

50-332

PDR
Return
to 39655

Allied-General Nuclear Services
Post Office Box 847
Barnwell, South Carolina 29812

J. A. Buckham
President

December 13, 1983

(803) 259-1711



Mr. Leland C. Rouse
U. S. Nuclear Regulatory Commission
Washington
DC 20555

Dear Mr. Rouse:

In our discussion of August 24, 1983, you expressed an interest in being kept informed of any changes in the status of shutdown activities at the Barnwell Nuclear Fuel Plant. To this end, I am enclosing copies of:

- Our application to the South Carolina Department of Health and Environmental Control for amendment of our S. C. Radioactive Materials License No. 144, which includes as Attachment 1, the BNFP Decommissioning Plan.
- Our letter of December 9, 1983 to Secretary of Energy Hodel summarizing the current status of shutdown activities.

As you will note from these enclosures, the future of the Barnwell Nuclear Fuel Plant remains uncertain. I will advise you promptly of any change in that regard. If the enclosures raise any other questions, I expect to be here for the next few months and would be pleased to respond.

Sincerely yours,

J. A. Buckham
J. A. Buckham

JAB:jr

Enclosures



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DOCKET NO. 50-332
CONTROL NO. 23166
DATE OF DOC. 12/13/83
DATE RCVD. 12/16/83
FCUF _____ EDR ☒
FCAF ☒ LPDR ☒
WM _____ I&E REF. ☒
WMUR _____ SAFEGUARDS _____
FCTC _____ OTHER ELD

DESCRIPTION:

enclosed is a copy of
their application to the
South Carolina Dept. of Health
Environmental Control & their
letter of 12/09/83
12/19/83 INITIAL C&C

Allied-General Nuclear Services
Post Office Box 847
Barnwell, South Carolina 29812

J. A. Buckham
President

November 10, 1983

Mr. Hayward Shealy, Director
Bureau of Radiological Health
S. C. Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Re: Application for Amendment - South Carolina Radioactive Materials
License No. 144

Dear Mr. Shealy:

Allied-General Nuclear Services (AGNS) herewith submits its application to amend SCRML No. 144 because operations at the Barnwell Nuclear Fuel Plant (BNFP) are being terminated effective December 31, 1983. For the past several months, Allied-General Nuclear Services (AGNS) has been in the process of decommissioning the BNFP in accordance with the AGNS BNFP Decommissioning Plan (the Plan) which is included as Attachment 1 to the enclosed Application for Radioactive Material License. As explained in the Plan, at no time has spent nuclear reactor fuel been present at the BNFP. During cold testing natural uranium was used as surrogate fuel. In addition to natural uranium, laboratory quantities of other radioactive materials have been used for laboratory procedures development, instrument calibrations, and pilot scale process development studies. All of these activities were conducted using materials authorized by the referenced license.

The objective of the decommissioning program is to place the BNFP facilities and the site in such a condition that only a minimal level of continued surveillance will be required. To accomplish this objective, the source, special nuclear and other radioactive materials have been removed from the site by transfer to an authorized recipient.

Transuranic (TRU) sources have been transferred to authorized licensees and to the Department of Energy Savannah River Operations Offices (SR) or their contractor. TRU wastes are also being transferred to SR. These transfers are expected to be completed by December 1, 1983. Non-TRU wastes are being disposed of at Chem-Nuclear's site in Barnwell.

A radioactive materials inventory is enclosed as Attachment 4 to the License Application to show the disposition of the radioactive materials previously held by AGNS as authorized by the referenced license.

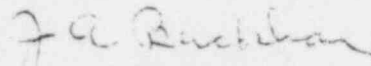
AGNS is contracting with Chem-Nuclear Systems, Inc. of Barnwell, South Carolina to perform the radiological and security surveillance program described in the Plan.

In addition to the information submitted herewith, we will provide you with additional supporting documents as they become available. These documents and their estimated submittal dates are as follows:

<u>Document</u>	<u>Estimated Submittal Date</u>
1. Final Environmental Survey	12/8/83
2. Rockwell Decommissioning Consultant's Final Reports, including Independent Facility Radiological Survey Report	12/15/83
3. AGNS Final Facility Radiological Survey Report	12/15/83

It is our objective to complete all decommissioning activities by December 31, 1983. Therefore, your expeditious review and approval of our enclosed license amendment application will be greatly appreciated. Mr. Monte Hawkins of my staff is available to respond to questions that you may have during your reviews.

Sincerely,


J. A. Buckham
President

JAB:jr

Attachments

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
APPLICATION FOR RADIOACTIVE MATERIAL LICENSE

INSTRUCTIONS: Complete Items 1 through 16 if this is initial application. Supplementary sheets shall be used where applicable. If application is for renewal, Items 1 through 16 shall be completed and indicate new information or changes in the program. If there has been no changes, all items must be completed with reference to a previous application or document and date. Item 16 must be completed on all applications. Mail one copy to: South Carolina Department of Health & Environmental Control, Bureau of Radiological Health, 2600 Bull Street, Columbia, South Carolina 29201. Upon approval of this application, the applicant will receive a State of South Carolina Radioactive Materials License issued in accordance with the general requirements contained in the South Carolina Department of Health & Environmental Control, Regulation 61-63, Radioactive Materials (Title A), and the Atomic Energy and Radiation Control Act, Section 13-7-40 et. seq. of the 1976 Code.

<p>1. (a) NAME AND STREET ADDRESS OF APPLICANT. (Institution, firm, persons, etc.)</p> <p>Allied-General Nuclear Services P. O. Box 847 Barnwell, SC 29812</p> <p>Telephone No.: Area Code (803) 259 1711</p>	<p>(b) STREET ADDRESS(ES) AT WHICH RADIOACTIVE MATERIAL WILL BE USED (if different from 1 (a).)</p> <p>West end of Osborn Road Snelling, South Carolina</p>
<p>2. DEPARTMENT TO USE RADIOACTIVE MATERIAL</p> <p>No Use - Decommissioned Facility See Attachment 1</p>	<p>3 PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.)</p> <p>South Carolina License No. 144</p>
<p>4. INDIVIDUAL USER(S). (Name and title of individual(s) who will use or directly supervise use of radioactive material. Give training and experience in Items 8 and 9.)</p> <p>Company Representatives - J. A. Buckham See Attachment 3</p>	<p>5. RADIATION PROTECTION OFFICER (Name of person designated as radiation protection officer if other than individual user. Attach resume of his training and experience as in Items 8 and 9).</p> <p>J. E. Purvis - CNSI See Attachment 2</p>
<p>6. RADIOACTIVE MATERIAL. (Element and mass number of each.)</p> <p>Natural Uranium Plutonium - 238-239-240</p>	<p>(b) CHEMICAL AND/OR PHYSICAL FORM AND MAXIMUM NUMBER OF MILLICURIES OF EACH CHEMICAL AND/OR PHYSICAL FORM POSSESS AT ANY ONE TIME. (If sealed source(s), also state name of manufacturer, model number, number of sources and maximum activity per source.)</p> <p>Natural Uranium <5 kg Plutonium <1 gram As residual material described in Attachment 1.</p>
<p>7. DESCRIBE PURPOSE FOR WHICH RADIOACTIVE MATERIAL WILL BE USED. Provide sufficient detail to allow potential personnel/exposures to be evaluated. If radioactive material is in the form of a sealed source, include the make and model number of the storage container and/or device in which the source will be stored and/or used.) Attach extra sheets if necessary.</p>	

TRAINING AND EXPERIENCE OF EACH INDIVIDUAL NAMED IN ITEM 5 (Use supplemental sheets if necessary)

8. TYPE OF TRAINING	WHERE TRAINED	DURATION OF TRAINING	ON THE JOB (Circle answer)	FORMAL COURSE (Circle answer)
a. Principles and practices of radiation protection			Yes No	Yes No
b. Radioactivity measurement standardization and monitoring techniques and instruments			Yes No	Yes No
c. Mathematics and calculations basic to the use and measurement of radioactivity	See Attachment 2		Yes No	Yes No
d. Biological effects of radiation			Yes No	Yes No

9. EXPERIENCE WITH RADIATION (Actual use of radioisotopes or equivalent experience.)

Isotope	Maximum Amount	Where Experience Was Gained	Duration of Experience	Type of Use
		See Attachment 2		

10. RADIATION DETECTION INSTRUMENTS (Use supplemental sheets if necessary.)

Type of Instruments (Include make and model number of each)	Number Available	Radiation Detected	Sensitivity Range (mr/hr)	Window Thickness (mg/cm ²)	Use (Monitoring, Surveying, Measuring)
		See Attachment 2			

11. METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED ABOVE

See Attachment 2

12. FILM BADGES, DOSIMETERS, AND BIO-ASSAY PROCEDURES USED (For film badges, specify method of calibrating and processing, or name of supplier.)

See Attachment 2

INFORMATION TO BE SUBMITTED ON ADDITIONAL SHEETS

13. FACILITIES AND EQUIPMENT. Describe laboratory facilities and remote handling equipment storage containers, shielding, fume hoods, etc. Attach an explanatory sketch of the facilities. See Attachment 2.
14. RADIATION PROTECTION PROGRAM. Describe the radiation protection program including control measures. If application covers sealed sources, submit leak testing procedures where applicable, name, training, and experience of person to perform leak tests and arrangements for performing initial radiation survey, servicing, maintenance and repair of the source. See Attach. 2
15. WASTE DISPOSAL. If a commercial waste disposal service is employed, specify name of company. Otherwise, submit detailed description of methods which will be used for disposing of radioactive wastes and estimates of the type and amount of activity involved. Chem-Nuclear System, Inc., Barnwell, SC

CERTIFICATE (This item must be completed by applicant)

16. THE APPLICANT AND ANY OFFICIAL executing this certificate on behalf of the applicant named in Item 1, certify that this application is prepared in conformity with South Carolina Department of Health and Environmental Control Regulations for Control of Radiation and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

Allied-General Nuclear Services

Applicant named in Item 1.

Date

Nov. 12, 1983

By:

GA Buchanan, President