

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED: Chase Environmental Group William Beaumont Hospital Royal Oak, Michigan	2. NRC/REGIONAL OFFICE Region III U.S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532-4351
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REPORT NUMBER(S) 2010-02

3. DOCKET NUMBER(S) 150-00016	4. LICENSEE NUMBER(S) 201-605-90(KY)	5. DATE(S) OF INSPECTION 10/27-12/20/2010
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LICENSEE:

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, NUREG-1600, to exercise discretion, were satisfied.

_____ Non-cited violation(s) were discussed involving the following requirement(a):

- 1. During this inspection certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.

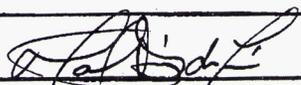
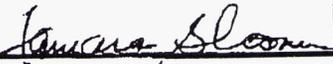
Title 10 Code of Federal Regulations (CFR) 150.20(a) provides, in part, that any person who holds a specific license from an Agreement State is granted an NRC general license to conduct the same activity in non-Agreement States, areas of exclusive Federal jurisdiction within Agreement States, and in offshore waters, provided that the provisions of 10 CFR 150.20(b) have been met.

Title 10 CFR 150.20(b)(5) requires, in part, that any person engaging in activities in non-Agreement States, areas of exclusive Federal jurisdiction within Agreement States, and in offshore waters, shall comply with all terms and conditions of the specific license issued by an Agreement State except such terms or conditions as are contrary to the requirements of this section.

Condition 16 of Commonwealth of Kentucky License Number 201-605-90 states, in part, that the licensee shall submit a decontamination, decommissioning, and remediation and/or other project work plan for each project to be performed under this license and this plan shall include personnel qualifications including those of the radiation control supervisor and other information shall be submitted as required by the references in Condition 19 of this license.

Statement of Corrective Actions

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE'S REPRESENTATIVE	Manuel Diaz		1/18/11
NRC INSPECTOR	Katie Stretl		1/13/11
Branch Chief	Tamara Bloomer		1/18/11

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(Continued)

Condition 19 of Commonwealth of Kentucky License Number 201-605-90 states, in part, that the licensee shall conduct its program in accordance with statements, representations, and procedures contained in the application dated November 9, 2009. The application dated November 9, 2009, included a Radiation Safety Manual, Revision 1, dated November 2009. Section 4.2 of the Radiation Safety Manual states, in part, that the content of work plans shall be commensurate with the scope, complexity, and risk of the project and will address evaluation of hazards including risk of internal and external exposure to the workers and the environment and methods to minimize personnel radiation exposure.

Contrary to the above, on October 13, 2010, the Work Plan for William Beaumont Hospital RDS-112 Cyclotron Removal Project submitted to the NRC, failed to include personnel qualifications including those of the radiation control supervisor and an evaluation of hazards including risk from external exposure during cyclotron removal activities. As a corrective action, the RSO and licensee management committed to evaluate procedures governing work plans to ensure required information is included for future projects.

Title 10 Code of Federal Regulations (CFR) 150.20(a) provides, in part, that any person who holds a specific license from an Agreement State is granted an NRC general license to conduct the same activity in non-Agreement States, areas of exclusive Federal jurisdiction within Agreement States, and in offshore waters, provided that the provisions of 10 CFR 150.20(b) have been met.

Title 10 CFR 150.20(b)(5) requires, in part, that any person engaging in activities in non-Agreement States, areas of exclusive Federal jurisdiction within Agreement States, and in offshore waters, shall comply with all terms and conditions of the specific license issued by an Agreement State except such terms or conditions as are contrary to the requirements of this section.

Condition 19 of Commonwealth of Kentucky License Number 201-605-90 states, in part, that the licensee shall conduct its program in accordance with statements, representations, and procedures contained in the application dated November 9, 2009. The application dated November 9, 2009, included a Radiation Safety Manual, Revision 1, dated November 2009. Section 3.1.4 of the Radiation Safety Manual states the Project Manager's duties include notifying the Radiation Safety Officer (RSO) promptly of any operation or condition which appears to present a radiological hazard to employees or exceeds limitations set forth in the work plan. Additionally, section 3.1.6, of the Radiation Safety Manual states the Health Physics Technician's duties include ensuring that the RSO is notified of conditions or situations that present a radiological hazard, concern, or exceed limitations set forth in the work plan.

Contrary to the above, on October 26, 2010, the Project Manager and Health Physics Technicians failed to notify the RSO of an operation and condition that presented a radiological hazard to employees. Specifically, licensee staff identified an unanticipated dose rate of 30 Roentgen per hour at a distance of approximately 3 inches from a bag containing target material and conducted an operation to move the material to a shipping container without notifying the RSO. As a corrective action, the RSO committed to revise procedures to ensure the notification requirement is incorporated in future work plans and to conduct a review of training and radiation worker's understanding of the notification requirement.

Docket File Information
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6. INSPECTION PROCEDURES 87104, 83822, 86740	7. INSPECTION FOCUS AREAS Cyclotron disassembly and removal operation
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SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM 03225	2. PRIORITY 5	3. LICENSEE CONTACT Manuel Diaz, RSO	4. TELEPHONE NUMBER 865-481-8801
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- Main Office Inspection Next Inspection Date: _____
 Field Office Inspection _____
 Temporary Job Site Inspection _William Beaumont Hospital, Royal Oak, Michigan_____

PROGRAM SCOPE

Chase Environmental Group, Inc. (licensee), an agreement state (Kentucky) licensee filed an NRC Form 241 (reciprocity) on October 13, 2010 to work in the State of Michigan (NRC jurisdiction). The licensee was authorized to perform work in accordance with the reciprocity request and work plan entitled "Work Plan for William Beaumont Hospital RDS-112 Cyclotron Removal Project," dated October 7, 2010.

Performance Observations

The inspection observed the licensee disassembly and removal of cyclotron components in accordance with the Work Plan. However, the inspector identified a violation regarding the failure to provide all information required by license condition in the work plan submitted to the NRC on October 13, 2010 (see Part 1).

On October 26, 2010, the licensee staff identified the dose rate of 30 Roentgen per hour at approximately 3 inches from a bag containing cyclotron target material inside a shielded cabinet. Radiation workers, including the project manager, were immediately informed and stopped work in the vicinity of the material. Later that day, three occupational workers returned into the vault to move the bag from the cabinet to a transportation container. To move the material, the three individuals passed the material from hand to hand to the storage cabinet. On October 28, 2010, the inspector identified the material or operation to move the material was not included in the work plan and that the Radiation Safety Officer had not been notified of the potential hazard. The failure to notify the RSO of the radiological hazard was a violation of a license condition (see Part 1).

The licensee completed a dose assessment for all three individuals involved in the materials transfer. The three individuals wore whole body dosimeters throughout the duration of the entire cyclotron removal project. The whole body exposure to the three individuals involved in the target transfer were 40 millirem (mrem), 20 mrem, and less than 10 mrem. The licensee conducted a reenactment and interviews to determine the extremity dose to the individuals since extremity dosimetry was not worn during the transfer. The licensee provided the NRC a dose assessment summary and individuals' dose estimates in letters dated November 18 and 23, 2010. The estimated maximum extremity exposure from the target handling was 28 mrem. These values are far below the annual limits for occupations workers provided in 10 CFR 20.1201, which are 5 rem for the whole body and 50 rem for extremities.

The inspector observed that the licensee adequately conducted a dose assessment of the individuals involved in the handling of the material with unexpected dose rates; maintained control and adequately posted radiological restricted areas during the cyclotron disassembly and removal project; and characterized, packaged, and shipped radioactive waste for disposal.