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**RADIOACTIVE MATERIALS SECTION
DIVISION OF RADIATION PROTECTION
N. C. DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**

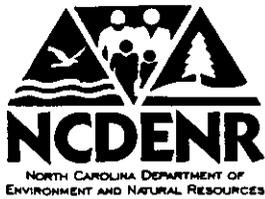
RADIOACTIVE MATERIALS LICENSE

Pursuant to North Carolina Regulations for Protection Against Radiation and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, transfer, and import radioactive materials listed below; and use such radioactive material for the purpose(s) and at the place(s) designated below. This License is subject to all applicable rules and regulations of the North Carolina Department of Environment and Natural Resources now and hereafter in effect and to any conditions specified below.

<p>1. Licensee Name: S&ME, Inc.</p> <p>2a. Mailing Address: 3109 Spring Forest Road, Raleigh, NC 27616</p> <p>b. Physical Address: 3109 Spring Forest Road, Raleigh, NC 27616</p>	<p>3. License No: 092-0922-1 License Type: 0410</p> <p>4. Expiration Date: March 31, 2002</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">New License</td> <td style="width: 25%; text-align: center;">X</td> <td style="width: 25%;">Routine</td> <td style="width: 25%;"></td> </tr> <tr> <td>Renewal</td> <td></td> <td>Administrative</td> <td></td> </tr> </table> <p>5.a. Amendment No.: 28</p> <p>b. Issuance Date: November 30, 2001</p>	New License	X	Routine		Renewal		Administrative	
New License	X	Routine							
Renewal		Administrative							
<p>6. Radioactive Material (element and mass no.)</p> <p>A. Iridium 192</p> <p>B. Cobalt 60</p>	<p>7. Chemical and/or Physical Form</p> <p>A. Sealed Sources (Amersham Model A424-9 or CIS-US Model 702)</p> <p>B. Sealed Sources (Amersham Model 424-18)</p>	<p>8. Maximum Amount of Radioactivity and/or Quantity of Radioactive Material which Licensee May Possess at Any One Time.</p> <p>A. No single source to exceed 110 curies</p> <p>B. No single source to exceed 30 curies</p>							
<p>9. Authorized Use:</p> <p>A. To be used in Amersham Models 660A and 660B exposure devices for industrial radiography, and in an Amersham Model 650L or Industrial Nuclear Model IR-50 source changer for storage and source exchange.</p> <p>B. To be stored in a Tech-Ops Model 741 exposure device until it is returned for disposal.</p>									

CONDITIONS

10. A. The authorized place of receipt and storage of radioactive material is the licensee's address stated in Item 2b. above.
- B. Radioactive materials may be used at temporary jobsites of the licensee throughout the State of North Carolina in areas not under exclusive Federal jurisdiction (Federal installations such as military bases, VA hospitals, etc). Authorization for the use of radioactive materials at temporary jobsites under exclusive Federal jurisdiction shall be obtained either by (1) filing an NRC Form 241 [10 CFR 150.20(b)], or (2) applying for reciprocity, or (3) applying for a specific license from the NRC if the length of the job is to exceed six (6) months.
- C. The North Carolina Division of Radiation Protection Radioactive Materials Section shall be notified of the location(s) of temporary jobsites within North Carolina, except those under Federal jurisdiction, no later than three (3) days prior to the first day of use. If the 3-day notification would impose a hardship on the licensee, the licensee may, upon application to the agency, obtain permission to proceed sooner for a specific job.
- D. This condition does not prohibit the use of radioactive materials in other states; however, before radioactive material can be used at a temporary jobsite in another state, authorization must be obtained from the State, if it is an Agreement State, or from the Nuclear Regulatory Commission for any non-Agreement State, either by filing for reciprocity or applying for a specific license.
11. The licensee shall comply with the provisions of 15A NCAC 11 .0300 "Licensing of Radioactive Material," .0500 "Safety Requirements for Industrial Radiography Operations," .1000 "Notices: Instructions: Reports and Inspection," and .1600 "Standards for Protection Against Radiation." (The North Carolina Regulations for Protection Against Radiation are contained in 15A NCAC 11.)



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CONDITIONS (continued):

12. A. The individuals listed below are the only persons authorized by this license to act as radiographers and radiographers' assistants as defined in 15A NCAC 11 .0502:

<u>Radiographer(s)</u>	<u>Assistant Radiographer(s)</u>
Andrew Jordan	Alan Jackson
Patrick M. McCubbins	Frank DeAngelo
Jody Howard	}
Susan Lloyd	
Perry Vezina	
Chris Anders	
Phil Rollins	

B. The Radiation Safety Officer for the activities authorized under this license shall be Phil Rollins.

13. The licensee is authorized to receive, possess, and use sealed sources of Iridium 192 or Cobalt 60 where the radioactivity exceeds the maximum amount of radioactivity specified in Item 8 of this license provided:

A. Such possession does not exceed the quantity per source specified in Item 8 by more than 20% for Iridium 192 or 10% for Cobalt 60; and

B. Records of the licensee show that no more than the maximum amount of radioactivity per source specified in Item 8 of the license was ordered from the supplier or transferor of the radioactive material; and

C. The levels of radiation for radiographic exposure devices and storage containers do not exceed those specified in 15A NCAC 11 .0503.

14. The licensee shall not transfer possession and/or control of materials or products containing radioactive material as a contaminant except:

A. By transfer of waste to an authorized recipient; or

B. By transfer to a specifically licensed recipient; or

C. As provided otherwise by specific condition of this license pursuant to the requirements of 15A NCAC 11 .1628.

15. The licensee is authorized to possess, use, and transfer up to 1000 pounds of Uranium contained as shielding material in the radiography exposure devices authorized by this license.

16. A. Pursuant to 15A NCAC 11 .0507, the licensee is authorized to perform tests for leakage or contamination of the sealed sources authorized by this license, or tests may be performed by other persons specifically authorized by this agency to perform such services.

B. The periodic leak test required by 15A NCAC 11 .0507 does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six (6) months prior to the date of use or transfer.

17. A. Each radiographic exposure device using depleted uranium (DU) shielding and a "S" tube configuration shall be tested for DU contamination at intervals not to exceed 12 months.

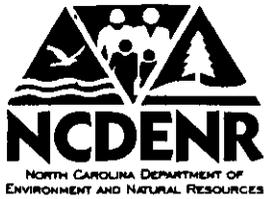


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CONDITIONS (continued):

17. B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the nearest accessible surface to the sealed source. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the agency.
- C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall remove the exposure device from use and make arrangements for proper disposal.
18. Sealed sources of radioactive material shall not be combined for use in open air techniques to produce a radiation level in excess of the level produced by the largest single source authorized by this license for open air use.
19. The licensee shall maintain written procedures for the following:
 - A. inspection and maintenance of radiography exposure devices, transport and storage containers, source changers, survey instruments, radiation machines and associated equipment to be conducted at intervals not to exceed three (3) months to assure proper functioning of components important to safety;
 - B. Inspection and maintenance necessary to maintain Type B packaging used to transport radioactive materials.
20. In accordance with 15A NCAC 11 .0509, the licensee shall maintain current utilization logs for inspection by the agency at the address specified in Item 2b.
21. In accordance with 15A NCAC 11 .0508, the licensee shall conduct a quarterly physical inventory to account for all sealed sources received and possessed under the license.
22. A. The licensee shall conduct observation(s) of the performance of each radiographer and radiographer's assistant during actual operations at intervals not to exceed six (6) months.
B. If a radiographer or radiographer's assistant has not participated in a radiographic operation for more than six (6) months since the last inspection, that individual's performance must be observed and recorded by a practical examination of the individual before he participates in radiographic operations.
C. Notwithstanding the requirements of Subitems A. and B. above, if a single individual serves as both radiographer and Radiation Safety Officer, and performs all radiographic operations, an inspection program is not required.
D. Records of the observations and examinations shall be maintained for a period of three (3) years after the record is made.
23. In addition to the possession limits in Item 8 above, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 15A NCAC 11 .0353 for establishing decommissioning financial assurance.
24. The licensee may transport licensed material or deliver licensed material to a carrier for transport, in accordance with the provisions of Section 71.5, Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material For Transport."
25. The licensee shall annually review its Radiation Protection Program for content and implementation [Ref. 15A NCAC 11 .1603(c)]. Documentation of the Radiation Protection program reviews shall be retained for inspection by the agency [Ref. 15A NCAC 11 .1636].
26. The licensee shall institute the provisions of 15A NCAC 11 .1610 when an occupationally exposed woman voluntarily informs her supervisor, in writing, of her pregnancy and the estimated date of conception.
27. The licensee shall ensure that no individual "member of the public" [Reference: 15A NCAC 11 .0104(64)] receives a radiation dose in excess of the limits specified in 15A NCAC 11 .1611(a) while conducting licensed operations.



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License No.: 092-0922-1

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CONDITIONS (continued):

28. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 7, and 8 of this license in accordance with statements, representations and procedures contained in:
- A. Application with attachments dated November 7, 1997, signed by John R. Browning, Vice President; and letter with attachments dated November 11, 1997, signed by John McGrady, PE, Radiation Safety Officer.
 - B. Letter with attachment dated December 11, 1997, signed by John McGrady, PE, Radiation Safety Officer.
 - C. Letter with attachments dated January 8, 1997, signed by John McGrady, PE, Radiation Safety Officer.
 - D. Letter with attachment dated February 18, 1998, signed by John McGrady, PE, Radiation Safety Officer; and facsimile transmission received February 25, 1998, submitted by John McGrady, PE, Radiation Safety Officer.
 - E. Letter with attachment dated August 14, 1998, signed by John McGrady, PE, RSO.
 - F. Letter with attachments dated September 21, 1998, signed by John McGrady, PE, RSO.
 - G. Letter with attachments dated December 17, 1998, signed by John McGrady, PE, RSO.
 - H. Letter with attachment dated May 10, 1999, signed by John McGrady, P.E., R.S.O.
 - I. Letter with attachments dated June 15, 1999, signed by John McGrady, P.E., R.S.O.
 - J. Letter with attachments dated August 16, 1999, signed by John McGrady, PE, RSO.
 - K. Letter dated August 28, 2000, signed by John McGrady, PE, RSO.
 - L. Application for amendment dated September 11, 2000, signed by John McGrady, Radiation Safety Officer.
 - M. Letter with attachments dated October 20, 2000, signed by John McGrady, PE, RSO.
 - N. Letter with attachments dated June 14, 2001, signed by John McGrady, PE, RSO.
 - O. Amendment application with attachments dated July 29, 2001 signed by Phil Rollins and facsimile dated August 7, 2001 signed by John McGrady, Corporate RSO.
 - P. Letter dated September 10, 2001, signed by John McGrady, PE, Corporate RSO.
 - Q. Application for amendment with attachments dated November 19, 2001, signed by Phil Rollins, R.S.O.

J. Robin Abden
For: Richard M. Fry, CHP

Director, Division of Radiation Protection

S&ME, Inc./Corporate Disbursement Account
3100 Spring Forest Road
Raleigh, North Carolina 27616

138589

PLEASE DETACH AND RETAIN FOR YOUR RECORDS

INVOICE NUMBER	DATE	VOUCHER NO.	AMOUNT
		1057/5835-00	1,400.00

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER



S&ME

Corporate Disbursement Account
3100 Spring Forest Road
Raleigh, North Carolina 27616
(919) 872-2660

Bank of America

66-798
531

138589

Feb 18, 2002

PAY ~~XXX~~ 1,400 ~~XXX~~

DOLLARS AND ~~XXX~~00 ~~XXX~~ CENTS

\$1,400.00

TO THE
ORDER
OF

Nuclear Regulatory Commission
61 Forsyth ST SW STE 23185
Atlanta, GA 30303-8931

Paul Santoro

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