START

0033953

8

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

7601 W. Clearwater, Suite 102 • Kennewick, Washington 99336 • (509) 546-2990

July 27, 1992

Mr. Bill Hedgebeth
U.S. Environmental Protection Agency
1200 Sixth Avenue MSIN AT-083
Seattle, WA 98101

Dear Mr. Hedgebeth:

Re: PCB Containers at 305-B Storage Facility

Two items containing polychlorinated biphenyls (PCBs) are located in a radioactive mixed waste storage area within the Department of Energy's 305-B Storage Facility at Hanford. Pacific Northwest Laboratories (PNL) is the facility operator. Ecology became aware of these items during an inspection in support of PNL's Part B permit application.

One item is an 8-gallon drum containing capacitor oil. The other is a pre-1980 Peabody Barnes submersible pump wrapped in plastic. Records for the drum and pump are enclosed.

The 305-B Storage Facility also stores nonradioactive PCBs.

Mr. Glenn Thornton, PNL, is the Operations Supervisor and point-of-contact for the 305-B Storage Facility. His phone number is (509) 376-7688.

Thank you for your help and assistance, Bill. If you have any questions, please call me on (509) 546-2977.

Sincerely,

Laura Russell

Laura Russell
RCRA Compliance Inspector
Nuclear & Mixed Waste Management Program
Kennewick Office

LR:mf
Enclosure

cc: K.B. Selby, PNL
G.T. Thornton, PNL
D. Nylander, Ecology
G.T. Tebb, Ecology
G. D. Davis, Ecology
S. V. Moore, Ecology
S. McKinney, Ecology

FEB 1994
RECEIVED
EDMC

9413137.1813

9413137.1814

Battelle
Pacific Northwest Laboratories

CHEMICAL DISPOSAL/RECYCLE REQUEST

Send Completed Form To:

Nonradioactive Materials: ~~K. A. Poston, 376-3752~~ P7-68 GLENN THORNTON

Radioactive Materials: ~~M. W. McCoy, 376-1483~~ P7-68 KEVIN SELBY

This material was generated by: ☒ 1830 ☐ 1831 Programs

Generator Logbook Number 90R40

Requested by:	Telephone No.	Address	Organization Code	Date
E. L. Hilty	373-3214	K6-77 or K6-96	D7081	7/13/90

Location of Waste: 6220 Fenced + Locked Storage Area

DETAILED MATERIAL DESCRIPTION (CONTINUE ON BACK OF FORM)

Item No.	Number of Containers (a)	Container Size	Material Quantity (KG)	Container Type	Material Description or Trade Name (b)	Chemical Component (b)	Weight % (c)	(S) Solid (L) Liquid (G) Gas	Hazards (d)	Status (e)	Isotope and Quantity (RMW Only)
1	1	4" Dia 3' length	45	pump	PCB's in Capacitor lubricant	AROCHLOR #1016	1%	L	XT	OF	40,000 DPM
						Steel	74	S			1.8E-9 Ci
						Copper	20	S			SCRAP
		1/2 HP 230V 1 PH				Lexan	5	S			
		7 AMPS 31782-176									

(a) Indicate how many containers of each size are being offered for disposal or recycle.

(b) If the waste is a mixture, list the components and their approximate percentages. Please provide any information on trade name, manufacturer or unusual chemicals that will assist in disposal analysis.

(c) Trace amounts of metals, cyanide, sulfide, PCBs, and phenolics should be specified. Components must add up to 100% including water, earth or other components.

(d) Hazards
C = corrosive
E = explosive
H = heavy metal
R = reactive
EP = EP toxic
O = oxidizer
F = flammable
X = biohazard/carcinogen
T = toxic

(e) Status (state all that apply)
F = full
MT = empty (<1 in.)
Rx = reacted
N = new (unused)
T = treated
PF = partially full
TR = triple-rinsed (empty drums)
O = old (expired)
S = spill material
R = recyclable condition, i.e., unopened, opened but in excellent condition, quality assured.

A-1200-367 (12/88)

	Yes	No
Classified Material		X
Special Nuclear Material		X
Security Escort Required		X

ONSITE RADIOACTIVE SHIPMENT RECORD

(Instructions For Completion On Back)

DOE CONTRACTOR: [X] PNL [ ] WHC [ ] KEH

Nº 32805

	NAME	CONTRACTOR AND COMPONENT	BUILDING AND AREA	PHONE
To:	KEVIN SELBY	PNL - LAB SAFETY	305B-300A	376-4295
From:	E.L. HILTY	PNL - ENV. ASSESS. DEPT.	622R-600A	373-3214
Carrier:	E.L. HILTY	SAME	Vehicle No. TH-541	SAME

SHIPPER

COMPLETE DESCRIPTION OF RADIOACTIVE CONTENTS:

Radionuclide(s): SR-90

Maximum Activity (Curies)/Container: 1.8 E-9

Grams Fissile/Container: None

Total Grams Fissile/Shipment: None — Total Curies/Shipment: 1.8 E-9

DETAILED PACKAGING DESCRIPTION:

No. Containers: 1

Type Containers: BAG

Description: A Submersible Sample Pump Doubled Bagged + Tapped + Labled

Secondary Hazards? (List): PCB

Container Approval Document(s): PNL-MA-81 — Shipment Number (when applicable): N/A

Normal Form [X] — Special Form [ ]

Material Is: DOE [X] — Licensee [ ]

Physical Form: [X] Solid [ ] Gas [ ] Liquid

Container(s) [ ] Single Trip [ ] Reusable

Absorbant Material Required [ ] Yes [X] NA

Container(s) Free of Deterioration and/or Damage [X] Yes

Labels Required [X] Yes [ ] No

Placards Required [ ] Yes [X] No

Tiedown Verified [ ] Yes [X] NA

Accountable Nuclear Material Transfer Documents Prepared [ ] Yes [X] NA

QUANTITY CATEGORY

[X] Limited Quantity
[ ] Low Specific Activity Material
[ ] Type A Quantity
[ ] Type B Quantity
[ ] Highway Route Controlled Quantity

Chemical Form

[ ] Oxide [ ] Mixture
[ ] Nitrate [X] Organic
[ ] Elemental
[ ] Other _____ Specify

RADIATION MONITORING

EXTERNAL RADIATION (mrem/hr)

Package		Vehicle	
At Contact	<0.5	At Sides	<0.5
At 1 Meter	<0.5	2 Meter	<0.5
		In Cab	<0.5

REMOVABLE CONTAMINATION

Smears of Outer Container

[X] ≤ 22 or _____ d/m βγ/ sq. cm

[X] ≤ 22 or _____ d/m α/ sq. cm

List Other Pertinent Information: <D SMEARABLE α & β

RM Escort Required [ ] Yes [X] No

RM Supervisor Review Required [ ] Yes [X] No — Reviewed by: _____ RM Supervisor — Date

Surveyed by: [signature] 7-13-90 — Radiation Monitor — Date

CARRIER

INSTRUCTIONS: 1. Speed Limit Restricted To: Posted MPH. Never exceed posted limits.

2. Do not leave shipment unattended between pick up and drop off points.
3. In case of an accident or spill notify RM immediately. Phone 375-2400
4. Shipments during hazardous road conditions and/or congested traffic should be avoided.
5. Tie down or restrain packages to prevent shifting or loss of packages during transport.
6. Declare material and present shipment record at each patrol check point.
7. Obtain RM release of transport vehicle after delivery of radioactive materials.
8. Other: PLACARD NOT REQUIRED
9. Obtain Receiver's Signature: Received by [signature] Date 7/13/90

NOTE: Person authorizing shipment must not transport it.

CERTIFICATION

This/These package(s) has/have been prepared for onsite shipment in accordance with applicable federal regulations as prescribed in DOE Order 5480.1A chapter III and its RL supplement.

[signature] E.L. Hilty — Shipping Organization Rep. — E.L. HILTY — Print Name — 7/13/90 — Date

(DISTRIBUTION - See Back For Instructions)

54-3000-609 (6/87)

9413137.1815

Medium Pump Serial Number 31782-1276

Polychlorinated biphenyl	Result
AR 1016	19,900 UG/G
AR 1221	* 45 UG/G
AR 1232	* 45 UG/G
AR 1242	* 45 UG/G
AR 1248	* 45 UG/G
AR 1254	45 UG/G
AR 1260	* 45 UG/G

Long Pump Unable to read Date code (post 1978)

Polychlorinated biphenyl	Result
AR 1016	* 1.5 UG/G
AR 1221	* 1.5 UG/G
AR 1232	* 1.5 UG/G
AR 1242	* 1.5 UG/G
AR 1248	* 1.5 UG/G
AR 1254	* 1.5 UG/G
AR 1260	* 1.5 UG/G

Short Pump Date Code: F-80

Polychlorinated biphenyl	Result
AR 1016	* 1.0 PPB
AR 1221	* 1.0 PPB
AR 1232	* 1.0 PPB
AR 1242	* 1.0 PPB
AR 1248	* 1.0 PPB
AR 1254	* 1.0 PPB
AR 1260	* 1.0 PPB

* Denotes a results less than the detection limit.

9413137-1816

7737

Internal Distribution

RW Bryce
TJ Gilmore
EL Hilty
GV Last
File/LB

Battelle
Pacific Northwest Laboratories
P.O. Box 999
Richland, Washington U.S.A. 99352
Telephone (509) 375-6812
Telex 15-2874
Facsimile (509) 375-2718

9413137.1817

February 14, 1990

Mr. K. R. Fecht
Westinghouse Hanford Company
P.O. Box 1970, H4-56
Richland, WA 99352

Dear Mr. Fecht:

Reference: PNL Letter M. S. Hanson to K. R. Fecht, July 1989, "PCB".

As outlined in the above referenced letter and pursuant with the meeting minutes "PCB in Peabody Barnes pump from well N-33", November 20, 1989, three nonoperating 1/2 horsepower Peabody Barnes pumps were disassembled and the internal fluids analyzed for Polychlorinated biphenyls (PCB). The results are listed in the attached table. Three styles of 1/2 horsepower Peabody Barnes pumps (labeled short, medium, and long in the table) have been used on the Hanford Site. The "medium" pump is the earliest model, the "long" pump the next, and the "short" pump the newest style of the three. In the oldest style, the "medium" pump, nearly 2% of the fluid in the motor chassis was the PCB Arochlor (AR) 1016. The serial number, which contains the date code, indicates this pump was manufactured in December 1976. Peabody Barnes has previously indicated that pre-1978 pumps likely contain PCBs. These results would support that. In addition, this "medium" pump is the same style pump that was pulled from well N-33, which was also found to contain the PCB AR 1016. We feel this strongly suggests that the pump in well N-33 was the source of the PCBs. The two newer pump styles did not contain detectable amounts of PCB.

We again recommend that all Peabody Barnes pumps date coded pre-1978 be replaced during routine maintenance. We also recommend, in the interim of maintenance, that all wells containing a Peabody Barnes pump be monitored for PCBs.

Sincerely,

RW Bryce for

M. S. Hanson, Acting Manager
Ground-Water and Compliance Monitoring
OFFICE OF HANFORD ENVIRONMENT

MSH/TJG/dla

Attachment

Battelle
Pacific Northwest Laboratories

Project Number _____

Internal Distribution

LR Bohn
PG Doctor
EL Hilty
File/LB

Date May 30, 1990

To Kevin Selby

From R. W. Bryce

Subject DISPOSAL OF MONITORING PUMPS

Thank you for the information you have provided in the disposal of monitoring pumps that potentially contain PCBs. Attached is some additional information on the pumps which may be important to you in ensuring proper disposal of this equipment. The first item is a letter from the pump manufacturer, Peabody Barns, indicating that the capacitor used in pumps manufactured before 1979 may contain PCBs. Upon receipt of this letter we reviewed our procurement documentation and felt that all pumps purchased prior to 1979 had been removed from wells. As a result of the discovery of PCBs in ground-water samples from a well in N Area we have discovered that pumps containing PCBs in the capacitors were sold after 1979 and may still be in use for ground-water sampling.

The second attachment is a letter from M. S. Hansen to K. R. Fecht which contains the results of analysis of fluids from three pumps. Fluids from the pre-1978 pump contained 19,900 micrograms per gram PCB Arochlor 1016.

If you need any additional information or have any additional guidance for handling these pumps please call me on 376-8345.

RWB/dla

9413137.1818

9413137.1819

Battelle
Pacific Northwest Laboratories

CHEMICAL DISPOSAL/RECYCLE REQUEST

Send Completed Form To:

Nonradioactive Materials:
K. A. Poston, 376-3752
P7-68
G. T. Thornton
P7-68

Radioactive Materials:
M. W. McCoy, 376-1483
P7-68

30 day clock started
4-5-90

This material was generated by:
☒ 1830
☐ 1831
Programs

Generator Logbook Number

Requested by:	Telephone No.	Address	Organization Code	Date
W. B. LARSON	6-2483	P7-25	D7E00	4-26-90

Location of Waste:
Rm 527 / 325 Bldg / 300 Area P7-25

DETAILED MATERIAL DESCRIPTION (CONTINUE ON BACK OF FORM)

Item No.	Number of Containers (a)	Container Size	Material Quantity (KG)	Container Type	Material Description or Trade Name (b)	Chemical Component (b)	Weight % (c)	(S) Solid (L) Liquid (G) Gas	Hazards (d)	Status (e)	Isotope and Quantity (RMW Only)
#3	1	1 gal	3.6	Jug glass	CAPACITOR OIL	OIL 579 µg/ml PCB	100%	L	X	F	
											LQ

NEEDS ANALYSIS:
METALS
HALIDES
FLASHPOINT

Oil #3: WASTE P=0
total alpha 1.08 pci/g 2.4 α/minute/milliliter [redacted] 3.89 nCi
total beta 1.71 pci/g [redacted]
[redacted] < 1.9x10² D/minute/mi[redacted] .31 uCi

ACTUALLY LESS DUE TO OIL DENSITY

ing offered for disposal or recycle.
their approximate percentages. Please provide any information on trade name, manufacturer or unusual chemicals that will assist in disposal

(c) Trace amounts of metals, cyanide, sulfide, PCBs, and phenolics should be specified. Components must add up to 100% including water, earth or other components.

(d) Hazards
C = corrosive
E = explosive
H = heavy metal
R = reactive
EP = EP toxic
O = oxidizer
F = flammable
X = biohazard/carcinogen
T = toxic

(e) Status (state all that apply)
F = full
MT = empty (<1 in.)
Rx = reacted
N = new (unused)
T = treated
PF = partially full
TR = triple-rinsed (empty drums)
O = old (expired)
S = spill material
R = recyclable condition, i.e., unopened, opened but in excellent condition, quality assured.

A-1200-367 (12/88

33954

RECEIVED

OCT 26 1992

N&MWMP

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

October 21, 1992

TO: Geoff Tallent
Nuclear and Mixed Waste Management Program

FROM: Alan Newman AN
Environmental Engineer
Air Quality Program

SUBJECT: 305-B Dangerous Waste Storage Unit, SEPA DNS

In reviewing this SEPA checklist, I noted that there is an air emission from the bulking area. Does this emission have any air pollution controls? Because it is an existing facility, it has to continue to comply with the air pollution requirements existing when it was initially constructed and put into operation.

The Air Quality Program has an existing Toxic Air Pollution regulation, WAC 173-460 which went into effect September 1991. We are now in the process of amending that regulation to require toxic air pollutant controls on existing sources of toxic air pollutants. Since this is a TSD facility that handles solvents and other organic liquids, I can assume that the emissions from this facility will be subject to that regulation when it is finally enacted in 1994. You may want to stay informed and to inform your clients of this upcoming requirement. Elizabeth Waddell and Audrey O'Brien are the main staff involved in developing the existing source portions of this regulation.

AN:rr

cc: Jay Willenberg

9413137.1820