March 18, 2011

License No. 06-00217-06
Docket No. 030-03754

L-7

Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, PA 19406-1415

03003754

Subject: **Application for Renewal of NRC License 06-00217-06**

Ladies and Gentlemen:

ABB Inc. (ABB) requests the approval of the enclosed application for renewal of NRC License No. 06-00217-06. By this submittal, ABB understands that it has met requirements for timely submittal, and that the current License No. 06-00217-06 remains in full effect until final action is taken on this application. This application reflects the current conditions and ABB's mission for the Combustion Engineering (CE) Site.

Please find the completed NRC Form 313, "Application for Materials License", dated March 18, 2011. The information for Items 5-11 has been included on separate paper with this submittal. Several license application revisions, necessary for current conditions, are described in Enclosure I of this submittal. Enclosure II includes the existing complete License Renewal Application for 06-00217-06, including several revision pages needed for renewal.

There is an existing license amendment to support ABB's CE Windsor site decommissioning effort that is currently under review by the NRC and notice has been published in the Federal Register on February 15, 2011. Changes proposed under this license amendment request are also identified in this renewal application for clarity. If there are any comments or questions concerning the enclosed documents, please do not hesitate to contact the Radiation Safety Officer, Heath Downey, at (207) 939-5560, or me at (860) 418-0370, or by E-mail at john.conant@us.abb.com.

Sincerely,

ABB INC.

Donald A. Jackson on behalf of

John F. Conant
Director, Nuclear Engineering and Compliance

JFC/et

Enclosures

xc: John Nicholson (NRC Region I)
Charles Petrillo (Town of Windsor)
Edward Wilds (CTDEP)

FULL COST RECOVERY ACTION

TAC NO. U01852

574708

NMSS/RGN1 MATERIALS-002

ABB Inc.

5 Waterside Crossing
Windsor, CT 06095

Phone: 860-687-4900
Fax: 860-285-0228

www.abb.us

NRC FORM 313 (3-2009) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120 **EXPIRES: 3/31/2012**

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

APPLICATION FOR MATERIALS LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND
ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
612 E. LAMAR BOULEVARD, SUITE 400
ARLINGTON, TX 76011-4125

03003754

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S.NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR *(Check appropriate item)*

- [ ] A. NEW LICENSE
- [ ] B. AMENDMENT TO LICENSE NUMBER
- [x] C. RENEWAL OF LICENSE NUMBER **06-00217-06**

2. NAME AND MAILING ADDRESS OF APPLICANT *(Include ZIP code)*

ABB Inc.
5 Waterside Crossing
Windsor, CT 06095

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

2000 Day Hill Road
Windsor, CT 06095

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

John F. Conant

TELEPHONE NUMBER

(860) 687-4904

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL
a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES *(See 10 CFR 170 and Section 170.31)*

FEE CATEGORY | AMOUNT ENCLOSED $

13. CERTIFICATION. *(Must be completed by applicant)* THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER – TYPED/PRINTED NAME AND TITLE	SIGNATURE	DATE
John F. Conant, Senior Project Manager	for	3/18/2011

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED $	CHECK NUMBER	COMMENTS
APPROVED BY				DATE	574708

APPLICATION FOR MATERIAL LICENSE
ITEMS 5 - 11

<table>
<tr><th>Item</th><th>Response</th><th>Description Attached</th></tr>
<tr><td>5.</td><td>RADIOACTIVE MATERIAL</td><td></td></tr>
<tr><td></td><td>The following radioactive material possession limits are requested for this license:
<table>
<tr><th></th><th>Byproduct, source, and/or special nuclear material</th><th>Chemical and/or physical form</th><th>Maximum amount that licensee may possess at any one time under this license</th></tr>
<tr><td>A.</td><td>Any byproduct material with Atomic Numbers 1 through 83</td><td>Irradiated and/or contaminated debris, inspection and test equipment, test samples, calibration standards, or residues</td><td>0.5 curies</td></tr>
<tr><td>B.</td><td>Any byproduct material with Atomic Numbers 84 through 103</td><td>Irradiated and/or contaminated debris, inspection and test equipment, test samples, calibration standards, or residues</td><td>Not to exceed 3 millicuries per nuclide and 30 millicuries total</td></tr>
<tr><td>C.</td><td>Source material</td><td>Irradiated and/or contaminated debris, inspection and test equipment, test samples, calibration standards, or residues</td><td>100 kilograms</td></tr>
<tr><td>D.</td><td>Uranium-235</td><td>Irradiated and/or contaminated debris, inspection and test equipment, test samples, calibration standards, or residues</td><td>325 grams</td></tr>
</table></td><td>License Renewal Application Section 5</td></tr>
<tr><td></td><td><u>Financial Assurance and Recordkeeping for Decommissioning</u>

A Decommissioning Funding Plan with a Surety Bond and Standby Trust Agreement are established for this license.</td><td>N/A</td></tr>
<tr><td>6.</td><td>PURPOSE FOR WHICH LICENSED MATERIAL WILL BE USED</td><td></td></tr>
<tr><td></td><td>The authorized activities for the licensed material are decommissioning leading to license termination.</td><td>License Renewal Application Section 6</td></tr>
<tr><td>7.</td><td>INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE</td><td></td></tr>
</table>

APPLICATION FOR MATERIAL LICENSE
ITEMS 5 - 11

Item	Response	Description Attached
	The Radiation Safety Officer (RSO) is responsible for implementation and supervision of radiological safety and protection procedures. The Current RSO, Mr. Heath Downey, has been serving in this capacity since December 2006.	License Renewal Application Section 7.3
8.	**TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS**	
	The licensee provides training for personnel working with licensed material commensurate with the task/job hazards.	License Renewal Application Section 7.8
9.	**FACILITIES AND EQUIPMENT**	
	The remaining facilities associated with usage of radiological material at the site no longer house active operations and are in the process of decommissioning.	License Renewal Application Section 9
10.	**RADIATION SAFETY PROGRAM**	
	Audit Program Audits and/or appraisals are performed at least annually.	License Renewal Application Section 7.7
	Radiation Monitoring Instruments Written procedures will be implemented and maintained for calibration and operation of radiation monitoring instruments. Calibration will be performed by written procedure or by authorized service provider.	License Renewal Application Section 10.3
	Material Receipt and Accountability Written procedures will be implemented and maintained for safely opening packages that meet the requirements in 10 CFR 20.1906. Written procedures will be implemented and maintained for licensed material accountability and control to ensure that: • License possession limits are not exceeded; • Licensed material in storage is secured from unauthorized access or removal; • Licensed material not in storage is maintained under constant surveillance and control; and • Records of receipt, transfer, and disposal of licensed material are maintained.	License Renewal Application Section 7.6
	Operating and Emergency Procedures Written procedures will be implemented and maintained for safe use and emergencies.	License Renewal Application Section 7.5

APPLICATION FOR MATERIAL LICENSE
ITEMS 5 - 11

Item	Response	Description Attached
	Procedures may be revised if: • The changes are consistent with the procedures submitted with the license application; • The changes are reviewed and approved by licensee management and the RSO; • Licensee staff is trained in the revised procedures before they are implemented; • The changes do not degrade the effectiveness of the program.	
	Leak Tests Leak tests will be performed at the intervals approved by NRC or an Agreement State and specified in the SSD Registration Certificate. Leak tests will be performed by written procedure or by authorized service provider.	License Renewal Application Section 7.6
	Surveys Radiological surveys will be implemented following written procedures consistent with the types and quantities of materials in use.	License Renewal Application Section 7.5
11.	**WASTE MANAGEMENT**	
	During decommissioning activities, the licensee will generate LLRW. All licensed LLRW shall be disposed of in accordance with the requirements of 10 CFR Part 20 Subpart K.	License Renewal Application Section 11

Enclosure I

Description of Proposed Changes

Description of Proposed Changes

This license renewal application proposes to make administrative and minor technical revisions to update the license to the contemporary status of the CE Windsor Site.

- Title page updated.
- List of Effective Pages updated.
- Page 2, Section 4.0: Update contact information.
- Page 3, Section 5.0: Revise possession limits to reflect current NRC approved limits in license (removed item E from previous).
- Page 3, Section 6.0, 2nd paragraph: Added "Item D is to possess the total inventory of uranium-235 that existed within contaminated structures, soils, and debris as of December 31, 2008. The amount of uranium-235 specified in Item D above excludes undisturbed contaminated structures, soils, and debris and packaged waste that meets the requirements for exemption from classification as fissile material specified in 10 CFR 71.15." to be consistent with current conditions in NRC License No. 06-00217-06.
- Page 4, Section 7.1: Added title to Figure 7.1-1 for clarity.
- Page 8, Section 7.6, 2nd paragraph: Added "and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory" to be consistent with current conditions in NRC License No. 06-00217-06.
- Pages 8-9, Section 7.6, numbered list: Revised the leak test requirements list to be consistent with current conditions in NRC License No. 06-00217-06.
- Page 12, Section 9.0, 1st paragraph: Added "Only 248 acres remain as a controlled area under this license as described in the request for Partial Site Release dated December 27, 2007" to be consistent with current conditions in NRC License No. 06-00217-06.
- Page 13, Section 9.0: Updated Figure 9-1 to reflect current conditions.
- Page 14, Section 10.1, 2nd paragraph: Updated DCGL values. This is a pending change (submitted in August 2010) associated with the current license amendment request under review by the NRC.

Enclosure II

License Renewal Application

ABB INC.

COMBUSTION ENGINEERING SITE
Windsor, CT.

Application for Renewal
US NRC License Number 06-00217-06
Docket Number 030-03754

March 18, 2011

NRC License No. 06-00217-06

LIST OF EFFECTIVE PAGES

LICENSE RENEWAL APPLICATION

Page No.		Effective Date
Title Page		03/18/11
1	Table of Contents	08/30/01
2		03/18/11
3		03/18/11
4		03/18/11
5		10/19/06
6		10/19/06
7		10/19/06
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13		03/18/11
14		08/06/10
15		01/25/08
16		10/19/06

Table of Contents

1.0 License Information

This is an application for amendment of License Number 06-00217-06. The intent of this amendment is to revise and update the current license application for the Combustion Engineering (CE) Windsor Site in order to reflect the contemporary status of the CE Windsor Site.

2.0 Applicant's Name and Address

ABB Inc.
5 Waterside Crossing
Windsor, CT 06095

3.0 Address Where Licensed Material Will Be Used or Possessed

The location of use or possession of material associated with this license is:

2000 Day Hill Road
Windsor, CT 06095

4.0 Person to be contacted About the Application (Mail Address)

Attn: Mr. John F. Conant
Director, Nuclear Engineering and Compliance / Senior Project Manager
ABB Environmental Control & Support
5 Waterside Crossing
Windsor, CT 06095

Telephone: (860) 687-4904
*Mobile (860) 418-0370 (*Business Related) Nuc
Facsimile: (860) 285-0228

5.0 Radioactive Materials Possession Limits

	Byproduct, source, and/or special nuclear material	Chemical and/or physical form	Maximum amount that licensee may possess at any one time under this license
A.	Any byproduct material with Atomic Numbers 1 through 83	Irradiated and/or contaminated debris, inspection and test equipment, test samples, calibration standards, or residues	0.5 curies
B.	Any byproduct material with Atomic Numbers 84 through 103	Irradiated and/or contaminated debris, inspection and test equipment, test samples, calibration standards, or residues	Not to exceed 3 millicuries per nuclide and 30 millicuries total
C.	Source material	Irradiated and/or contaminated debris, inspection and test equipment, test samples, calibration standards, or residues	100 kilograms
D.	Uranium-235	Irradiated and/or contaminated debris, inspection and test equipment, test samples, calibration standards, or residues	325 grams

6.0 Purpose of Use of Licensed Material

Possession and use for those activities directly or indirectly related to decontamination, and decommissioning of buildings, systems, facilities and property at the CE Windsor Site. The licensee may under this license perform decontamination, monitoring, packaging, storage, and shipment of residual waste and receipt of licensed calibration standards without prior NRC approval. The licensee may perform decontamination and decommissioning activities as described in the CE Windsor Site Decommissioning Plan.

Enriched uranium that is authorized under ItemD is to possess the total inventory of uranium-235 that existed within contaminated structures, soils, and debris as of December 31, 2008. The amount of uranium-235 specified in Item D above excludes undisturbed contaminated structures, soils, and debris and packaged waste that meets the requirements for exemption from classification as fissile material specified in 10 CFR 71.15. Due to the diffuse form of this material, it is exempt from criticality controls for special nuclear material in 10 CFR Part 70 and physical security requirements for special nuclear material in 10 CFR Part 73.

7.0 Organization and Administration

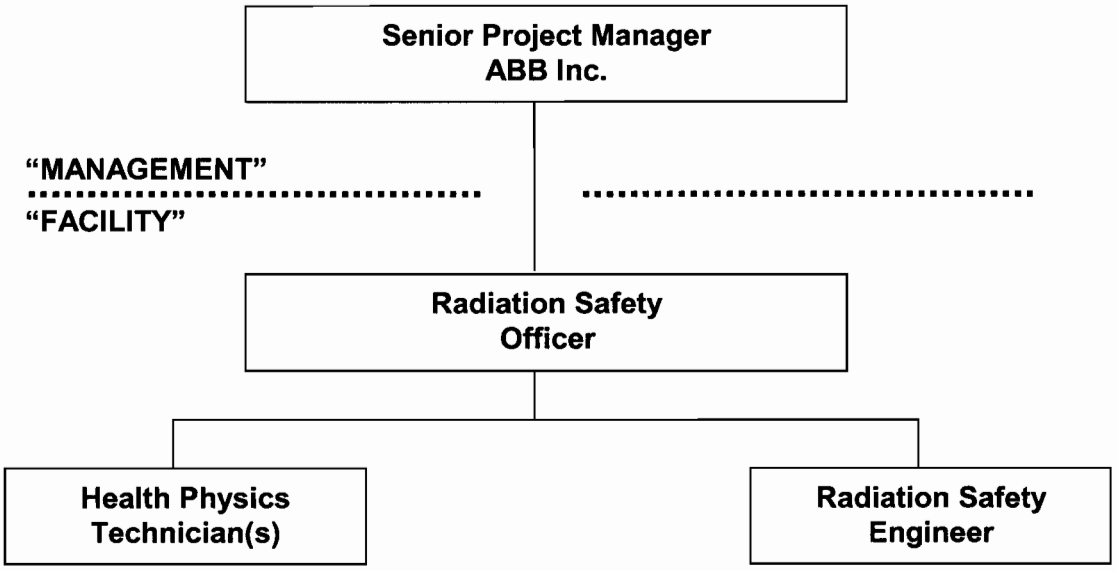
7.1 Management

Senior management appreciates the need for strong management controls for an effective radiation safety program for its license. The Radiation Safety Officer (RSO) has been delegated sufficient time, authority, organizational freedom, management prerogative, and resources to communicate with and direct personnel of the radiation safety staff and others regarding NRC regulations and license provisions. The RSO has and will continue to receive the support of the Management responsible for this license in ensuring that all licensed activities will be conducted in accordance with NRC regulations and the specific terms of this license.

Figure 7.1-1 provides an organization chart depicting the organizational relationships of personnel related to radiation safety for this license application.

Management oversight ensures sufficient mechanisms are in place for adequate control over licensed activities. These include regular reports to management. Annual audits of the program are performed and reports to management are provided to assure safe operations and compliance with regulatory requirements. Section 10 provides further information concerning the radiation safety program.

Figure 7.1-1
Organization Chart



Note 1: RSO, Technician, and Engineer positions may be part-time, temporary, or non-functioning as required for contemporary licensed activities.

7.2 ALARA

ABB Inc. has a strong commitment to the ALARA philosophy. In support of this commitment, corporate management periodically reviews safety related activities, including the ALARA program. The following ALARA policies are implemented for all work at the CE Windsor Site:

The key ALARA objective is to minimize exposure to radioactive material for the public, workers and the environment at the CE Windsor Site.

In the interest of limiting exposures to the public and the environment, radioactive effluents are minimized to the maximum extent possible.

The preferred method of limiting internal exposure of workers is through the use of engineered controls.

7.3 Radiation Safety Officer

The Radiation Safety Officer (RSO) is appointed by a higher level of management. The RSO is responsible for oversight of the day-to-day radiation protection program. He is responsible for communication with management regarding program implementation and compliance status, and he is available to provide advice and assistance on radiological safety matters.

The required education and experience of the RSO are an academic degree in the physical or biological sciences or engineering, or equivalent experience, and at least 5 years' experience with a broad spectrum of radioactive materials. A listing of the duties and responsibilities of the RSO is given in Figure 7.3-1.

The RSO may be contacted during emergencies or when away via telephone (company phone system or home/cellular phone during off-hours. The RSO's primary obligations to ABB are his RSO duties.

The duties, obligations, responsibilities, and authorities of the RSO may be conducted, alternatively, by an individual possessing the required education and experience. This individual shall be designated by the RSO or a higher level of management, and does not require NRC approval.

Figure 7.3-1
Duties and Responsibilities of Radiation Safety Officer

The Radiation Safety Officer is responsible to assure the following:

1. Surveillance of overall activities involving radioactive material, including monitoring and surveys of all areas in which radioactive material is used.

2. Determine compliance with rules and regulations, and license conditions.

3. Monitor and maintain absolute and other special filter systems associated with the use, storage, and disposal of radioactive material.

4. Provide necessary information on all aspects of radiation protection to personnel at all levels of responsibility, pursuant to 10 CFR 19, and 10 CFR 20.

5. Proper delivery, receipt, and conduct of radiation surveys of all shipments of radioactive material arriving at or leaving the site within the scope of this license, including proper packaging and labeling of that radioactive material.

6. Distribute and process personnel monitoring equipment, determine the need for evaluation of bioassays, monitor personnel exposure and bioassay records for trends and high exposures, and notify individuals and their supervisors of exposures approaching maximum permissible amounts and recommend appropriate remedial action.

7. Conduct training programs and otherwise instruct personnel in the proper procedures for the use of radioactive material prior to use, at periodic intervals (refresher training) and as required by changes in procedures, equipment and regulations, etc.

8. Supervise and coordinate the radioactive waste disposal program, including effluent monitoring and maintenance of waste storage and disposal records.

9. Store radioactive materials not in current use, including wastes.

10. Perform or arrange for leak tests on all sealed sources as required by license or regulations and calibration of radiation survey instruments.

11. Maintain an inventory of radioisotopes on site and limit the quantity of radionuclides on site to the amounts authorized by the license.

12. Immediately terminate any activity that could pose a threat to public, workers or the environment.

13. Supervise decontamination, renovation, material control, remediation, and decommissioning operations.

14. Maintain other records not specifically designated above, e.g., receipt, transfer, and survey records as required by 10 CFR 30.51, "Records," and 10 CFR Part 20, Subpart L, "Records" (guidance is provided in NUREG-1460, dated November 1992, "Guide to Reporting and Record Keeping Requirements").

15. Periodic meetings with and reports to management.

16. Read and understand the NRC regulations applicable to this license and the specific conditions in this license.

17. Designate and maintain a list of qualified supervisors and users of licensed materials. Qualified individuals will be identified through evaluation of previous job experiences, education, and/or site-specific training programs.

18. Develop and maintain training programs in accordance with 10 CFR Part 19.12.

19. Develop and maintain operational Radiation Protection procedures to ensure program implementation and compliance with regulatory requirements.

7.4 Radiation Safety Officer Support

The RSO may, as licensed activities require, be supported by health physics (HP) professionals who assist in the implementation and control of the licensed program. This staff fluctuates according to need. General staff structure is provided by Figure 7.1-1.

7.5 Procedures

Activities involving licensed materials shall be conducted in accordance with approved, written procedures and/or Radiation Work Permits (RWPs). Radiation safety duties shall be conducted in accordance with written procedures approved by the RSO. Procedures shall be reviewed and re-approved, at a minimum, biennially. Changes, deletions, or additions to procedures shall be accomplished under the cognizance of, and with the approval of, the RSO.

7.6 Licensed Material Inventory and Accountability

Inventory control and accountability is accomplished by keeping track of receipts and outgoing shipments of material in logs. Running totals are maintained to ensure that possession limits are not exceeded. Purchases of licensed calibration standards shall be from licensed vendors and only with the approval of the RSO.

A physical inventory of sources and/or devices possessed under the license shall be performed every six months. Records of inventories are maintained for a minimum of five years from the date of the inventory and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory. Leak tests of sealed radioactive sources shall be accomplished in accordance with the following:

(1) 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.

(2) Notwithstanding Paragraph (1) above, sealed sources designed to primarily emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.

(3) 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.

(4) Sealed sources need not be tested if they contain only hydrogen-3; or they contain only a radioactive gas; or the half-life of the isotope is 30 days or less; or they contain not more than 100 microcuries of beta- and/or gamma-emitting material or not more than 10 microcuries of alpha-emitting material.

(5) 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.

(6) 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 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.

(7) Tests for leakage and/or contamination, including leak test sample collection and analysis, 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.

(8) Records of leak test results shall be kept in units of microcuries and shall be maintained for 5 years.

7.7 Audits and Appraisals

Inspections, audits and/or assessments shall be performed to determine if materials operations are being conducted in accordance with applicable license conditions and written procedures. Annual audits cover the Radiation Protection Program and are conducted based upon a written plan. A written report shall be prepared and distributed to management and the RSO including the results of the inspection, including non-compliances, if any. Written corrective action plans shall be prepared to address non-compliances, and corrective actions shall be tracked to completion. Radiation Protection Program areas subject to annual review include, but are not limited to:

(1) Radiation Work Permits

(2) Procedures for controlling and maintaining inventories, procurement of radioactive material, individual user and institutional cumulative possession limits, transfer of radioactive materials within the institution, and transfer of radioactive material to other persons/licensees.

(3) Review of previous audit findings and corrective actions.

Radiation protection audits shall be accomplished under the direction of the RSO. Revisions to the audit program shall be accomplished under the cognizance of, and with the approval of, the RSO. The RSO shall be responsible for ensuring that changes to the audit program maintain compliance with this license and applicable regulations.

7.8 Training

Training for personnel working with licensed material is provided commensurate with the hazards faced by the worker. The training program defines training requirements for workers, contractors and visitors. Personnel shall not be allowed to work unsupervised with licensed material prior to completion of the minimum training requirements. The training program will be approved and conducted under the cognizance of the RSO, and will be reviewed and updated, as necessary.

Training shall be conducted in accordance with written, approved procedures. Radiation safety training is scheduled so that each individual assigned to a restricted area is ordinarily trained in radiation protection before entering the area. In special cases where a

worker or visitor must enter a restricted area prior to completion of the training, the individual will be escorted by a trained and qualified individual.

The Radiation Safety Training Program includes periodic refresher training, as necessary, to maintain awareness of the need, and each individual's responsibility, for maintaining exposures ALARA and to update and renew each individual's knowledge of appropriate subjects including emergency procedures and response criteria. Refresher training is normally conducted at intervals not exceeding 24 months. As a practical matter, in instances where a worker's refresher training has lapsed due to changing job assignments or other similar reasons, the worker may resume duties in a restricted area provided the refresher training is completed in a timely manner (ordinarily within 30 days).

Meetings, postings, memos or other means of communication may be used, as necessary, to inform workers of important new developments in procedures, equipment, and regulations that have an immediate impact on the radiation protection aspects of their work.

All revisions to the training required by this license shall be accomplished under the cognizance of, and with the approval of, the RSO. The RSO shall be responsible for ensuring that all changes to training programs maintain compliance with this license and applicable regulations.

The training requirements for NRC licensed activities on the CE Windsor Site are described in a training and qualification procedure, which establishes the training requirements for activities involving potential exposure to radioactive materials. The ABB training program includes: Right to Know Training, Radiological Worker I Training, Radiological Worker II Training, Health Physics Technician Training, and Radiation Safety Staff Training.

7.8.1 Right To Know Training

Training for non-radiological workers, who require unescorted access to health physics Restricted Areas.

7.8.2 Radiological Worker I (RWI) Training

Training for radiological workers whose job assignments require routine, unescorted access to health physics Restricted Areas and Radiation Areas. Workers are required to complete Radiological Worker I training initially, at intervals not to exceed 24 months, and when there are significant changes to health physics policies and procedures that may affect the health and safety of the individual. Radiological Worker I training is also required for personnel who may operate or use devices or equipment that contain accessible controlled radioactive material, be involved in the transport of radioactive material; receive more than 100 mrem in a year from occupational exposure; and/or respond as a member of an Emergency Response Team that may enter health physics Restricted Areas.

7.8.3 Radiological Worker II (RWII) Training

Training for radiological workers whose job assignments require routine, unescorted access to health physics Contamination Areas, and/or Airborne Radioactivity Areas. Workers are required to complete RWII training initially, at intervals not to exceed 24 months, and when there are significant changes to health physics policies and procedures that may affect the health and safety of the individual. Radiological Worker II training is also required for personnel that may perform work involving direct contact with radioactive material that could result in contamination of the worker or the environment.

7.8.4 RWI or RWII Applied Training

Upon successful completion of the academic portion of RWI or RWII Training, students participate in appropriate applied ("hands-on") training. The content and level of difficulty of applied training will be commensurate with the level of Radiological Worker qualification being pursued and commensurate with the associated worker hazards. Applied training is structured to be as realistic as possible to situations and radiological conditions that could be encountered at the CE Windsor Site.

7.8.5 Health Physics Technician (HPT) Training

Health Physics Technicians are trained to the level of knowledge and skills commensurate with their job duties and responsibilities. Health Physics Technicians complete training on procedures specific to their job assignment. The HPT training program ensures that HPTs are trained to meet the requirements of their position. Personnel may be utilized that have previous HPT qualification.

Personnel having previous HPT qualifications will be evaluated according to the following criteria:

HPTs Should:

- Possess a H.S. diploma (or equivalent) and should have at least two years of documented, relevant experience, or
- Possess at least an Associates Degree (or equivalent) in a related field and have at least one years of documented, relevant experience, or
- Possess NRRPT registration.

The RSO evaluates the individual's qualification upon assignment or hire relative to the anticipated scope of work at the CE Windsor Site. If the RSO determines that the individual is qualified, such determination will be documented and placed into the individual's site training records. If the RSO determines that the individual needs site-specific training, he shall assure accommodations to provide it, including appropriate documentation.

Individuals may, at the discretion of the RSO, be assigned to perform specific, limited duties without full HPT qualifications. If this is done, the RSO shall provide documentation to substantiate the individual's specific qualifications, including justification for such.

7.8.6 Radiation Safety Staff

A health physics professional with knowledge and experience sufficient to develop, implement, and audit a Radiation Protection Program at a work site may be assigned as a Radiation Safety Engineer, Radiological Engineer, or similar title. Individuals assigned to such work must be qualified to perform the specific tasks that they will be assigned to perform. Due to the individualized nature of such assignments, *a priori* training and qualification criteria cannot be established. Generally, individuals assigned to such positions will have a related degree, or equivalent, and several years of related experience. The RSO shall make the final determination on an individual's qualification for such assignments and will be responsible for providing documentation for such determination.

7.8.7 Prenatal Radiation Exposure

Women participating in the Radiation Worker training program, to be occupationally exposed, will be provided additional information regarding dose to the Embryo/Fetus. This program will be based on NRC Regulatory Guide 8.13.

8.0 Records

Records pertaining to the Radiation Protection Program, unusual occurrences, inspections, audits, ALARA, personnel exposures, radiation and contamination surveys, effluent monitoring, Environmental Monitoring Program, calibrations, and decommissioning are retained to demonstrate compliance with the conditions of the license and with applicable Federal, State and local regulations. Such records are retained, as a minimum, for the times specified in governing regulations.

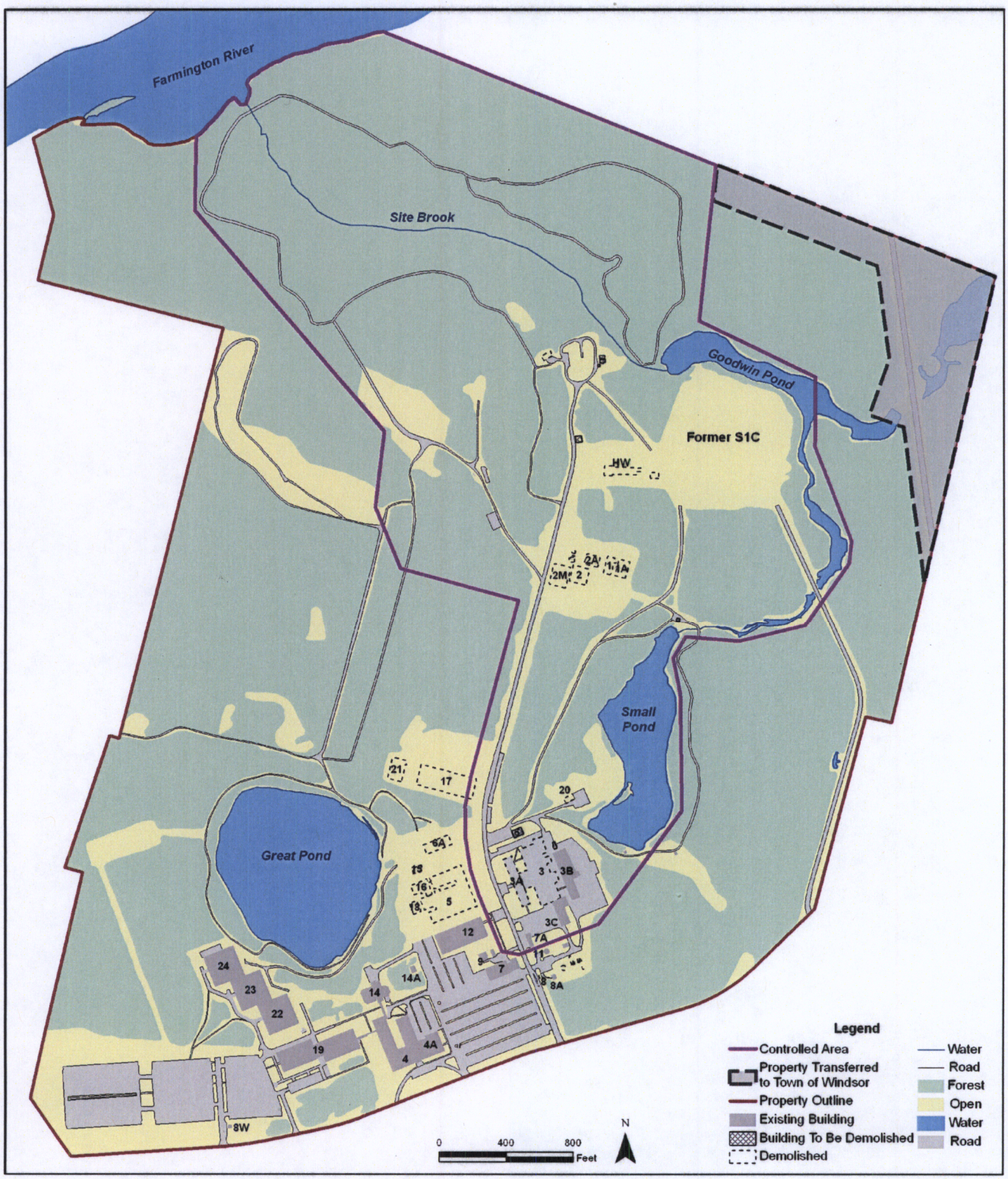
9.0 Facilities and Equipment

The CE Windsor Site is an approximately 600-acre tract of land located in the town of Windsor, Connecticut. The Farmington River flows along the northern boundary of the site. The land adjacent to the North, East, South and West boundaries of the site consists of heavily wooded sections and open fields which have been cultivated for the production of broad leaf tobacco and other farm products. The land area within five miles of the site is somewhat rural, with rolling farmland interspersed among woodland tracts. In recent years, the area has become a bedroom community suburb of the greater Hartford area, with some light industry. Figure 9-1 shows the buildings and facilities presently located on the CE Windsor Site. Only 248 acres remain as a controlled area under this license as described in the request for Partial Site Release dated December 27, 2007.

Buildings originally impacted during site commercial operations have been remediated. These buildings, slabs, foundations (to four feet below grade), and all underground piping and utility systems have been removed under the Plan. Final Status Surveys submitted to the NRC demonstrate compliance for unrestricted release in accordance with 10CFR20.1402. The previously identified FUSRAP areas, Buildings 3 and 6 plus remaining impacted areas, are described in the CE Windsor Site Decommissioning Plan Revision 1. These remaining buildings and areas will also be remediated as part of license termination.

Figure 9-1

CE Windsor Site Plan



10.0 Technical Requirements

10.1 Exposure Control and Monitoring

Personnel dose control and monitoring for licensed activities is described in Sections 10.1.1 and 10.1.2. Monitoring shall be performed for individuals likely to receive in excess of 10% of the applicable limit in 10 CFR 20. Work restrictions shall be implemented if an individual reaches 50% of the applicable limit.

The licensee will survey applicable portions of the facility and maintain contamination levels in accordance with the survey frequencies contained in written procedures. Release of equipment and materials from restricted areas shall be in accordance with the NRC's "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," dated April, 1993. The building DCGLs for the CE Windsor Site are uranium 20,148 dpm/100cm^2 (total alpha plus beta) and Co-60 6,980 dpm/100 cm^2 (total beta) as accepted under Decommissioning Plan Revision 1. The DCGLs for the CE Windsor Site for soils and sediments are:

Uranium – 557 pCi/g total uranium	Thorium – 4.0 pCi/g Th-232
Reactor Byproduct Material – 5.0 pCi/g Co-60	Radium – 4.5 pCi/g Ra-226

Radiological surveys are conducted on a routine basis, both in and adjacent to restricted areas. The type, location and frequency of surveys shall be specified in written procedures. Radiation and contamination surveys are performed only by qualified personnel, with qualification as determined by the RSO.

10.1.1 External Dose Monitoring

Personnel monitoring devices (e.g., TLDs; extremity badges) are used as determined by the RSO. If used, they shall be processed at least quarterly by a vendor accredited by NVLAP.

10.1.2 Internal Dose Monitoring

In vivo and/or in-vitro monitoring may be performed, upon direction of the RSO, to assess and monitor workers' internal dose. Such monitoring may include body/lung counts, bioassay monitoring and/or breathing zone air sampling.

10.2 Environmental Monitoring

10.2.1 Environmental Monitoring, Sampling and Counting

The Site Radiation Protection Program includes environmental monitoring to demonstrate compliance with 10 CFR 20.1301. Samples obtained from surface and well water, sediment, and soil are analyzed for the presence of radioactive materials. Sample location and frequency is specified in written procedures, or at the direction of the RSO.

10.3 Radiation Monitoring Instrumentation

An adequate number of instruments of sufficient accuracy and sensitivity shall be available to ensure compliance with the monitoring requirements of this license and 10 CFR 20. Instruments shall be approved by the RSO, who shall assure that a current list of available calibrated instruments is maintained. Additions, deletions, or substitutions may occur at the discretion of the RSO.

10.3.1 Calibration of Instruments

Hand-held portable radiation survey instruments utilized for radiation protection purposes shall be calibrated at least annually or following instrument maintenance, repair, or adjustment likely to affect the primary calibration. Calibration shall be performed according to written procedures, instructions or other guidance documents reviewed and approved by the RSO and shall be performed using standard sources traceable to NIST or by a commercial calibration service. Check sources shall be used daily or prior to use. An instrument will be removed from service if the source check is not within ± 20 percent of the initial post-calibration value.

Laboratory instruments used for radioactivity measurements are evaluated daily or prior to use. Maintenance and repair shall be performed if the source or background checks are not within prescribed ranges. Calibration, repair and efficiency determination shall be performed according to written procedures, instructions or other guidance documents reviewed and approved by the RSO, and shall be performed using standard sources traceable to NIST or by a commercial calibration service authorized by the NRC or Agreement State to provide radiation detection instrumentation services.

The model survey meter calibration program published in Appendix M to NUREG-1556, Vo. 7, ' Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope,' dated December 1999 will be implemented. Gamma spectrometry system(s) measurements may be performed using High Purity Germanium (HPGe) detectors that have been specifically characterized by the vendor to enable a sourceless efficiency calibration methodology. When this method is selected, the vendor's computer software performs a mathematical efficiency calibration without the use of sources.

11.0 Waste Management

11.1 Waste Collection

Collection of radioactive material deemed to be waste shall be accomplished with written procedures approved by the RSO.

11.2 Waste Storage

Low-level radioactive waste (LLRW) that is collected will typically be packaged for shipment, staged until a full load is accumulated, and then sent for disposal. LLRW produced as a result of site operations is collected, packaged, surveyed, and stored in closed containers in a location prescribed by the RSO. LLRW produced as a result of decontamination and decommissioning activities will be handled as described in Section 12 of the CE Windsor Site Decommissioning Plan.

11.3 Waste Disposal

LLRW will be transferred to a recipient who is properly licensed to receive such waste in accordance with applicable regulations. LLRW may be transferred to a licensed broker or shipped directly to an authorized LLRW disposal facility or other authorized waste processor.

This is to acknowledge the receipt of your letter/application dated

3/18/2011, and to inform you that the initial processing which includes an administrative review has been performed.

RENEWAL 06-0021 7-06

☑ There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

_____.

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 574708.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader