



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
 DIVISION OF RADIOLOGICAL HEALTH



**RADIOACTIVE MATERIAL LICENSE**

Pursuant to Tennessee Department of Environment and Conservation Regulations, 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 radioactive material listed below; and to 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 Tennessee Department of Environment and Conservation and orders of the Division of Radiological Health, now or hereafter in effect and to any conditions specified below.

LICENSEE		3. License number
1. Name	Surface Technology Systems (STS)	R-01085-I03
2. Address	105 Brentwood Drive Oak Ridge, TN 37830	4. Expiration date
		September 30, 2003
		5. File no.
		R-01085
6. Radioactive Material (Element and Mass Number)	8. Chemical and/or physical form	9. Maximum Radioactivity and/or quantity of material which licensee may possess at any one time.
See	Supplementary	Sheets
10. Authorized Use		
See	Supplementary	Sheets

CONDITIONS

11. Unless otherwise specified, the authorized place of use is the licensee's address stated in item 2, above.

See                      Supplementary                      Sheets

For the Commissioner  
 Tennessee Department of Environment and Conservation

Date of Issuance September 24, 1998

By: Charles Arnott  
 DIVISION OF RADIOLOGICAL HEALTH  
 Charles Arnott  
 Health Physicist

Page 1 of 5 Pages

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF RADIOLOGICAL HEALTH

**RADIOACTIVE MATERIAL LICENSE**

Supplementary Sheet

Page 2 of 5 Pages

License Number R-01085-I03

6. Radioactive Material (Element and Mass Number)	8. Chemical and/or Physical Form	9. Maximum Radioactivity and/or Quantity of Material Which Licensee May Possess at Any One Time
A. Uranium – Depleted and Natural	A. Any	A. As necessary for the uses authorized in Item 10.A. Total not to exceed 10 curies.
B. Any radioactive material with atomic number between 1 and 103, except for special nuclear material.	B. Any	B. No single isotope to exceed 1 curie.
C. Uranium 233	C. Any	C. 200 grams *
D. Uranium enriched in the U-235 isotope	D. Any	D. 350 grams * of contained U-235
E. Plutonium	E. Any	E. 200 grams *

\* For each kind of special nuclear material determine the ratio between the quantity of that special nuclear material and the quantity specified here for the same kind of special nuclear material. The sums of such ratios for all kinds of special nuclear material in combination shall not exceed "1" (i.e. unity).

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF RADIOLOGICAL HEALTH

**RADIOACTIVE MATERIAL LICENSE**

**Supplementary Sheet**

Page 3 of 5 Pages

License Number R-01085-I03

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10. Authorized Use

- A. through E. Possession, storage, packaging, and shipment of radioactive material incident to the surface decontamination of structures, components, and items for the purpose of unrestricted release. Authorized methods of decontamination are the use of the Advanced Recyclable Media System (ARMS), wiping and spraying of components, and the scabbling of concrete. This license also authorizes surveys, characterization, and remediation of radioactively contaminated structures, materials, soils, and soil-like materials. These authorizations shall be in accordance with statements, representations, and procedures contained in application dated July 6, 1998, with attachments, and the references in Condition 19 of this license.

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Conditions

12. The licensee shall comply with applicable provisions of 1200-2-4, 1200-2-5, and 1200-2-10 of "State Regulations for Protection Against Radiation."
13. Operations authorized in Item 10. of this license may be conducted at temporary job sites of the licensee, in areas not under exclusive Federal jurisdiction, throughout the State of Tennessee.

Before radioactive materials can be used at a temporary job site at any Federal facility, the jurisdictional status of the job site must be determined. If the jurisdictional status is unknown, the Federal agency should be contacted to determine if the job site is under exclusive Federal jurisdiction. A response should be obtained in writing or a record should be made of the name and title of the person at the Federal agency who provided the determination and the date that it was provided. Authorization for use of radioactive materials at job sites under exclusive Federal jurisdiction shall be obtained either by: (1) filing a NRC Form-241 in accordance with 10 CFR 150.20(b), "Recognition of Agreement State Licenses,"; or (2) by applying for a specific NRC license.

Before radioactive materials can be used at a temporary job site in another State, authorization shall be obtained from the State if it is an Agreement State, or from the NRC for any non-Agreement State, either by filing for reciprocity or applying for a specific license.

14. A. Radioactive material authorized by this license shall be used by, or under the supervision of, Brad Squibb, Stephen V. Prewett, Ph.D., Steven M. Pocock, David Howe, Dell Reuss, or Paul Gillespie.
- B. The Radiation Safety Officer for this license is Brad Squibb.

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF RADIOLOGICAL HEALTH

**RADIOACTIVE MATERIAL LICENSE**

**Supplementary Sheet**

Page 4 of 5 Pages

License Number R-01085-A03

15. The licensee shall submit to the regulatory agency maintaining jurisdiction in accordance with statements, representations, and procedures contained in application dated July 6, 1998, with attachments, a Decontamination and Decommissioning (D&D) Plan for each project to be performed under this license. This D&D Plan shall be submitted prior to the project being performed.
16. The licensee shall maintain complete and accurate records of the receipt and disposal of radioactive material. The licensee shall, for radioactive material no longer useful for any purpose and for any equipment or supplies contaminated with such material for which further use and decontamination is not planned, define those materials as radioactive waste and treat them as such in accordance with the following provisions:
  - A. Radioactive waste material shall not be stored with non-radioactive waste.
  - B. A written record of all radioactive waste material shall be maintained until it has been determined by a suitable survey or radioassay that it has decayed to background levels or until it has been shipped to an authorized recipient in accordance with all applicable regulations. Accountability of radioactive waste material prepared for shipment but not yet shipped from the licensee's premises shall be maintained by the licensee by an internal record system such that the licensee is constantly aware of the material's location and the proposed time of shipment. Individuals who are involved in the shipping of such material and/or the storage of such material prior to shipment, shall be trained in the precautions necessary for such handling and storage.
  - C. For material which has decayed to background levels as determined by radioassay or external level as measured with appropriately calibrated instruments, records shall indicate that the material was determined to be no longer radioactive and will indicate the methods and results of the survey or analysis.
  - D. Shipment records of radioactive waste material shall be maintained and the licensee shall require written confirmation from the authorized recipient of such material that this material has been received.
  - E. All records and written confirmations required by this condition shall be maintained for inspection by the Department.

The requirements for this condition are in addition to any other requirements for the handling and/or disposal of radioactive material contained in this license and "State Regulations for Protection Against Radiation."

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF RADIOLOGICAL HEALTH

**RADIOACTIVE MATERIAL LICENSE**

**Supplementary Sheet**

Page 5 of 5 Pages

License Number R-01085-A03

17. Except for plutonium contained in a medical device designed for individual human application, no plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee except in packages the design of which the U. S. NRC has specifically approved for transport of plutonium by air.
18. No provision of this license relieves the licensee from compliance with other Federal, State, and local laws, ordinances, and regulations applicable to the licensee's activities.
19. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated July 6, 1998, with attachments, and letter received September 18, 1998, with attachments .