5-4	<i>RR</i>	<i>JDF</i>
TK-R7-113	TK-R7 TO P-R5-3/P-R5-4	<i>RR</i>	<i>JDF</i>

~~3. Ensure pumps P-R5-1 and P-R5-2 have power on and breakers are unlocked (work package may be required). I.L 4 8/17 JDF~~

~~4. Ensure pumps P-R5-1 and P-R5-2 are within operating specifications for pumping the organic solvent. Transfer organic to TK-G5 per Task A. "TRANSFER ORGANIC SOLVENT FROM R-CELL TO G-CELL" STEPS A.1, A.2, A.4, A.5, A.6 and A.7. amount to be specified by management. Telecon Approval R. DUNCAN 8/12/93 1520 hrs. C.H. 8/12/93~~
Open/close valves via Tables 2-A, 2-B, & 2-C accordingly 8/13 IL 4 JDF

* 1.A OPERATORS WILL DRAIN THE ORGANIC HEADER BY OPENING DRAIN VALVE R-R204-01. ORGANIC WILL BE CONTAINED IN A DOT 17-C 55 GALLON DRUM FOR LATER DISPOSAL.
 APPROVAL FOR THIS STEP OBTAINED PER TELECON WITH R.A. DUNCAN COY. 8-8-93. IMPACT LEVEL 4. S.W. HILBERTA

D. 203-A ACTIVITIES

The organic solvent will be transferred through the canyon in the route identified and verified in Section V.B, above. From wall penetration K-G4, the Tk-K6 to 203-A UNH transfer line (#K148-3"-M9-P) will be utilized to route the material to the 203-A area. In the 203-A pump house, a new line will be installed to simplify the valving requirements and reduce the potential for misroutings and leaks. This new line will be attached to the UNH transfer line by removing valve P003-06. The following steps will be used both to guide and document the removal of the valve, the installation of the blank and the routing of the new transfer line.

***** HPT HOLD POINT *****

HP

A pre-job safety meeting shall be held before the start of this portion of the work plan. This meeting is to insure that all involved personnel receive adequate knowledge and instruction to perform this work plan safely, discuss hold points, radiological conditions and the RWP.
HPT initials/date DS 8-10-93

***** HPT HOLD POINT *****

HP

Start record air sample prior to work.
HPT initials/date (D) 8/10/93 (Air Sample by Routine CAM)

***** HPT HOLD POINT *****

HP

Set dose and contamination levels prior to and upon opening lines when installing blanks & spool pieces and valve removal.
HPT initials/date DS 8-10-93

- DS 1. Ensure a job specific RWP for removal of valves & blank installation has been prepared and attached to the work package.
- DS 2. Remove valve P003-06 from transfer line K148-3"-M9-P in 203-A pumphouse.
- DS 3. Install a blind flange on the downstream (valve manifold) side to isolate the 203-A piping systems. This will completely isolate the organic solvent transfer route from the 203-A tanks and piping systems.
- DS 4. Install the new transfer route, attaching the flanged end to the upstream (202-A building) side of the open portion of transfer line #K148. Route this new line as specified in Engineering Change Notice (ECN) #100000 MOII DS 8/6/93 Impact Level 4.
- DS 5. Verify the air blow is available, attach it to the building air supply, but not the temporary transfer line valve, MV-203-03 Temp. This valve will be utilized to perform the hydrostatic leak test.

- DJP 6. Attach the flexible transfer line to the quick coupling located on the new section of piping downstream from the new isolation valve MV-203-02 Temp. (see ECN #190022). See also change ECN 190111 ~~DATE~~ 8-6-93
- DJP 7. Verify that the appropriate radiological control zones have been established to support the loading of the tanker trucks.
- DJP 8. Verify that the appropriate temporary fire fighting equipment is available and ready for use. call MFD
- DJP 9. Verify that the 203-A UNH loading station containment pad has been surveyed and decontaminated to the level that a vendor supplied truck will be easily released.

E. LEAK TEST OF TRANSFER ROUTE

A hydrostatic leak test will be performed utilizing raw water connection in the 203-A pumphouse. The transfer line will be filled with water back into G-cell, bleeding air out of the line through nozzle G-T50. Once the leak test is completed, the water will remain in the line and ~~will be loaded into the vendor tanker trailer for disposal,~~ will be air blown from 203-A back to G-Cell floor. I.L. 4 8/10 JDF 8/15/93

Note: During performance of this leak test, continuous communication shall be maintained between the dispatcher, the crane operator and the nuclear operator at 203-A.

- DJP 1. Remove the flex jumper from pipe trench wall penetration G-T50 and install a blank in its place, Do Not Tighten.
- XH 2. ~~Install back flow preventer onto air blow connection (valve MV-203-03 Temp.) of new loadout line in 203-A pumphouse.~~ I.L. 4 8/10 JDF 8/15/93
- DJP 3. Connect raw water hose to the ~~backflow preventer.~~ quick disconnect at the MV-203-03 Temp valve I.L. 4 8/10 JDF 8/15/93
- DJP 4. Establish communications between the dispatcher, the crane operator and the nuclear operator at 203-A. These communications shall be maintained for the duration of the leak test.
- DJP 5. Verify that isolation valve MV-203-02 Temp. is closed.
- DJP 6. Verify that isolation valve MV-203-01 Temp. and air blow valve MV-203-03 Temp. are open.
- DJP 7. Open the raw water supply valve at 203-A.
- DJP 8. Crane operator will be stationed above nozzle G-T50, and will monitor this nozzle for liquid. When the air in the line is displaced tighten the blank and notify the Shift Manager.

DJP 9. Crane operator will begin to inspect the canyon route for possible leaks. In the event a leak is found, immediately notify supervision. When complete, notify 203-A operator to shut off water.

DJP 10. Nuclear operator at 203-A shall shut off the raw water, close isolation valve MV-203-01 Temp. and air blow valve MV-203-03 Temp.

DJP 11. Remove the raw water hose and back flow preventer. ^{I.L. 4} _{26 JDF} DJP 8/16/93

NA 12. ~~Crane operator will remove the blank from wall nozzle G-T50 and will reestablish the flex jumper. Replacement of this flex jumper shall also be verified in Section V. A., Step 2, above.~~

See Redline on following page. ^{8/10} _{JDF} ^{I.L. 4} DJP 8/16/93

F. VERIFY THAT ALL PRESTART ACTIVITIES COMPLETED

The Shift Manager shall verify that all prestart activities required to allow the transfer of the organic solvent from the 202-A building to the vendor supplied tanker trucks have been completed and documented in this work procedure and the appropriate supporting documents.

[Signature]
Shift Manager

8/17/93
Date

VI. TRANSFER THE ORGANIC SOLVENT OUT OF THE 202-A BUILDING

The organic solvent will be transferred in batches out of tank Tk-G5 into vendor supplied tanker trucks staged in the 203-A UNH loading station containment pad. Pump P-G5- will be utilized to accomplish this transfer, for it has the longest suction leg of the three pumps positioned in tank Tk-G5. Continuous communications must be established and maintained between the operators at 203-A and the Central Control Room (CCR) operator.

The activities of this section have been divided into two phases, depending upon the transfer being accomplished. Since all transfers to 203-A will originate from Tk-G5, it will be necessary to periodically transfer solution from R-cell into Tk-G5. Thus, prior to commencing any tanker loading activities, the desired transfer volume shall be determined and the volume in Tk-G5 verified to exceed this amount. If the desired volume is not in Tk-G5, proceed to Section VI.A.; if Tk-G5 volume exceeds the desired transfer volume, proceed to Section VI.B.

*** HPT HOLD POINT ***

Ensure a job specific RWP for actual transfer activities has been prepared and attached to the work package.

HPT initials/date [Signature] 8-17-93



8/10 I.L. 4
DF JCP
8/16/93

REDLINE

E. LEAK TEST OF TRANSFER ROUTE

- JCP 12. To air blow the line, ensure that the air line is attached to the quick coupler located near the MV-203-03 Temp. valve. Ensure the isolation valve MV-203-02 Temp. is closed.
- JCP 13. Remove the blank from wall nozzle G-T50.
- JCP 14. Request the crane operator to remain positioned above this open nozzle.
- JCP 15. Open the air blow valve MV-203-03 Temp. and the isolation valve MV-203-01 Temp. Air blow the transfer line back into the 202-A building until the crane operator indicates that no solution is existing in the open nozzle.
- JCP 16. Close the air blow valve MV-203-03 Temp. and the isolation valve MV-203-01 Temp.
- JCP 17. Reestablish the flex jumper to pipe trench wall penetration G-T50. Replacement of this flex jumper shall also be verified in Section V. A., Step 2, above.

(11)

*** HPT HOLD POINT ***



SET DOSE AND CONTAMINATION LEVELS PRIOR TO AND UPON OPENING LINES IN SAMPLE GALLERY.

HPT INITIALS/DATE SPC 8.23.93

8/17/93 IMPACT LEVEL 4

Robert Juncos SPC 8/17/93

A. TRANSFER ORGANIC SOLVENT FROM R-CELL TO G-CELL

NOTES: During performance of the organic solvent transfer, continuous communication shall be maintained between the dispatcher, the central control room (CCR) operator and the nuclear operator(s) in R-cell.

OSR Requirement (LCO 5.6.7) - Agitator blades shall be submerged at least 6 inches below the liquid surface in vessels containing organic solvents, or the agitator shall be turned off.

OSR Requirement (LCO 5.6.14) - Solvent-extraction processing operations shall not commence unless the primary temperature measurement/control instruments and sump alarms listed in Tables I-5-1 and I-5-2 (see Appendix G), respectively are operating properly and acceptable alternates are operable.

OSR Requirement (LCO 5.6.15) - Verify the operability of TR-G5 and TR-R7, as defined in LCO 5.6.15, Table I-5-1.

DAF 8/17/93
1. Need a job specific RWP for R-Cell.

2. The Shift Manager with a concurring Engineer shall determine the amount of organic to be transferred from Tk-R7 to Tk-G5. This amount shall be communicated to both the CCR operator and the R-cell operator(s).

Initial tank volumes:	Tk-G5	<u>7521</u> 8556	gallons
	Tk-R7	<u>8556</u>	gallons (A)

Note: Tank Tk-G5 will overflow at 14500 gallons, or a weight factor of approximately 66 for the organic solvent solution. ~~When transferring organic from Tk-R7 to Tk-G5, Do not exceed a final volume in Tk-G5 of 10100 gallons (46 WF), the 70% volume capacity limit. Do not overflow tank.~~

Projected tank volumes:	Tk-G5	<u>11700</u>	gallons
	Tk-R7	<u>5100</u>	gallons (B)

Tk-R7 initial volume(A) - Tk-R7 projected volume(B) = Amount Transferred

8556 Gallons(A) - 5100 Gallons(B) = 3456 Gallons

*** ~~NOT~~ HOLD POINT (see above)

HP

DAF 8/17/93
A. Remove Blank at G-522-09 *ILY 8/12 JDF DAF 8/17/93*
B. Ensure Pump P-R5-1 ~~and P-R5-2~~ has power on and breaker are unlocked (work package may be required). *ILY 8/12 JDF DAF*

DAF 8/17/93
B. Ensure pumps P-R5-1 are within operating specifications for pumping the organic solvent *ILY 8/12 JDF DAF*

WAP 3. Close the following valves in Table 2-A accordingly:

TABLE 2-A. (Close Valves for TK-R7 to TK-G5 Transfer)

CLOSE VALVES	FUNCTION	OPERATOR	VERIFIER
DOV-R7-7	P-R5-1 TO TK-R1	<i>ARA</i>	<i>JA</i>
G-S22-G01	BLANK VALVE	<i>JA</i>	<i>JA</i>
<i>X</i> G-S22-G03	P-R5-1 TO TK-G5	<i>JA</i>	<i>JA</i>
G-S22-G04	BLANK	<i>JA</i>	<i>JA</i>
G-S22-G05	BLANK	<i>JA</i>	<i>JA</i>
G-S22-G06	P-R5-1 TO DM	<i>JA</i>	<i>JA</i>
G-S22-G08	BLANK	<i>JA</i>	<i>JA</i>
G-S22-G10	BLANK	<i>JA</i>	<i>JA</i>
R-R204-01	BLANK	<i>ARA</i>	<i>JA</i>
<i>8/13 114</i> <i>306</i> <i>WAP</i> <i>X</i> R-R204-02	P-R5-1 TO PAS-R5-1	<i>ARA</i>	<i>JA</i>
R-R204-03	TK-R7 TO P-R5-2	<i>ARA</i>	<i>JA</i>
<i>X</i> R-R204-07	P-R5-2 TO TK-G5	<i>ARA</i>	<i>JA</i>
R-R204-08	BLANK	<i>ARA</i>	<i>JA</i>
R-R204-09	P-R5-2 TO DRAIN	<i>ARA</i>	<i>JA</i>
R-R204-10	BLANK	<i>ARA</i>	<i>JA</i>
R-R243-04	P-R5-1 TO TK-R1	<i>JA</i>	<i>JA</i>
TK-R5-108	TK-R5 TO P-R5-1	<i>JA</i>	<i>JA</i>
TK-R5-109	TK-R5 TO P-R5-1	<i>JA</i>	<i>JA</i>
TK-R7-108	TK-R7 TO DOV-R7-2	<i>JA</i>	<i>JA</i>
TK-R7-109	DOV-R7-2 TO P-R5-1	<i>JA</i>	<i>JA</i>

DAF

4. Open the following valves in Table 2-B accordingly:

TABLE 2-B. (Open Valves for TK-R7 to TK-G5 Transfer)

OPEN VALVES	FUNCTION	OPERATOR	VERIFIER
G-S22-G02	P-R5-1 TO TK-G5	<i>JA</i>	<i>gd</i>
G-S22-G07	P-R5-1 TO TK-G5	<i>JA</i>	<i>gd</i>
G-S22-G09	P-R5-1 TO TK-G5	<i>JA</i>	<i>gd</i>
R-R204-02 R-R204-04	TK-R7 TO P-R5-1	<i>JA</i>	<i>JA</i>
R-R204-06	P-R5-1 TO TK-G5	<i>JA</i>	<i>JA</i>
TK-R7-101	TK-R7 TO P-R5-1	<i>JA</i>	<i>gd</i>
TK-R7-102	TK-R7 TO P-R5-1	<i>JA</i>	<i>gd</i>
TK-R7-110	TK-R7 TO P-R5-1	<i>JA</i>	<i>gd</i>

*3/13 JLV
JDF
etc*

*90° to pipe
is open
parallel is
closed*

DAF

5. Establish communication between nuclear operator in R-cell and the Central Control Room (CCR) operator.

DAF

6. CCR operator start the R-cell pump (P-R5-1).

DAF

7. Monitor the tank levels and when the correct volume has been transferred stop the pump.

*3/13 JLV
JDF
etc*

NA

4a. Step needed only if P-R5-2 is being used instead of P-R5-1

Table 2-B (cont)

Open following valves accordingly for TK-R7 to TK-G5 Transfer

Open valves	Function	Operator	Verifier
R-R204-03	TK-R7 to P-R5-2	<u>NA</u>	<u>NA</u>
R-204-07	P-R5-2 to TK-G5	<u>NA</u>	<u>NA</u>
Close valves	Function	Operator	Verifier
R-204-02	TK-R7 to P-R5-1	<u>NA</u>	<u>NA</u>
E-204-06	P-R5-1 to TK-G5	<u>NA</u>	<u>NA</u>

- DK 1. Verify that the flexible transfer line is properly attached to valve MV-203-02 Temp. on the new section of hard piped transfer line.
- DK 2. Verify that the vendor has attached the disbursement end to the tanker trailer and has performed all tanker trailer loading prestart requirements.
- DK 3. Establish continuous communications with the dispatcher and the central control room (CCR) operator.
- DK 4. Verify that the MV-203-03 Temp. valve is closed, the transfer line air blow valve.
- DWP 5. Open transfer line valves MV-203-01 Temp. and MV-203-02 Temp., the organic solvent transfer line isolation valves.

DWP 6. Request CCR operator to record the pre-transfer Tk-G5 weight factor (WF) and volume. Request CCR operator to start pump P-G5-1.

<p>Tk-G5 Pre-Transfer Weight Factor <u>51.5</u></p> <p>• INSTALL WPAS-65-4 BYPASS TO ALLOW ORGANIC SOLVENT TO BE TRANSPORTED IMPACT LEVEL 4 8/17/93 JDF</p>	<p>• INSTALL WPAS P-G5-1 BYPASS (WFA) TO ALLOW SOLVENT TO BE TRANSPORTED 8/17/93 JDF</p>
<p>Volume <u>11700</u> gallons</p>	<p>gallons</p>

NOTE: For the first transfer of organic out of Tk-G5, the crane operator shall verify the integrity of all canyon cell connections. Following the first transfer, this inspection will be performed at the discretion of the Shift Manager.

- DWP 7. Verify that the crane operator has completed inspection of the canyon transfer route. (This step is only required for the first transfer of organic, unless requested by supervision.)

WARNING: The vendor must be aware that line holdup will be air blown into their tanker. This volume is approximately _____ gallons.

- DWP 8. When the vendor indicates that the tanker trailer has been loaded, notify CCR operator to stop pump P-G5-1. Request CCR operator to record the post-transfer Tk-G5 weight factor (WF) and volume.

Tk-G5 Post-Transfer Weight Factor 33 @ .785 spg

Volume 7430 gallons

- DWP 9. Close organic solvent transfer line isolation valve MV-203-01 Temp.
- DWP 10. Verify that facility air line has been attached to the Quick-coupler of MV-203-03 Temp.. Open MV-203-03 Temp. to air blow the organic solvent out of the flexible transfer line into the vendor's tanker trailer.

EJK 5a. While loading the truck get a representative air sample of the off gas from the ^{truck} vent using a high volume air sampler. The sample data radioactivity needed is gross alpha and gross beta per unit volume of air (cc or ml).
 8/13 IL4 Needed for 12th shipment only.
 JDF DK 8/17/93 JW 8-13-93

DJP 11. After the line has air blown for 1 minute, shut off air, close the air blow supply valve MV-203-03 Temp., and then close organic transfer line isolation valve MV-203-02 Temp.

DJP 12. Request vendor to estimate the total number of gallons loaded onto his trailer. Record the estimate below.

Estimated amount of organic loaded onto vendor's trailer:

3500 gallons

DJP 13. Support the vendor in disconnecting the flexible transfer line from the tanker trailer.

DJP 14. Request HPT to survey and release the vendor's tractor and trailer. Decontaminate vendor's tractor and trailer if needed.

~~While loading the truck, get a representative air sample of the off gas from the truck vent using a high volume air sampler. The sample data radioactivity needed is, gross alpha and gross beta per unit volume of air. (see sheet). 8/13 I.L.Y. JDF DJP 8/13/93~~

VII. FLUSH AND ISOLATE THE TRANSFER ROUTE

Once all the organic solvent has been removed from the facility, the entire transfer route, including storage tanks Tk-G5 and Tk-R7, will be flushed with a water/surfactant mixture from Tk-R1A. This flush will be transferred into the vendor's tanker trailers and removed from the site for incineration. When all the flush solution has been removed from the facility (which may require one or more trailers), the transfer route will be air blown back into the 202-A building and the dedicated transfer route will be dismantled and removed.

Flushing this system is broken into four major steps; addition of the flush solution to Tk-R7, transfer of the flush solution from Tk-R7 to Tk-G5, transfer of the flush solution from Tk-G5 into the vendor-supplied tanker trailers, and the air blow of the transfer line from 203-A back into the 202-A building.

A. TRANSFER R1A FLUSH SOLUTION TO TANK R7

NOTE: Flush solution composition will be determined by the Cognizant Engineer.

- 1. Makeup approximately 1000 gallons of flush solution in Tk-R1A.
- 2. Record initial tank volumes.

Initial tank volumes: Tk-R1A _____ gallons
Tk-R7 _____ gallons

DJP 15. After loading the truck, get 2 - 1 ounce samples of the organic solution in the truck. Needed for 1st shipment only.

8/13 I.L.Y. DJP 8/13/93
JDF

8/13 I.L.Y. JDF DJP

~~15. Verify the hose is correctly attached to the tanker trailer.~~

9/30/93
15. Verify spare hose has the proper camlocks connected
and is ready for use, for the organic load out from trailer

I.L. 4
9/30 JSC
DSC

3. Close the following valves in Table 3-A accordingly:

TABLE 3-A. (Close Valves prior to Flushing TK-R7 with TK-R1A solution)

CLOSE VALVES	FUNCTION	OPERATOR	VERIFIER
DOV-R1-5	FLTR TO TK-R1		
R16-01	FLTR TO TK-R5		
R16-04	FLTR TO TK-R5		
R7011-01	FLTR TO G-5		
TK-R1A-12	TK-R1A TO ?		
TK-R1A-14	BLANK		
TK-R1A-16	FLTR TO DOV-R1A-1		
TK-R1A-17	BLANK		

4. Transfer approximately 1000 gallons of flush solution to Tk-R7 by opening the following valves in Table 3-B accordingly:

TABLE 3-B. (Open Valves prior to Flushing TK-R7 with TK-R1A solution)

OPEN VALVES	FUNCTION	OPERATOR	VERIFIER
R14-01	FM TO TK-R7		
R16-02	FM TO TK-R7		
R16-03	FLTR TO FM		
TK-R1A-13	TK-R1A TO FLTR		
TK-R1A-15	FLTR TO FM		

6. Close the following valves in Table 3-C accordingly:

TABLE 3-C.
(Close Valves upon completion of Flushing TK-R7 with TK-R1A solution)

CLOSE VALVES	FUNCTION	OPERATOR	VERIFIER
R14-01	FM TO TK-R7		
R16-02	FM TO TK-R7		
R16-03	FLTR TO FM		
TK-R1A-13	TK-R1A TO FLTR		
TK-R1A-15	FLTR TO FM		

7. Record Final Tank Volumes (Wait at least 5 minutes after pump has been stopped to record volumes so that tanks have reached equilibrium).

Tk-R1A _____ gallons
 Tk-R7 _____ gallons

B. TRANSFER R7 FLUSH SOLUTION TO TANK G5

1. Record initial tank volumes.

Initial tank volumes: Tk-R7 _____ gallons
 Tk-G5 _____ gallons

2. Contact with CCR operator. Open valves to allow the transfer of the flush from Tk-R7 to Tk-G5.

3. Open the following valves in Table 2-A accordingly:

TABLE 4-A. (Open Valves for TK-R7 to TK-G5 Transfer)

OPEN VALVES	FUNCTION	OPERATOR	VERIFIER
G-S22-G02	P-R5-1 TO TK-G5		
G-S22-G07	P-R5-1 TO TK-G5		
G-S22-G09	P-R5-1 TO TK-G5		
R-R204-02 R-R204-04	TK-R7 TO P-R5-1		
R-R204-06	P-R5-1 TO TK-G5		
TK-R7-101	TK-R7 TO P-R5-1		
TK-R7-102	TK-R7 TO P-R5-1		
TK-R7-110	TK-R7 TO P-R5-1		

8/13 SL4
SDF

8/13 SL4
SDF
DAP

3a. Stop needed only if P-R5-2 is being used instead of P-R5-1

Table 4-A (cont)

Open following valves accordingly for TK-R7 to TK-G5 transfer

<u>Open valves</u>	<u>Function</u>	<u>Operator</u>	<u>Verifier</u>
R-R204-03	TK-R7 to P-R5-2	_____	_____
R-R204-07	P-R5-2 to TK-G5	_____	_____

<u>Close Valves</u>	<u>Function</u>		
R-204-02	TK-R7 to P-R5-1	_____	_____
R-204-06	P-R5-1 to TK-G5	_____	_____

4. Close the following valves in Table 4-B accordingly:

TABLE 4-B. (Close Valves for TK-R7 to TK-G5 Transfer)

CLOSE VALVES	FUNCTION	OPERATOR	VERIFIER
DOV-R7-7	P-R5-1 TO TK-R1		
G-S22-G01	BLANK VALVE		
G-S22-G03	P-R5-1 TO TK-G5		
G-S22-G04	DM TO ?		
G-S22-G05	BLANK		
G-S22-G06	P-R5-1 TO DM		
G-S22-G08	BLANK		
G-S22-G10	BLANK		
R-R204-01	BLANK		
R-R204-02			
R-R204-02	P-R5-1 TO PAS-R5-1		
R-R204-03	TK-R7 TO P-R5-2		
R-R204-07	P-R5-2 TO TK-G5		
R-R204-08	BLANK		
R-R204-09	P-R5-2 TO DRAIN		
R-R204-10	BLANK		
R-R243-04	P-R5-1 TO TK-R1		
TK-R5-108	TK-R5 TO P-R5-1		
TK-R5-109	TK-R5 TO P-R5-1		
TK-R7-108	TK-R7 TO DOV-R7-2		
TK-R7-109	DOV-R7-2 TO P-R5-1		

8/13 JLY
JDF
DGP

5. Establish communication

6. CCR operator start the R-cell pump (P-R5-1), monitor the tank levels and when the correct volume has been transferred stop the pump.

- _____ 6. Request CCR operator to record the pre-transfer Tk-G5 weight factor (WF) and volume. Request CCR operator to start pump P-G5-__.

Tk-G5 Pre-Transfer Weight Factor _____

Volume _____ gallons

- _____ 7. Verify that the crane operator has completed inspection of the canyon transfer route. (This step is only required for the first transfer of organic, unless requested by supervision.)

- _____ 8. When the vendor specifies that the tanker trailer has been loaded, notify the CCR operator to stop pump P-G5-__. Request CCR operator to record the post-transfer Tk-G5 weight factor (WF) and volume.

Tk-G5 Post-Transfer Weight Factor _____

Volume _____ gallons

- _____ 9. Close organic solvent transfer line isolation valve MV-203-01 Temp.

D. AIR BLOW 203-A TRANSFER LINE.

- _____ 1. Verify that facility air line has been attached to the Quick-coupler of Mv-203-03 Temp. Open MV-203-03 Temp. to air blow the flush solution out of the flexible transfer line into the vendor's tanker trailer.

- _____ 2. After the line has air blown for 1 minute, close the air blow supply valve MV-203-03 Temp., and then close organic transfer line isolation valve MV-203-02 Temp.

- _____ 3. Request vendor to estimate the total number of gallons loaded onto this trailer. Record the estimate below.

Estimated amount of solution loaded onto vendor's trailer:

_____ gallons

- _____ 4. Support the vendor in disconnecting the flexible transfer line from the tanker trailer.

- _____ 5. Request HPT to survey and release the vendor's tractor and trailer.

NOTE: Establish constant communications between the 203-A operator, the crane operator, CCR operator, and the dispatcher.

*** HOT HOLD POINT ***

(HP) SET DOSE AND CONTAMINATION LEVELS prior TO AND upon opening lines in sample gallery.

HOT INITIALS/DATE

IMPACT LEVEL 4 8/18/93

Bob Jensen

Bob 8/18/93

- 8. To air blow the line, ensure that the air line is attached to the quick coupler for MV-203-03 Temp. Ensure the isolation valve Mv-203-02 Temp is closed.
- 9. Request the crane operator to loosen and remove the head of the flex jumper attached to hot pipe trench wall nozzle G-T50. Request that he remain positioned above this open nozzle.
- 10. Open the air blow valve MV-203-03 Temp and air blow the transfer line back into the 202-A building until the crane operator indicates that no solution is existing in the open nozzle.
- 11. Close the air blow valve and the transfer line.
- 12. The system, as defined by the OSR Compliance Surveillance, shall be returned to its previous condition (see Table 5) after all of the organic has been transferred.

Table 5. (Standby conditions and controls data)

TITLE/DESCRIPTION	CONTROL	VERIFIED Y / N	OPERATOR INITIALS
Pump G5-1	Power off and breaker Locked. MCC-13		
Pump G5-2	Power off and breaker Locked. MCC-14		
Pump R5-1	Power off and breaker Locked. MCC-3		
Pump R5-2	Power off and breaker Locked. MCC-3		

*** ~~NOT HOLD POINT~~ *** SEE ABOVE

- REINSTALL STANDBY BLANK AT G-680

HP

Pool - Duncan 8/9/93. IMPACT LEVEL 33
R.P. Rutledge 8/9/93 *W.P.* 8/7/93

- Remove WFAS G5-1 BYPASS (WFAS G5-5) *Pool - Duncan* 8/17/93. IMPACT LEVEL 4
P.H. M... 8/17/93

- Remove WFAS G5-4 BYPASS *Pool - Duncan* IMPACT LEVEL 4 8/17/93
B. Brennan

VIII. REFERENCES

- 1) Memorandum, W. W. Bixby, EM-60, to J. D. Wagoner, RL, "Termination of the Plutonium Uranium Extraction (PUREX) Plant and Guidance to Proceed with Shutdown Planning and Terminal Cleanout Activities," dated December 21, 1992.
- 2) Letter, J. R. Hunter, RL, to T. M. Anderson, WHC, "Termination of the Plutonium-Uranium Extraction (PUREX) Plant and Guidance to Proceed with Shutdown Planning and Terminal Cleanout Activities," LT #9300055B, dated January 11, 1993.
- 3) Memorandum, K. R. Welsch, NEPA Documentation, to I. G. Papp, "NEPA Review of TBP and NPH Disposal," dated February 14, 1992.
- 4) Internal Memo, Judith M. Siemer, Systems Safety Analysis, to I. G. Papp, "Disposal of Used Purex Organic Solvent," IM #29230-92-003, dated February 11, 1992.
- 5) Internal Memo, R. W. Oldham, Environmental Permits Section, to I. G. Papp, "Disposal of Purex Organic Mixture," IM #81173-92-016, dated February 7, 1992.

CHRONOLOGICAL ORDER OF EVENTS

The following is the chronological order of events, to the best of our knowledge, for the activities being coordinated with WINCO for the shipment of the PUREX organic solvent.

- Aug 17 Loaded tanker trailer with PUREX organic. Through a miscommunication with WINCO, the truck was not able to immediately leave WHC. WHC misunderstood WINCO over their ability to accept the trailer once it was loaded, we had received a schedule and verbal confirmation from an individual in the WINCO Applied Technology Department, but found out after the truck was loaded that only the Calciner Operations Manager could approve the actual shipment and receipt of the organic. This individual had not approved the schedules we had been provided.

Although we could not immediately release the truck to Idaho, the loading of the truck had provided required emissions information requested by the State of Washington, which will allow us to load subsequent trailers.

- Aug 23 An individual in WINCO's Environment, Safety and Health Department expresses three concerns over the shipment and receipt of the organic. Judy Burton, Calciner Operations Manager, states that these concerns are all that prevents WINCO from approving the shipment of the organic. WHC provided them with sample results and letters based upon process knowledge to eliminate these concerns. This task was completed on Aug 30.
- Aug 30 WHC provided all the information to WINCO to allow to approve the release of the truck. WINCO began their review of the information.
- Aug 31 WINCO provide final comments on the information provided by WHC. WHC prepared final documentation and faxed to WINCO.

Mid morning, Allison Crowell contacted us and requested that we have WINCO send us a letter stating that the shipment of the organic to Idaho has been coordinated with them and they agree to accept it upon receipt. She stated that either herself or Rudy Garcia would review this letter and would then give their approval to release the truck from Hanford. She stated that we were not to allow the truck to leave without their approval. Contacted WINCO and asked them to prepare a letter stating that WHC and WINCO had coordinated the shipment and that WINCO was approving the release of the truck.

Shortly after lunch, she called back and said she was leaving for the day and we were still required to fax them the letter but if needed, we could ship without their approval. Prior to this conversation with Allison, both WHC and WINCO had agreed that just a verbal confirmation to ship the organic would be provided.

Sept 1 WINCO informed us that DOE-ID now required the preparation of a letter to the State of Idaho describing this project. On the week of Aug 16 DOE-ID had contacted the State and had received verbal approval for the receipt of the organic by WINCO and the use of this material as a fuel for the Calciner.



Idaho National Engineering Laboratory

Post-It™ brand fax transmittal memo 7671		P. 1	
# of pages > /			
To	Shayne Orndahl	From	Kraig Wendt
Co.	WTC	Co.	WINCO
Dept.		Phone #	208-526-3860
Fax #	509-33-4539	Fax #	-3499

MEMORANDUM

To: M. B. Hirman, DOE-ID
 From: K. M. Wendt, WINCO
 Date: August 31, 1993
 Subject: Agreement by DOE-ID and the Idaho Department of Health and Welfare for Receiving Organic Solvent from the Hanford Reservation as Fuel for the Idaho Chemical Processing Plant (ICPP) Calciner

Westinghouse Hanford Company (WHC) has approximately 20,000 gallons of organic solvent available for shipment to the ICPP for use as fuel in the calciner. The organic solvent, used in their uranium extraction process, is roughly 23% tri-butyl phosphate (TBP) with the residual being normal-paraffin-hydrocarbon (NPH) (straight chain carbon molecules of 10 to 16 carbon atoms). The solvent is listed as a hazardous waste by the State of Washington solely based on the TBP concentration. However, the TBP does not render the solvent a hazardous waste for the State of Idaho or the Environmental Protection Agency (EPA). WHC will certify that this solvent is not hazardous under Idaho State and EPA regulations. Recognize also that this solvent is slightly contaminated with radionuclides. This solvent is very similar to the ICPP First Cycle Extraction contaminated solvent burned as fuel in the calciner; the calciner is permitted for using this solvent as fuel. This memorandum is to document these facts along with documenting that George E. Dials of DOE-ID and Dave Humphrey of the State of Idaho agree that the organic from Hanford can be received at the ICPP for use as calciner fuel. These individuals made this agreement via telephone during the week of August 16, 1993 and was confirmed as being performed by M. B. Hirman.

Sincerely,

Kraig M. Wendt

Kraig M. Wendt, Sr. Engineer
WINCO



ADHERENCE TO WAC 173-303-141

Upon looking at the requirements to adhere with WAC 173-303-141 the following steps were taken and show compliance.

- A) WINCO will legitimately treat the material by using it as fuel in their calciner.
- B) Westinghouse Hanford Company (WHC) has on file a copy of a letter signed by Westinghouse Idaho Nuclear Company (WINCO) stating that DOE-ID and the State of Idaho agree that the WINCO may accept the waste.
- C) WHC is using a truck with a valid EPA/state identification number. The number is on the manifest and is:
Kendrick Trucking
ID # TND987766078
- D) WHC is in compliance with other applicable requirements such as including the manifest and labeling the truck with an EPA label and a toxicity label.
- E) WHC will receive from WINCO a signed and dated copy of the manifest and straight bill of lading as the shipping record.