

CALIFORNIA POLYTECHNIC STATE UNIVERSITY

50-394

SAN LUIS OBISPO, CALIFORNIA 93407  
(805) 546-0111



30 January 85

Mr. Peter B. Erickson, Project Manager  
Operating Reactors Branch #5  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Erickson:

Pursuant to your letter dated October 6, 1981, Docket No. 50-394, authorizing California Polytechnic State University to dismantle the AGN-201 Training Reactor in accordance with our dismantling plan dated September 8, 1981, and all related correspondence, we request the termination of license number R-121, decommission of the Reactor, and release of the facility for uncontrolled use.

The AGN-201 Reactor has been dismantled . All reactor fuel and components containing residual radioactive material have been removed from the facility. The fuel was shipped to the Department of Energy, Oakridge Y-12 Plant, Oakridge Operations, Oakridge, TN. The components containing residual radioactive materials and the RaBe Neutron Sources have been shipped to U.S. Ecology, Richland, Washington, Low-Level Radioactive Waste Disposal Facility. (See attached certification and Radioactive Waste Shipment and Disposal Form.)

The final radiation surveys have been performed (for details consult the Final Decommissioning Report for the AGN-201 Reactor submitted on January 24-25, 1985). It is concluded, after reviewing the data, that there is no adverse impact to the health and safety of the general public, employees, or students at the University.

As specified in the dismantling plan, radiation levels have been reduced to background levels establishing radiation levels as low as reasonably achievable.

Thank you for the continuation of good radiation safety.

Sincerely,

Thomas A. Schell  
Radiation Safety Officer, Public Safety

TAS:da

cc: John A. Zwolinski  
E.M. Garcia

Attachments

THE CALIFORNIA STATE UNIVERSITY

8502060105 XA  
50-394 W

ADD. ORIG. TO REG FILE  
NTES, CY

H003  
1/2

SOUTHWEST NUCLEAR COMPANY  
7066 A COMMERCE CIRCLE  
PLEASANTON, CA 94566  
ATTN: THOMAS J. DIAS

# USEcology

This is to certify that the waste described below was received for disposal at the US Ecology Richland, Washington Low-Level Radioactive Waste Disposal Facility. This certification satisfies Conditions 31(a) and 31(b) (Acknowledgement of Receipt of Waste) of the State of Washington Radioactive Materials license WN-I019-2 issued to US Ecology.

BATES NUMBER 10,980  
GENERATOR NUMBER CAR-99-001-9226  
MANIFEST NUMBER 49730  
SHIPMENT NUMBER 84-18  
DATE RECEIVED 6/26/84  
SIGNATURE *Ernie Clout* DATE 6/26/84

Discrepancies (if any) between wastes listed on the manifest and waste materials received in the shipment:

*See U.O.R, AND RSR CORRECTION FORMS ATTACHED.*

NOTE: Any inquiries to this acknowledgement should be directed to Mike Nolan, Facility Radiation Safety Officer.

RECEIVED  
JUL 6 1984

CAIR 99 - 001 - 9226  
BROKER'S US ECOLOGY NUMBER

BROKER NAME: SOUTHWEST NUCLEAR COMPANY  
ADDRESS: 7066-A Commerce Circle  
CITY: Pleasanton STATE: CA ZIP: 94566  
CONTACT: Thomas J. Dias PHONE: (415) 462-3750  
USER PERMIT #: 6660 SHIPMENT #: 84-18

BILL DISPOSAL CHARGES TO: SOUTHWEST NUCLEAR COMPANY  
NAME: \_\_\_\_\_  
ADDRESS: 7066-A Commerce Circle  
CITY: Pleasanton ST: CA PURCHASE ORDER #: \_\_\_\_\_

**CONSOLIDATED SHIPMENT MANIFEST**

FOR WASTE COLLECTORS  
HANDLING ONLY PREPACKAGED WASTE

**US ECOLOGY, INC.**  
EXECUTIVE OFFICE: (502) 426-7160  
P.O. BOX 7246 • LOUISVILLE, KENTUCKY 40207

BATES #

FORM 802 - 3/84

Include this page plus the total number of pages in all attached generator manifests.

CONSIGNEE TO:  
 P.O. BOX 638  
Hartford Reservation  
Richland, WA 99352  
509-377-2411  
 P.O. BOX 378  
POFF 85, 12 m. So. of  
Beatty, NV 89203  
702-653-2203

CARRIER NAME: WESTERN STATE TRUCK LINE DATE: 6/21/84  
CARRIER EPA# (if any): \_\_\_\_\_  
ADDRESS: 3841 N. Columbia Blvd.  
CITY: Portland STATE: OR ZIP: 97217  
DRIVER NAME: Leonard J. Hilman PHONE: 800-547-9680

**RADIOACTIVE WASTE GENERATOR MANIFESTS ASSOCIATED WITH THIS SHIPMENT:**

GENERATOR NAME	MANIFEST NO.	GENERATOR NUMBER	GENERATOR NAME	MANIFEST NO.	GENERATOR NUMBER
University of California, Davis	20554	CA, D 09-213-0984			
Univeristy of CA, San Francisco	49261	CA, B 99-000-0599			
San Francisco General Hospital	49267	CA, B 99-001-0811			
Office of Emergency Services	49237	CA, B 99-001-0465			
University of Pacific	49238	CA, B 99-000-6070			
Syntax, Inc.	49234	CA, D 00-923-8411			
Codon	49268	CA, B 99-000-0213			
SouthWest Nuclear Company	49705	CA, D 99-001-0226			
CA Polytechnic State University	48960	CA, D 09-445-5102			

- 1) A complete copy of each of the generator manifests listed above must be attached to this manifest.
- 2) A copy of the manifest must be mailed to the assigned US Ecology site and a separate copy must accompany the waste.

**WASTE COLLECTOR CERTIFICATION**

THE UNDERSIGNED CERTIFIES THAT THE WASTE DESCRIBED HEREIN HAS NOT BEEN PROCESSED, REPACKAGED OR TREATED IN ANY MANNER WHICH WOULD INVALIDATE THE INDIVIDUAL GENERATOR'S CERTIFICATION:

Thomas J. Dias 6-21-84

- CHECK BELOW FOR PROPER DISTRIBUTION OF THIS COPY:
- 1) ORIGINAL SITE COPY (To accompany shipment)
  - 2) ORIGINAL SITE COPY (To be mailed to site)
  - 3) CHAINED COPY
  - 4) SHARED COPY

**FOR US ECOLOGY USE ONLY**

THIS IS TO ACKNOWLEDGE THAT, EXCEPT AS NOTED BELOW, ALL PACKAGES DESCRIBED ON THE ATTACHED MANIFESTS WERE RECEIVED AT THE CONSIGNEE US ECOLOGY DISPOSAL SITE ON THE DATE INDICATED BELOW:

NO EXCEPTIONS  
 EXCEPTIONS ARE AS FOLLOWS:

Received  
- copy  
4/7/83

GENERATOR NUMBER K.A.R. 19.9 - 10.0 - 1874.9

GENERATOR NAME Cal. State Polytechnic University  
ADDRESS Aero & Mech. Engrg. Dept

CITY San Luis Obispo STATE CA ZIP 93407

CONTACT R. W. Adimison, Prof. M.E.

PHONE 805/546-1115 ext 2407

USER PERMIT NO 2514 SHIPMENT NO 5-24-32

**RADIOACTIVE WASTE SHIPMENT & DISPOSAL FORM**  
**US ECOLOGY, INC.**  
EXECUTIVE OFFICE: (502) 426-7160  
P.O. BOX 7246 • LOUISVILLE, KENTUCKY 40207  
Illinois Office: (815) 454-2376

Consigned To:  
 P.O. Box 638  
Richland, WA 99352  
(509) 377-2411  
 P.O. Box 578  
Beatty, NV 89003  
(702) 553-2203

USE THIS NO. ON ALL CONTINUATION PAGES No. 17314 PAGE 1 OF 1

AGENT/BROKER Thomas Gray and Assoc I  
ADDRESS 1205 W. Barkley Ave.  
CITY Orange STATE Ca.  
CONTACT Jeffrey Mellon  
PHONE 714 997-5090 USER PERMIT NO 6920

CARRIER \_\_\_\_\_ SHIPPING DATE \_\_\_\_\_  
TYPE OF CASH \_\_\_\_\_ RADIATION READING \_\_\_\_\_

(15) Item No.	(16) Container Type	(17) Container Volume (Cu Ft)	(18) Container Weight (lbs)	(19) Physical Form	(20) Waste Description	(21) Solidification or Absorbent Media	(22) Chemical Form	(23) Radioisotope	(24) Activity <input type="checkbox"/> Ci <input checked="" type="checkbox"/> Mucuries	(25) Special Nuclear Material (Grams)	(26) Source Material (RA/gram)	Radiation Levels mR/hr		(28) Trans port Group	(29) Waste Class	(30) Label		
												(27) Container Surface	(27) 3 Ft. (1ft)					
1	30 gal 17 gal 11 gal	4.0		Dry SOLID	Sealed Source	None	Radium + Po encapsulated in steel shield with poly concrete wax	Po/Bi Ra/Bi	10.0 5.0	0 0	0 0	7.5 1.0	1.0	I I	- -	Radioactive Material Special Form Yellow II		
(27) TOTALS												4.0	15.0	0	0			

TOT. QUANTITY	PROPER SHIPPING NAME & HAZARD CLASS (PER 49 CFR 172.101)	IDENTIFICATION NUMBER	TOTAL WEIGHT IN POUNDS
	Radioactive Device, N.O.S. - Radioactive Material	UN2911	
	Radioactive Material, Fissile, N.O.S. - Radioactive Material	UN2918	
	Radioactive Material, Low Specific Activity, N.O.S. - Radioactive Material	UN2912	
	Radioactive Material, N.O.S. - Radioactive Material	NA9'91	
	Radioactive Material, Limited Quantity, N.O.S. - Radioactive Material	UN2910	
	Radioactive Material, Special Form, N.O.S. - Radioactive Material		

Total # of Pkgs. This Shipment	Total Activity This Shipment	Total Volume This Shipment
1	15.0 Ci mci	4.0 cu ft

(35) 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 ALL APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION AND ARE IN COMPLIANCE WITH ALL REGULATIONS APPLICABLE AT THE DESIGNATED DISPOSAL SITE.  
K. A. R. 19.9 - 10.0 - 1874.9 R. W. Adimison



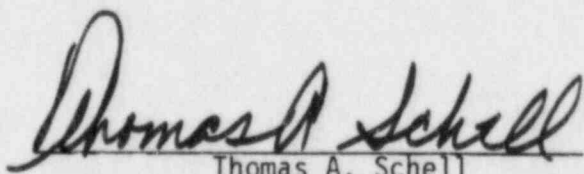
# CALIFORNIA POLYTECHNIC STATE UNIVERSITY

SAN LUIS OBISPO, CALIFORNIA 93407  
(805) 546-0111



## OATH OF AFFIRMATION

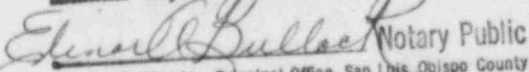
I, Thomas A. Schell, represent California Polytechnic State University's Radiation Safety Office in all matters relating to the submission of documents to the U.S. Nuclear Regulatory Commission referencing Reactor License #R-121; Docket No. 50C-394 and final decommissioning of the AGN-201 Nuclear Reactor. As appointed Radiation Safety Officer for California Polytechnic State University and pursuant to subchapter D-Preparation, Transmittal, and Processing of Documents code of Federal Regulations Title 1, Chapter 1, Part 18.3 submission of documents and letters of transmittal; 18.5 Certified Copies; 18.6 Form of Certification; and 18.7 Signature; I do hereby affirm that each copy of each document is certified to be a true copy of the original on this twenty-fifth day of January in the year of our Lord one thousand nine hundred and eighty five.

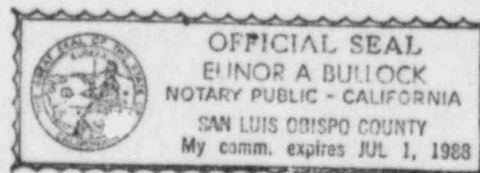
  
Thomas A. Schell  
Radiation Safety Officer

Dated: 1-25-85

Subscribed and sworn to before me this

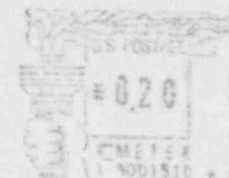
25 day of January 1985

  
Notary Public  
State of California - Principal Office, San Luis Obispo County



DEPARTMENT OF PUBLIC SAFETY  
CALIFORNIA POLYTECHNIC  
STATE UNIVERSITY

SAN LUIS OBISPO, CALIFORNIA 93407



Mr. John A. Zwolinski, Chief  
Operators Reactor Branch #5  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555





FCTC:LLG  
71-0492

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

FEB 24 1983

California Polytechnic State University  
ATTN: Mr. Jeffrey L. Hall  
Department of Public Safety  
San Luis Obispo, CA 93407

Gentlemen:

Enclosed is Quality Assurance Program Approval No. 0492, Revision No. 0. This approval is applicable to a one-time shipment of enriched uranium-oxide fuel discs from a dismantled AGN-201 reactor.

Please note that pursuant to the general license provisions of 10 CFR 71.12(a), (b) that the proposed shipment must be in a Department of Transportation specification container or an NRC approved package.

Sincerely,

A handwritten signature in cursive script, appearing to read "Charles E. MacDonald".

Charles E. MacDonald, Chief  
Transportation Certification Branch  
Division of Fuel Cycle and  
Material Safety, NMSS

Enclosure: As stated

8303040113 LP

2-24-83

QUALITY ASSURANCE PROGRAM APPROVAL  
FOR RADIOACTIVE MATERIAL PACKAGES

0492  
REVISION NUMBER

0

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 71, and in reliance on statements and representations heretofore made in Item 5 by the person named in Item 2, the Quality Assurance Program identified in Item 5 is hereby approved. This approval is issued to satisfy the requirements of Section 71.51 of 10 CFR Part 71. This approval is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

2. NAME California Polytechnic State University			3. EXPIRATION DATE December 31, 1983	
STREET ADDRESS Department of Public Safety			4. DOCKET NUMBER 71-0492	
CITY San Luis Obispo	STATE CA	ZIP CODE 93407		

5. QUALITY ASSURANCE PROGRAM APPLICATION DATE(S)  
February 4, 1983

6. CONDITIONS

The activities authorized by this approval are procurement of packaging, use, and one-time shipment of polyethylene fuel and control rod fuel discs from a AGN-201 dismantled reactor.

It shall remain the responsibility of the licensee-user to ensure that all transportation activities meet the requirements of Section 71.51 of 10 CFR Part 71.

*Charles S. [Signature]*  
U.S. NUCLEAR REGULATORY COMMISSION  
SIGNATURE  
Charles S. [Signature], Chief  
Transportation Certification Branch  
Division of Fuel Cycle & Material Safety

DATE  
FEB 24 1983

8303040116 LP





NUCLEAR REGULATORY COMMISSION

REGION V

1450 MARIA LANE, SUITE 210  
WALNUT CREEK, CALIFORNIA 94596

*JWC*

RECEIVED

APR 1 1983

MAR 28 1983

DIRECTOR OF  
BUSINESS AFFAIRS

Docket No. 50-394

California Polytechnic State University  
San Luis Obispo, California 93401

Attention: R. W. Adamson  
Reactor Administrator

*Wastewater used &  
physical on own  
11. ad 3/28/83  
containers, cover  
& filled.*

Gentlemen:

Subject: NRC Inspection of AGN-201 Reactor

This refers to the inspection conducted by Mr. T. Young Jr. of this office on March 14-16, 1983, of activities authorized by NRC License No. R-121, and to the discussion of our findings held by Mr. Young with you and other members of your staff.

*JJF  
4/11/83*

Areas examined during this inspection are described in the enclosed inspection report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector.

No items of noncompliance with NRC requirements were identified within the scope of this inspection.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room unless you notify this office, by telephone, within ten days of the date of this letter and submit written application to withhold information contained therein within thirty days of the date of this letter. Such application must be consistent with the requirements of 2.790(b)(1).

8309090391 2PT.

11/27/83

Should you have any questions concerning this inspection, we will be glad to discuss them with you.

Sincerely,



D. M. Sternberg, Chief  
Reactor Projects Branch No. 1

Enclosure:  
NRC Inspection Report  
No. 50-394/83-01

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-394/83-01

Docket No. 50-394

License No. R-121

Licensee: California Polytechnic State University  
San Luis Obispo, California 93407

Facility Name: Research Reactor (AGN-201)

Inspection at: California Polytechnic State University

Inspection conducted: March 14-16, 1983

Inspector:

T. Young, Jr.  
T. Young, Jr., Chief, Reactor Projects  
Section 2

3-24-83  
Date Signed

Approved By:

D. M. Sternberg  
D. M. Sternberg, Chief, Reactor Projects  
Branch 1

3/28/83  
Date Signed

Summary:

Inspection on March 14-16, 1983 (Report No. 50-394/83-01)

Areas Inspected: Routine unannounced inspection of facility defueling. The inspection involved seven inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

## DETAILS

### 1. Persons Contacted

- \*R. Adamson, Reactor Administrator
- \*R. Fisher, Senior Reactor Operator
- \*A. Rosen, Nuclear Physicist
- \*J. Hall, Radiation Safety Officer
- T. Nash, Technician
- J. Neelands, Technician

\*Denotes those attending the exit interview.

### 2. Reactor Core Disassembly

The inspector witnessed the reactor core being disassembled. The procedure used was the one proposed by the licensee in his application for authorization to dismantle the facility and dispose of component parts dated April 30, 1981, and as revised by letter dated September 8, 1981. The application was approved by the NRC on October 6, 1981.

The procedure was followed step by step and the fuel handling was supervised by the senior licensed operator. The fuel was then packaged in two Department of Transportation approved shipping containers. The two containers were to be bolted shut, sealed and stored in the reactor room until they could be shipped.

No items of noncompliance or deviations were identified.

### 3. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the completion of the inspection. The inspection findings were discussed, as set forth in paragraph 2.