



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

December 22, 2004

Docket No. 03036485
Control No. 135765

License No. 45-08475-02

Larry Price
General Manager
Smurfit-Stone Container Enterprises, Inc.
West Point Mill
P.O. Box 100
West Point, VA 23181

SUBJECT: SMURFIT-STONE CONTAINER ENTERPRISES, INC., ISSUANCE OF
LICENSE AMENDMENT, CONTROL NO. 135765

Dear Mr. Price:

This refers to your license amendment request dated September 30, 2004. Enclosed with this letter is the amended license.

The amended license is written in accordance with current NRC policy and includes new/revised conditions. Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5239, so that we can provide appropriate corrections and answers.

An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(14).

Please note that on October 25, 2004, the NRC suspended public access to ADAMS, and initiated an additional security review of publicly available documents to ensure that potentially sensitive information is removed from the ADAMS database accessible through the NRC's web site. Interested members of the public may obtain copies of the referenced documents for review and/or copying by contacting the NRC Public Document Room pending resumption of public access to ADAMS. The NRC Public Document Room is located at NRC Headquarters in Rockville, MD, and can be contacted at 800-397-4209 or 301-415-4737 or pdr@nrc.gov.

L. Price
Smurfit-Stone Container Enterprises, Inc.

2

Thank you for your cooperation.

Sincerely,

Original signed by Sattar Lodhi, Ph.D.

Sattar Lodhi, Ph.D.
Senior Health Physicist
Security and Industrial Branch
Division of Nuclear Materials Safety

Enclosure:
Amendment No. 01

cc:
William Heese, Radiation Safety Officer

DOCUMENT NAME: E:\Filenet\ML043650402.wpd

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OFFICE	DNMS/RI	N	DNMS/RI	N	DNMS/RI			
NAME	RRolph /RGR/		SLodhi /ASL/					
DATE	12/22/04		12/22/04					

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MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and 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.

<p style="text-align: center;">Licensee</p> <p>1. Smurfit-Stone Container Enterprises, Inc. West Point Mill</p> <p>2. P.O. Box 100 West Point, Virginia 23181</p>	<p>In accordance with the letter dated September 30, 2004,</p> <p>3. License number 45-08475-02 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date January 31, 2014</p> <hr/> <p>5. Docket No. 030-36485 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Nickel 63</p> <p>B. Cesium 137</p>	<p>7. Chemical and/or physical form</p> <p>A. Sealed Source (AEA Technology Model No. NBCD; DuPont Merck Pharmaceutical Model No. NER-004P)</p> <p>B. Sealed Source (3M Health Physics Services Model No. 4P6E; Minnesota Mining and Manufacturing Co. Model No. 4F6S; AECL Model No. C-163; General Radioisotope Products Model Nos. 6002, 6082, and 850233; TN Technologies Inc. Model Nos. 57157C and 696894)</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State</p> <p>B. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State</p>
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**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
45-08475-02

Docket or Reference Number
030-36485

Amendment No. 01

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| <p>6. Byproduct, source, and/or special nuclear material</p> <p>C. Americium 241</p> | <p>7. Chemical and/or physical form</p> <p>C. Sealed Source (AEA Technology Model Nos. AMC.P1 or AMC.P6; Isotope Products Laboratory Model No. GFS Series; BEBIG Model No. Am1.PO8)</p> | <p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>C. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State</p> |
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9. Authorized use:

- A. To be used for sample analysis in compatible gas chromatography devices that have been registered either with the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with a Commission or Agreement State specific license authorizing distribution to persons specifically authorized by a Commission or Agreement State license to receive, possess, and use the devices.
- B. To be used, for material mass, flow, density, and level measurements, in fixed gauging devices that have been registered either with the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or with an Agreement State and have been distributed in accordance with a Commission or Agreement State specific license authorizing distribution to persons specifically authorized by a Commission or Agreement State license to receive, possess, and use the devices.
- C. In NDC Systems Model No. 104P portable gauging devices for measuring physical properties of materials.

CONDITIONS

10. A. Licensed material may be used or stored only at the licensee's facilities located at Smurfit-Stone, West Point Mill, 19th and Main Street, West Point, Virginia.
- B. Licensed material listed in Item 6.C. may also be used at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material, including areas of exclusive Federal jurisdiction within Agreement States.

If the jurisdiction status of a Federal facility within an Agreement State is unknown, the licensee should contact the Federal agency controlling the job site in question to determine

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
45-08475-02Docket or Reference Number
030-36485

Amendment No. 01

whether the proposed job site is an area of exclusive Federal jurisdiction. Authorization for use of radioactive materials at job sites in Agreement States not under exclusive Federal jurisdiction shall be obtained from the appropriate state regulatory agency.

11. A. Licensed material listed in Item 6.A. shall be used by, or under the supervision of, William Heese, Jr.
- B. Licensed material listed in Item 6.B. shall be used by, or under the supervision of, individuals who have received the training described in application dated January 14, 2004 and have been designated, in writing, by the Radiation Safety Officer. The licensee shall maintain records of individuals designated as users for 3 years following the last use of licensed material by the individual.
- C. Licensed material shall be used by, or under the supervision and in the physical presence of, individuals who have received the training described in the facsimile dated December 20, 2004.
12. The Radiation Safety Officer for this license is William Heese, Jr.
13. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.
14. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed six months or at the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State.
- B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the test results received.
- C. Sealed sources need not be tested if they are in storage and are not being used; however, when they are removed from storage for use or transferred to another person and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- D. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
45-08475-02Docket or Reference Number
030-36485

Amendment No. 01

U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations.

- E. Tests for leakage and/or contamination, limited to leak test sample collection, shall be performed by the licensee or by other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. The licensee is not authorized to perform the analysis; analysis of leak test samples must be performed by persons specifically licensed by U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
- F. Records of leak test results shall be kept in units of microcuries and shall be maintained for 5 years.
15. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
16. The licensee shall conduct a physical inventory every six months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.
17. A. Each gauge containing licensed material shall be tested for the proper operation of the on-off mechanism (shutter) and indicator, if any, at intervals not to exceed 6 months or at such longer intervals as specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or the equivalent regulations of an Agreement State.
- B. Notwithstanding the periodic on-off mechanism (shutter) and indicator test, the requirement does not apply to gauges that are stored, not being used, and have the shutter lock mechanism in a locked position. The gauges exempted from this periodic test shall be tested before use.
18. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport or storage, or when not under the direct surveillance of an authorized user.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
45-08475-02Docket or Reference Number
030-36485

Amendment No. 01

19. Maintenance, repair, cleaning, replacement, and disposal of foils contained in detector cells shall be performed only by the device manufacturer or other persons specifically authorized by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
20. The following services shall not be performed by the licensee: installation, initial radiation surveys, relocation, removal from service, dismantling, alignment, replacement, disposal of the sealed source and non-routine maintenance or repair of components related to the radiological safety of the gauge (i.e., the sealed source, the source holder, source drive mechanism, on-off mechanism (shutter), shutter control, shielding). These services shall be performed only by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
21. The licensee may initially mount a gauge containing licensed material listed in Items 6.B. if permitted by the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State and under the following conditions:
- A. The gauge must be mounted in accordance with written instructions provided by the manufacturer;
 - B. The gauge must be mounted in a location compatible with the "Conditions of Normal Use" and "Limitations and/or Other Considerations of Use" in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State;
 - C. The on-off mechanism (shutter) must be locked in the off position, if applicable, or the source must be otherwise fully shielded;
 - D. The gauge must be received in good condition (i.e., package was not damaged); and
 - E. The gauge must not require any modification to fit in the proposed location.
- Mounting does not include electrical connection, activation or operation of the gauge. The source must remain fully shielded and the gauge may not be used until it is installed and made operational by a person specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such operations.
22. A. The licensee may maintain, repair, or replace gauging device components that are not related to the radiological safety of the device and that do not result in the potential for any portion of the body to come into contact with the primary beam or in increased radiation levels in accessible areas.
- B. The licensee may not maintain, repair, or replace any of the following gauging device components: the sealed source, the source holder, source drive mechanism, on-off mechanism (shutter), shutter control, or shielding, or any other component related to the

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
45-08475-02Docket or Reference Number
030-36485

Amendment No. 01

radiological safety of the device, except as provided otherwise by specific condition of this license.

23. Prior to initial use and after installation, relocation, dismantling, alignment, or any other activity involving the source or removal of the shielding, the licensee shall assure that a radiological survey is performed to determine radiation levels in accessible areas around, above, and below the gauge with the shutter open. This survey shall be performed only by persons authorized to perform such services by the U.S. Nuclear Regulatory Commission or an Agreement State.
24. The licensee shall operate each gauging device containing licensed material within the manufacturer's specified temperature and environmental limits such that the shielding and shutter mechanism of the source holder are not compromised.
25. The licensee shall assure that the shutter mechanism, for each gauging device containing licensed material, is locked in the closed position during periods when a portion of an individual's body may be subject to the direct radiation beam. The licensee shall review and modify, as appropriate, its "lock-out" procedures whenever a new device is obtained to incorporate the device manufacturer's recommendations.
26. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
45-08475-02Docket or Reference Number
030-36485

Amendment No. 01

27. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

- A. Application dated January 14, 2004 (ML033370244)
- B. Letter dated January 15, 2004 (ML033530337)
- C. Facsimile dated December 21, 2004



For the U.S. Nuclear Regulatory Commission

Date December 22, 2004

By

Original signed by Sattar Lodhi, Ph.D.

Sattar Lodhi, Ph.D.
Security and Industrial Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406