

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3); enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).
2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.
3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.
4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.
5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

LICENSED MATERIAL

A) Element/ Mass Number	B) Chemical/ Physical Form	C) Manufacturer	D) Amounts	E) Use
1) Any byproduct material with Atomic Numbers 1-83, inclusive	Any Sealed	N/A N/A	50mCi 500mCi with no source to exceed 100mCi	Calibration and verification of instrument response and/or radiochemical process or procedures
2) Cs-137	Sealed	N/A	3 Ci Total - no source to exceed 1.2 Ci	Steamline drain liquid level monitors or calibration and/or verification of instrument response
3) Cs-137	Any	N/A	50mCi	Calibration and/or verification of instrument and/or radiochemical processes or procedures
4) Cs-137	Sealed	JL Shepherd Model 6810 in custom device	1000Ci	Calibration and/or verification of instrument response
5) Co-60	Any	N/A	50mCi	Calibration and/or verification of instruments and/or radiochemical processes or procedures
6) Am-241	Sealed Neutron Source	N/A	2500Ci total - no source to exceed 625Ci	Neutron source to be used for initial reactor criticality
7) Cm-242-250	Sealed Neutron Source	N/A	20Ci/source	As incidental component of 8.A.6 Am-241 sources
8) Am-241	Any	N/A	5mCi	Calibration and/or verification of instrument response and/or radiochemical process or procedures
9) Am-241	Sealed	N/A	8Ci total - no source to exceed 5Ci	Calibration and/or verification of instrument response or for use as installed plant instrumentation for measurement of boron concentration
10) Sb-124	Sealed	N/A	2500Ci total - no source to exceed 625Ci	Initially non-radioactive material to be used following irradiation in the reactor core as regenerative neutron sources
11) U-238	Sealed - depleted in U-235	N/A	999 Kilograms	For use as encapsulated shielding material

Application for Material License (Continued)

APPLICATION FOR MATERIAL LICENSE (Continued)

6. The Midland Energy Center Calibration Facility is to be converted from a user facility to a storage (vault) facility for licensable by-product materials.

7. The following individuals are responsible for the radiation safety program:

J L Fontaine, Radiation Safety Officer
 T P Neal, Alternate Radiation Safety Officer
 M A Moore, Associate Health Physicist
 D R Gnaedinger, Senior Health Physics Technician
 L J Grusecki, Senior Health Physics Technician

8. Individual training and experience is listed on resume's.

9. Radioactive Material Storage Area

Licensed by-product material will be stored in the Midland Energy Center Calibration Facility (storage vault). The calibration facility is located adjacent to the SW corner of the MEC radwaste building. Walls of the calibration facility are 18" thick with the roof being 30" thick. Access is restricted by use of dead bolt locked doors and a health physics key control system.

Radiation Monitoring Instruments

A. The following radiation detection/monitoring instruments are available for use in Calibration Storage Facility:

<u>Instrument Type</u>	<u>Manufacturer</u>	<u>Number Available</u>	<u>Radiation Detected</u>	<u>Sensitivity Range</u>
1. Geiger Counter	Eberline E-520	Two (2)	beta/gamma	0 mR ² R/hr 0-3 ^{e6} cpm
2. Geiger Counter	Ludlum 177	Two (2)	beta/gamma	0-500k cpm
3. Proportional Counter	Eberline "Rascal"	Two (2)	neutron	.025EV-10MEV
4. Proportional Counter	NMC DS-3P	One (1)	beta/gamma	counter
	NMC DS-33P	One (1)	beta/gamma	counter

B. A partial listing of radiation detection/monitoring equipment available on request from the Palisades Nuclear Plant includes:

<u>Instrument Type</u>	<u>Manufacturer</u>	<u>Number Available</u>	<u>Radiation Detected</u>	<u>Sensitivity Range</u>
air samples	Science App, Inc	1-5	1-8cfm 4-24cfm	(2" filter) (4" filter)
MS-3 scaler	Eberline	1	beta/gamma	counter
ND6600 GeLi Counter	Nuclear Data	1	beta/gamma	counter

APPLICATION FOR MATERIAL LICENSE (Continued)

<u>Instrument Type</u>	<u>Manufacturer</u>	<u>Number Available</u>	<u>Radiation Detected</u>	<u>Sensitivity Range</u>
AGB-10KG-SR Radgun	Jordan	1-3	beta/gamma	0-10K R/hr
PAC-1 SAGA alpha - gamma Scintillation Counter	Eberline	1	alpha/gamma	

C. Instrument Pre-Operational Checks

1. All radiation monitoring instruments are calibrated at the Palisades Nuclear Facility every six months. Palisades is permitted to calibrate their own radiation monitoring instrumentation under provisions of Operating License DPR-20, Section 6.11 - Radiation Safety.
2. Prior to use, instruments undergo a pre-operational check. This includes:
 - A) Battery checks
 - B) Current calibration date verification
 - C) Check of overall condition of instrument
 - D) Check of correct type of probe being used for specific application

NOTE: Instruments assigned to Palisades undergo daily functional checks in addition to pre-operational testing.

3. Only qualified Health Physics personnel will perform pre-operational checks of radiation instruments.
10. See Radiation Safety Program
11. Disposal of licensable quantities of radioactive material and/or radwaste produced at the Midland Energy Center will be made in accordance with 10 CFR parts 20, 30, 40, 61, 70, 71 and 49CFR172 and 173. Radwaste shall be shipped to licensed burial grounds. (See Radiation Safety Program; Sections 8.3 and 12.0.)

RESUME

Radiation Safety Officer

Supervisory Instructor - James L Fontaine

Education:

<u>Institute</u>	<u>Duration</u>	<u>Major</u>	<u>Degree</u>	<u>Date</u>
1) General Dynamics Course, Groton, CT	2 Weeks	Alara Engineering Technology	Certificate	----
2) Purdue University, W Lafayette, IN	2 Years	Health Physics	M.S.	8/81
3) Ferris State College, Big Rapids, MI	4 Years	Nuclear Medicine	B.S.	8/78

Work Experience:

7/83 - Present	Supervisory Instructor - Consumers Power Company, Midland Nuclear Training Center
8/81 - 7/83	Corporate Alara Coordinator - Consumers Power Company, Radiological Services Department
1/80 - 8/81	Graduate Assistant - Purdue University, Radiological Services
8/78 - 8/79	Nuclear Medicine Technologist - Flint Osteopathic Hospital

Isotope Experience:

<u>Isotope</u>	<u>Maximum Amount</u>	<u>Where Experience Was Gained</u>	<u>Duration</u>	<u>Use</u>
Cs-137	50 mci - 1000 ci (Sealed)	Midland	1 Year	Calibration
Co-60	50 mci - 1 ci (Sealed)	Midland	1 Year	Calibration
Co-60	7500 ci (Sealed)	Purdue	2 Years	Material Studies
Am-241	5 mci - 8 ci (Sealed)	Midland and Purdue	3 Years	Calibration

Isotope Experience: (Continued)

<u>Isotope</u>	<u>Maximum Amount</u>	<u>Where Experience Was Gained</u>	<u>Duration</u>	<u>Use</u>
U-238	Depleted	Midland	1 Year	Shielding
Tritium	1 ci (Liquid)	Purdue	2 Years	Calibration
P-32	100 mci	Purdue	2 Years	Material Studies
Tc-99	1 ci	Flint Hospital	1 Year	Medical
Mo-99	1 ci	Flint Hospital	1 Year	Medical
I-131	100 mci	Flint Hospital	1 Year	Medical

RESUME

Alternate Radiation Safety Officer

Senior Health Physicist - Thomas P Neal

Education: 2 years, Bay City Junior College, Chemical Engineering Program

Work Experience:

1982 - Present	Sr Health Physicist/Corporate-Radiological Services Department, Consumers Power Company
1980 - 1982	Sr Technical Analyst/Corporate-Radiological Services Department, Consumers Power Company
1976 - 1980	Radiological Materials Control Supervisor - Palisades Nuclear Plant
1974 - 1975	Radiation Protection Supervisor - Palisades Nuclear Plant
1969 - 1973	Sr Radiation Protection/Chemistry Technician - Palisades Nuclear Plant

Isotope Experience:

Palisades Nuclear Plant, 1969-1980
Palisades/Big Rock Point 1980-Present

10 Curie	Cs-137	Instrumentation Calibration
1 Curie	Cs-137	Instrumentation Calibration
5 Curie	Pu-Be	Instrumentation Calibration
0.1 Curie	Cs-137	Area Monitor Calibration
500,000	Co 60	Cobalt target material
25,000	MAP	Activated Components

RESUME

Training and Experience of Individual User:

Associate Health Physicist - Marc A Moore

Education:

	<u>Institute</u>	<u>Duration</u>	<u>Major</u>	<u>Degree</u>	<u>Date</u>
1)	Chem-Nuclear Workshop	1 Week	Radwaste Packaging & Shipping	Certificate	1/84
2)	Harvard Office of Continuing Education	1 Week	Environmental Radiation Surveillance Course	Certificate	7/83
3)	Consumers Power Co, Midland Training Center	1 Week to several weeks duration	Various HP/Chemistry Technician Courses; basis through senior technical level	Certificate	7/81 -
4)	Ferris State College, Big Rapids, MI	2½ years	Industrial Hygiene	B.S.	8/80
5)	Pikes Peak Comm College, Colorado Springs, Colorado	1 Year	Science	Assoc Sci	6/77

Work Experience:

3/83 - Present	Associate Health Physicist - Consumers Power Company, Radiological Services Department
7/81 - 3/83	HP/Chemistry Technician - Consumers Power Company, Palisades Nuclear Plant
4/81 - 7/81	Health and Safety Officer - CECOS/CER, Cincinnati, OH
11/80 - 3/81	Health and Safety Officer - OH Materials Co., Findlay, OH
1/71 - 11/78	US Army, Ft Carson, Co - Squad Leader

Isotope Experience:

<u>Isotope</u>	<u>Maximum Amount</u>	<u>Where Experience Was Gained</u>	<u>Duration</u>	<u>Type of Use</u>
Cs-137	10 curie (sealed)	Palisades	1 3/4	Calibration Radwaste
Cs-137	1 curie (sealed)	Palisades	1 3/4	Calibration Radwaste
Mixed Fission Products	5-3000 curies	Palisades, CECOS OH materials	3 1/2 yrs	Contaminated Materials
Mixed Fission Products	100,000 curies	US Army	3 yrs	Contaminated Materials Special Weapons

RESUME

Training and Experience of Individual User:

Senior Health Physics Technician - David R Gnaedinger

Education:

<u>Institute</u>	<u>Duration</u>	<u>Major</u>	<u>Degree</u>
Chem-Nuclear Workshop	1 Week	Radwaste Packaging & Shipping	Certificate
Consumers Power Co Midland Training Center	29 Weeks	Various HP/Chemistry Technician Courses; basic through senior technician level	Certificates
Adrian College, Adrian, MI	4 Years	Biology	B.S.

Work Experience:

3/82 - present	Senior Health Physics Technician, Consumers Power Company; Midland Energy Center
7/80 - 3/82	Health Physics Technician, Consumers Power Company, Midland Energy Center
2/79 - 7/80	Chemistry Technician, Consumers Power Company; Midland Energy Center 21 Weeks outage support Palisades Nuclear Plant
3/73 - 8/78	Chemistry Research Assistant; Portland Cement Association, Skokie, Illinois

Isotope Experience:

<u>Isotope</u>	<u>Maximum Amount</u>	<u>Where Experience Was Gained</u>	<u>Duration</u>	<u>Use</u>
Cs-137	50 mci - 1000 ci (Sealed)	Palisades and Midland	5 Years	Calibration
Co-60	50 mci - 1 ci (Sealed)	Palisades and Midland	5 Years	Calibration
Am-241	5 mci - 8 ci	Midland	5 Years	Calibration

Isotope Experience: (Continued)

<u>Isotope</u>	<u>Maximum Amount</u>	<u>Where Experience Was Gained</u>	<u>Duration</u>	<u>Use</u>
U-238	Depleted	Midland	5 Years	Shielding
Mixed Fission 5 - 3000 curies Products		Palisades	6 mos	Contaminated Materials, Activated Components

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RESUME

Training and Experience of Individual User:

Senior Health Physics Technician - Lori J Grusecki

Education:

<u>Institute</u>	<u>Duration</u>	<u>Major</u>	<u>Degree</u>
Consumers Power Co Midland Training	29 Weeks	Various HP/Chemistry Technician Courses; basic through senior technician level	Certificates
Delta Community College, Saginaw, MI	3 years	Chemistry	Assoc Sci

Work Experience:

5/84 - present	Senior Health Physics Technician Consumers Power Company, Midland Energy Center
5/83 - 5/84	Health Physics/Chemistry Technician II, Consumers Power Company, Midland Energy Center
2/82 - 5/83	Health Physics/Chemistry Technician, Consumers Power Company, Midland Energy Center
5/81 - 2/82	Health Physics/Chemistry Technician Trainee, Consumers Power Company, Midland Energy Center

Isotope Experience:

<u>Isotope</u>	<u>Maximum Amount</u>	<u>Where Experience Was Gained</u>	<u>Duration</u>	<u>Use</u>
Cs-137	50 mci - 1000 ci (Sealed)	Midland	4 Years	Calibration
Co-60	50 mci - 1 ci (Sealed)	Midland	4 Years	Calibration
Am-241	5 mci - 8ci	Midland	4 Years	Calibration
U-238	Depleted	Midland	4 Years	Shielding

RADIATION SAFETY PROGRAM
FOR BY-PRODUCT LICENSE 21-08606-09

1.0 Objective

To provide guidelines for ensuring that adequate radiation safety standards are used in fulfilling criteria of By-products license #21-08606-09.

2.0 Scope

- 2.1 The Radiation Safety Program is applicable to the designated users by By-product license #21-08606-09.

3.0 Responsibilities

- 3.1 The Radiation Safety Officer (RSO) and/or designated user personnel are responsible for the following:
- 3.2 Implementation of radiation safety standards as specified in 10 CFR19, 20, 50 and 71.
- 3.3 Implementation of DOT transportation standards as specified in 49CFR172 and 173.
- 3.4 Implementation of corporate Radiation Safety Plan; to include ALARA, control of external and internal doses and control of radioactive materials.
- 3.5 To prevent loss or misplacement of radioactive material(s) that may result in radiation exposure to the public.
- 3.6 Provide for anti-contamination clothing and/or decontaminating materials if necessary.
- 3.7 Provide for issuance and tracking of personnel dosimetry as required.
- 3.8 Coordinate with all responsible parties the transfer of radioactive material(s).
- 3.9 Document all radioactive material transfers.

4.0 Precautions

- 4.1 Only RSO and/or other designated user personnel are to direct activities handling licensable quantities of by-product material(s).
- 4.2 Radiation survey instruments must be adequate for the type of monitoring to be done.

5.0 Radiation Standards

- 5.1 Any component or material item that exceeds the below listed administrative standards is considered contaminated and shall not be released to unrestricted areas:

5.2 For loose surface contamination:

- A. 1000 dpm of beta-gamma radioactivity measured on a dry smear per 100 cm² of surface or 1000 dpm per total surface if less than 100 cm².
- B. 20 dpm of alpha radioactivity as measured on a dry smear.
- C. 100 cpm above area background of beta-gamma radioactivity measured within 1/2" of the surface with a count rate meter equipped with a G-M pancake probe. If radioactivity greater than the above level is detected, smears shall be taken to evaluate the surface for removable surface contamination.

5.3 For fixed contamination:

- A. 0.1 mr/hr beta-gamma above background as measured with a beta-gamma survey instrument (open window) within one inch of material surface.

NOTE: Survey is not required if survey with G-M pancake probe (5.2.c above) did not detect radioactivity in excess of 100 cpm above background.

- B. No detectable alpha radioactivity by direct survey with a portable alpha survey meter measured within 1/2" of material surface (if alpha is suspected).

6.0 Receipt of Radioactive Material

- 6.1 All packages containing radioactive material shall be surveyed at an appropriate receiving/lay-down area, with the following items performed:
- 6.2 A radiation survey of all packages containing radioactive components/material with on-contact and 1 meter readings.
- 6.3 Contamination smears of external surfaces of package and contents for determination of leakage (if any).
- 6.4 The radiation survey of all packages containing radioactive material(s) shall be performed within 3 hours of receipt during regular working hours or 18 hours after normal working hours.
- 6.5 Document receipt of radioactive material and complete a Radioactive Material Receipt Record (RMRR; HP Form 6.21-1, Attachment 1). Also, inspect shipping documents for completeness and correct information.
- 6.6 Notify shipper of radioactive material package if contamination on the external surface exceeds:

Beta-gamma	2200 dpm/100cm ²
Alpha	220 dpm/100cm ²

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- 6.7 Immediately notify, by telephone or telegraph, mailgram or facsimile, the final delivering carrier and NRC Region III if contamination on package external surface exceeds:

Contamination	22,000 dpm/100cm ²
Radiation	200 mr/hr contact
	10 mr/hr at 1 meter

- 6.8 If contamination levels exceed the administrative limits specified in 5.2 and 5.3 no notifications are required, however, the package shall be decontaminated to an acceptable level and appropriate documentation made.

7.0 Posting and Labeling

- 7.1 All radioactive material(s) or containers holding such material shall have affixed radioactive materials tag (or label) conspicuously marked with the magenta three-bladed radiation symbol on a yellow background with the words "CAUTION RADIOACTIVE MATERIAL". The label shall include the following information as specified by 10CFR20.203f:

- A. Description of content
- B. Estimate of activity and highest dose rate
- C. The measured contamination level on surface of outside packaging.
- D. Disposition or special handling instructions; including phone number of RSO.
- E. Signature of individual responsible for filling out required information on tag.

- 7.2 Labeling is not required under the following conditions:

- A. The material is identified for use as anticontamination clothing.
- B. The radioactive material(s)/container(s) is under direct supervision of RSO or other user designated personnel.
- C. The radioactive material(s) is packaged and labeled in accordance with DOT regulations while in the process of transportation.
- D. The radioactive material(s)/container(s) is not in quantities greater than specified in 10CFR20, Appendix C.
- E. The radioactive material(s)/container(s) is located in a restricted area; ie storage vault, hot cell, etc.

- 7.3 The calibration storage facility shall be posted with "CAUTION - RADIOACTIVE MATERIAL AREA" sign(s).

8.0 Control of Radioactive Materials or Components

- 8.1 Radioactive materials temporarily located outside of a designated boundaried area shall be properly contained.
- 8.2 Any radioactive material/component that is transferred as waste product shall be contained in yellow plastic bags.
- 8.3 Radioactive material yellow plastic bags sealed with tape shall be used for wrapping all items/components suspected of being contaminated.
 - A. The yellow bags are intended to aid in identifying radioactive material.
 - B. The radioactive material yellow plastic bags are a controlled item and shall not be used for other purposes.
 - C. Controlled disposal of radioactive material yellow (plastic) bags and contents is required.
 - D. Any yellow bag containing radioactive waste material(s) shall be handled as radwaste for shipment to licensed burial grounds.
- 8.4 RSO or authorized designate shall be notified if any radioactive material yellow plastic bag is found outside of a designated controlled area.
- 8.5 External surfaces of any yellow plastic bags containing radioactive material shall be surveyed/smeared prior to their removal from boundaried radiation controlled areas. The contamination limits shall be the same as found in Section 5.2.

9.0 Radiation Work Permits

- 9.1 A radiation work permit shall be required for personnel entry into the calibration facility unless provided with direct health physics coverage.
- 9.2 Radiation work permits as a minimum, shall provide the following information (when applicable):
 - A. Job description, periodic activity control numbers, etc, and location of job.
 - B. The names of all personnel who work on the job.
 - C. The anticipated radiation, contamination levels etc, based on current surveys and date/time of the surveys.
 - D. Monitoring requirements during the job; ie constant monitoring, sampling, etc.

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9.2 (Continued)

- E. Estimated time necessary to complete job involving exposure to radiation and the estimated doses.
 - F. Special instructions and equipment to minimize exposure of personnel to radiation.
 - G. Anticontamination clothing and equipment requirements.
 - H. Personnel dosimetry requirements.
 - I. Authorization to perform job.
 - J. Actual exposure time, doses and other information obtained during the operation.
- 9.4 Radiation Work Permits shall be sequentially numbered by year for control. An RWP ledger should be maintained.
- 9.5 The Radiation Work Permit shall provide radiological controls in support of specific conditions relating to the job. All personnel working near any radioactive material(s) shall be briefed on contents and conditions of RWP prior to starting job.
- 9.6 The Radiation Work Permit will:
- A. Be job specific.
 - B. Specify area where job is to be performed.
 - C. Be valid for only period of time necessary to complete the job.
- 9.7 RSO and/or other designated license user personnel are exempt from RWP requirements of Section 9.0.

10.0 Dosimetry and ALARA

- 10.1 A posted radiation area shall be maintained around radioactive material(s) being handled in any unrestricted location at Midland Energy Center if radiation levels:
- A. Could result in an individual, if continuously present, receiving a dose in excess of 2mr in one (1) hour.
 - B. Could result in an individual, if continuously present, receiving a dose in excess of 100mr in any seven (7) consecutive days.
 - C. Could result in an individual receiving a whole body dose in excess of 500mr in any period of one (1) calendar year.
- 10.2 The posted radiation restricted area shall be controlled by RSO and/or designated user personnel.
- 10.3 Administrative dose control levels shall be used to keep whole body exposure to ionizing radiation AS LOW AS REASONABLY ACHIEVABLE (ALARA).

10.4 Wholebody Beta-Gamma-Neutron dosimetry and direct-reading dosimeters will be issued to individuals when radiation restricted areas must be entered and/or handling of radioactive material is required whenever the specified limits of Section 10.1 are exceeded.

11.0 Personnel Monitoring

11.1 When a count rate meter and G-4 pancake probe are used for personnel monitoring station, the background radiation count shall not exceed 300cpm. If this rate is exceeded, then the monitoring station needs to be relocated or shielded.

12.0 Radioactive Materials Shipment

12.1 Shipment of radioactive material/contaminated components shall be in accordance with 40CFR172-173 and 10CFR71.

12.2 RSO and/or other designated license user personnel shall be assigned responsibility for assuring compliance with these regulations.

12.3 In preparing to ship radioactive materials, the following items shall be addressed:

- A. Radiation and contamination surveys; including type and extent of contamination present.
- B. Documentation of survey(s).
- C. Shipping documents.
- D. Packaging requirements.
- E. Labeling and marking packages.
- F. Placarding (if required).
- G. Record retention and distribution.
- H. Type of carrier(s) used; it motor, rail, air, pony mail, etc.

12.4 Radioactive material(s) shall be sent only to facilities licensed to receive such material. RSO must possess a copy of receivers by-product license prior to actual shipment(s) being made.

12.5 All radioactive material shipments shall have a shipment record completed as per Section 15.3; whether exempt quantity or not.

ATTACHMENTS

- 1. Radioactive Material Receipt Record
- 2. Radiation Work Permit and Sign In Sheet
- 3. Radioactive Material Shipment Form
- 4. Radioactive Material Source Leak Test Record

HP 6.21.1

CONSUMERS POWER COMPANY

Proc No HP 6.21

Attachment 1

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RADIOACTIVE MATERIAL RECEIPT RECORD

The survey is required within three hours of receipt during normal working hours or eighteen hours after normal working hours.

ORIGINATOR	① TO: Consumers Power Co.		FROM	
	License No. Expiration Date		License No. Expiration Date	
	③ Reason For Transfer			
	④ Material Description			
	⑤ Physical Form: Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/>			
	⑥ DOT Quantity: Limited <input type="checkbox"/> Type A <input type="checkbox"/> Type B <input type="checkbox"/> Large <input type="checkbox"/> LSA <input type="checkbox"/>			
	⑦ Form: Special <input type="checkbox"/> Normal <input type="checkbox"/>			
	⑧			
	⑨ Fissile Class: I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/> Exempt <input type="checkbox"/> S.M. Grams			
	⑩ Transport Index			
	⑪ Principal Radionuclides		Activity	
	⑫ Container Description			
	⑬ Remarks			
⑭ Originator		Date		
RMC TECHNICIAN	⑮ Radiation (Container)		Contamination (Container)	
	Surface MREM/Hr. $\beta\gamma$ MREM/Hr. N		∞ D/M/100cm ²	
	3 Ft. From Surface MREM/Hr. $\beta\gamma$		$\beta\gamma$ D/M/100cm ²	
	⑯ DOT Label: None Required <input type="checkbox"/> White I <input type="checkbox"/> Yellow II <input type="checkbox"/> Yellow III <input type="checkbox"/> Empty <input type="checkbox"/>			
	⑰ Surveys Attached: Vehicle <input type="checkbox"/> Container <input type="checkbox"/>		⑱ Vehicle Placarded Yes No N/R	
	⑲ Remarks			
⑳ Surveyed By		Date		
RMC SUPERVISOR	① Above items are required to be leak checked semi-annually:			
	<input type="checkbox"/> Yes If yes, HP 6.24 or HP 6.25, as appropriate, forms completed <div style="text-align: right;">Init. Date</div>			
② This is to certify that the above named articles are properly classified, described, packaged, marked, and labeled, and in proper condition for receipt according to the applicable regulations of the Department of Transportation and 10 CFR. Date Authorized Signature Title				

Form 3184 1-83

NUCLEAR OPERATIONS DEPARTMENT Radiation Work Permit

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RWP No. _____

RWP Type

☐ Gen ☐ Std

Auth Doc No.		Equip ID No.		Job Func	Room ID		
Job Description							
Comments							
					Est Start Date		
					Person Rem Estimate		
EXPECTED RADIOLOGICAL CONDITIONS					RADIATION SAFETY REQUIREMENTS		
Radiation _____ mR/hr General		Comments _____		RAD SAFETY COVERAGE	<input type="checkbox"/> Dedicated <input type="checkbox"/> Periodic <input type="checkbox"/> Initial Surv Only <input type="checkbox"/> See Special Instr		
Radiation _____ mR/hr Contact		Comments _____			MONITORING	<input type="checkbox"/> Primary TLD <input type="checkbox"/> Secondary TLD <input type="checkbox"/> Low-Range Dosimeter <input type="checkbox"/> High-Range Dosimeter <input type="checkbox"/> Dose Rate Meter <input type="checkbox"/> Special (See Spec Instructions) <input type="checkbox"/> Process Secondary Dosimetry Every _____	
Airborne Activity _____ $\mu\text{Ci/cc}$		Comments _____				BODY	<input type="checkbox"/> Lab Coat <input type="checkbox"/> Paper Overalls <input type="checkbox"/> 1 Pair Cloth <input type="checkbox"/> 2 Pair Cloth <input type="checkbox"/> Waterproof
Contamination Levels _____ $\text{dpm}/100\text{ cm}^2$		Comments _____					HEAD
SPECIAL INSTRUCTIONS/PRECAUTIONS						HAND	
<input type="checkbox"/> Rad Safety Approval Required Prior to Sweeping, Brushing, Grinding, Welding, Use of Compressed Air or Solvents <input type="checkbox"/> Notify Rad Safety Prior to Start of Work <input type="checkbox"/> Prejob Briefing <input type="checkbox"/> High Rad Door Watch Required <input type="checkbox"/> Review Area Status Sheet Prior to Entry					FEET		<input type="checkbox"/> Rubber Overshoes <input type="checkbox"/> Rubber Boots <input type="checkbox"/> Cloth Shoe Cover <input type="checkbox"/> Poly Shoe Cover
Comments						RESPIRATORY	<input type="checkbox"/> Full Face <input type="checkbox"/> Supplied Air <input type="checkbox"/> SCBA <input type="checkbox"/> _____
Requested by (Supervisor)			Date	Time			
Prepared by (Rad Safety Tech)			Date	Time			
Approved by (Rad Safety Supvr)			Date	Time			
Expiration Date	Extended to	By	Extended to	By	Extended to		
Terminated by			Date	Time			

CONSUMERS POWER COMPANY
Radioactive Material Shipments

Shipper		Consigned to		Carrier	
Address		License No.		Tractor No.	
Telephone		Name		Contact mR/Hr	
Contact		Address		Car mR/Hr	
Date of Shipment		Shipment Number		State Police Notification Required* <input type="checkbox"/> Yes <input type="checkbox"/> No	
City, State, ZIP Code		Volume		Placards Required* <input type="checkbox"/> Yes <input type="checkbox"/> No	
Item(s)		Proper Shipping Name, Hazard Class and Identification Number (Per 172.101)		Total net wt in Pounds	
		Radioactive Material, Empty Packages		UN 2908	
		Radioactive Material, Fissile, NOS		UN 2918	
		Radioactive Material, Low Specific Activity, NOS		UN 2912	
		Radioactive Material, NOS		UN 2982	
		Radioactive Material, Limited Quantity NOS		UN 2910	
		Radioactive Material, Special Form, NOS		UN 2974	
		Radioactive Material, Instruments and Articles		UN 2911	
(1) Item No.	(2) Volume Cask Feet	(3) Weight Pounds	(4) Physical Form	(5) Chemical Form	(6) Radioactive
(7) Serial Number	(8) Storage Material	(9) Activity Curies	(10) Radiation Levels mR/hr Surface	(11) Transport Index	(12) Label
(13) DOT ID No.	(14) Filling Date	(15) DOT ID No.			
Total					

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to applicable regulations of the Department of Transportation.

Authorized Signature		Date	
<input type="checkbox"/> This is an exclusive-use shipment. It shall not be intermixed with other cargo, nor shall it be off loaded other than by the consignor or consignee. Any transportation delays should be avoided to minimize exposure to the public.		This shipment is within the limitations prescribed for cargo-only aircraft.	
Driver's Signature		Title	
(11) Document Control (12) Shipper		(13) Consignee (14) Carrier	

<input type="checkbox"/> Cargo Aircraft Only		<input type="checkbox"/> IATA Certification Form (Rec Edge) is attached (2 copies)	
Authorized Signature		Title	
(11) Document Control (12) Shipper		(13) Consignee (14) Carrier	

