



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

AUG 11 2011

Mark Bialek  
Radiation Safety Officer  
ADCO Services, Inc.  
17650 Duvan Drive  
Tinley Park, IL 60477

Dear Mr. Bialek:

Enclosed is Amendment No. 39 amending your NRC Material License No. 12-11286-01 in accordance with your request. Please note that the changes made to your license are printed in **bold font**.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (630) 829-9887 so that we can provide appropriate corrections and answers.

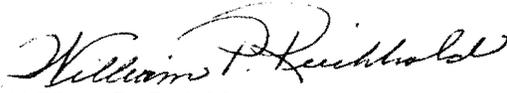
Please note, we have not added James Bell, Jr., Ron Christensen, Daniel Glick, Eugene Vlahakis, and Paul Malnar as authorized users at this time because we need to review their training and experience. You will need to submit their training and experience as described in the enclosed documents from NUREG-1556, Volume 18, "Program-Specific Guidance About Service Provider Licenses". You may also obtain a copy of NUREG-1556, Volume 18, "Program-Specific Guidance About Service Provider Licenses" on the NRC website at <http://www.nrc.gov/reading-rm/doc-collections/nureqs/staff/sr1556/v18/>. Please resubmit your request as additional information to control 575404.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Statement of Policy and Procedure for NRC Enforcement Actions. Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

M. Bialek

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,



William P. Reichhold  
Materials Licensing Branch

License No. 12-11286-01  
Docket No. 030-07490

Enclosure: Amendment No. 39

## OR

- Alternative information demonstrating that the proposed RSO is qualified by training and experience (e.g., Board Certification by the American Board of Health Physicists, completion of a bachelor's and/or master's degree in the sciences with at least one year of experience in the conduct of a radiation safety program of comparable size and scope).

**Note:** It is important to notify NRC, as soon as possible, typically within 30 days, of changes in the designation of the RSO. The name and qualifications of the replacement RSO must be submitted to NRC as part of an amendment request. Applicants should review the regulations for program areas which have specific requirements regarding changes in the RSO.



## 8.7.2 AUTHORIZED USERS

**Regulations:** 10 CFR 19.11; 10 CFR 19.12; 10 CFR 19.13; 10 CFR 30.33(a)(3); 10 CFR 30.34(e); 10 CFR 40.32; 10 CFR 70.22.

**Criteria:** Authorized users (AUs) must have adequate training and experience to use, possess, or provide services involving licensed materials. Duration of training and experience should be commensurate with the expected hazards service provider personnel may encounter during routine and emergency conditions. Successful completion of training as described in Appendix H is evidence of adequate training and experience. Experience requirements could consist of on-the-job training done under the supervision of a qualified individual (AU, RSO, or manufacturer's representative that is authorized by NRC or an Agreement State for the purpose(s) or activities that will be authorized in the license, when issued.).

### Frequency of Training

**Discussion:** An AU is a person whose training and experience meet NRC criteria specified in Appendix H, who is named either explicitly or implicitly on the license, and who uses or directly supervises the use of licensed materials. An AU must ensure the proper use of licensed materials possessed under the license. AUs must have training to provide reasonable assurance that they will use, possess, or provide services involving licensed materials in a safe manner, maintain security, prevent unauthorized access, and respond appropriately to emergencies. The classroom part of the training for AUs could range from a few hours to several days or more.

An AU is considered to be supervising the use of licensed material when he or she directs personnel in operations involving licensed material. Although the AU may delegate specific tasks to supervised users (e.g., maintaining records, conducting routine maintenance), the AU remains responsible for safe

## CONTENTS OF AN APPLICATION

use of licensed material. An individual's supervised hands-on experience should be adequate to address routine licensed activities and include a discussion or drill on emergency procedures.

**Response from Applicant:** Provide either of the following:

- The statement: "Before using licensed material, authorized users will receive the training described in Appendix H in NUREG-1556, Vol. 18, 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Service Provider Licenses,' dated November 2000."

OR

- A description of the training and experience for proposed authorized users.

*Note:* Alternative response will be evaluated using the criteria listed above.

### 8.7.3 ANCILLARY PERSONNEL

**Regulations:** 10 CFR 19.11; 10 CFR 19.12; 10 CFR 19.13; 10 CFR 30.7; 10 CFR 30.9; 10 CFR 30.10; 10 CFR 30.33.

**Criteria:** Ancillary personnel may include individuals whose assigned duties involve exposure to radiation and/or radioactive material, and individuals who in the course of their employment are likely to receive in a year an occupational dose of radiation greater than 1 millisievert (mSv) = (100 mrem). These individuals must receive instruction commensurate with their duties and responsibilities, as required by 10 CFR 19.12.

Ancillary personnel may include clerical, housekeeping, security, any customers' personnel or staff member working under the supervision and direction of the service provider's RSO or AU at the time licensed materials are possessed (incident to providing services) under the service provider's license, and other similar types of personnel whose duties may require them to work in the vicinity of radioactive material, whether they are escorted or not by authorized users. These individuals should be informed about radiation hazards and the appropriate precautions they should take when working in the vicinity of licensed material. The licensee should assess each individual's involvement with licensed material and provide appropriate training.

**Discussion:** Before beginning work with licensed material, most individuals must receive radiation safety training commensurate with their assigned duties. Each individual should also receive periodic refresher training.

Licensees should not assume that safety instruction has been adequately covered by previous radiation safety training. Particular attention should be given to individuals performing work or in the immediate vicinity or work being performed with radioactive materials that may require special procedures, e.g.,

## **Appendix H**

### **Criteria for Acceptable Training and Experience for Authorized Users**

## **Criteria for Acceptable Training and Experience for Authorized Users**

### **Classroom Training**

Classroom training may be in the form of lecture, videotape, or self-study that emphasize practical subject matter important to the safe handling of licensed materials. Duration and technical level of training should be commensurate with the expected hazards encountered during routine and emergency conditions.

### **Frequency of Training**

- Before assuming duties with, or in the vicinity of, radioactive materials;
- Whenever there is a significant change in duties, regulations, or the terms and conditions of the license;
- Annually for refresher training.

### **Suggested Radiation Safety Topics**

- Fundamentals of Radiation Safety:
  - Characteristics of radiation;
  - Units of radiation dose and quantity of radioactivity;
  - Hazards of exposure to radiation;
  - Levels of radiation from licensed material;
  - Methods of controlling radiation dose (time, distance, and shielding);
  - ALARA concept.
- Radiation Detection Instruments:
  - Operation;
  - Calibration;
  - Limitations of radiation survey instruments;
  - Radiation survey techniques for measuring radiation field;
  - Radiation survey techniques for measuring removable/fixed contamination;
  - Handling and proper use of personnel monitoring equipment.

- Radiation Protection Equipment and Use:
  - Proper use of protective equipment;
  - Decontamination of contaminated protection equipment.
- NRC regulations (10 CFR 19 and 20 ).
- NRC regulations (10 CFR 31, 32, 34, 35, 36, 39, 40, 70, and 71) as applicable.
- Licensee's operating and emergency procedures.
- Case histories relevant to operations.
- Course Examination (Didactic):
  - Successful completion of closed-book written/oral examination depending on the complexity and hazards of authorized activities;
  - Review of incorrect answers with student.
- On-the Job Training and Examination (Practical):
  - On-the-job training done under the supervision of a qualified individual (AU, RSO, or manufacturer's representative authorized by NRC or an Agreement State) that includes supervised hands-on experience performing the task authorized on the license that are commensurate with the expected hazards during routine and emergency conditions;
  - Practical examination consisting of an assessment by the RSO to ensure that each proposed AU is qualified to work independently and that each individual is knowledgeable of the radiation safety aspects of licensed activities. This may be demonstrated by observing the proposed AU perform licensed activities.
- Discussion and/or drill on emergency procedures.
- Retraining on areas found to be deficient in both the practical and didactic areas.

### **Classroom Course Instructor Qualifications**

The person conducting the training should be a qualified individual (e.g., a person who meets the qualifications for RSO or authorized user on the license and is familiar with the licensee's program). Instructors who provide classroom training to individuals in the principles of radiation and radiation safety should have knowledge and understanding of these principles beyond those obtainable in a course similar to the one given to prospective authorized users. Individuals who provide instruction in the hands-on use of licensed materials should have training and experience that would qualify them to be authorized users, or should possess a thorough understanding of the licensee operations.