

# BROAD SCOPE LICENSES APPLICATION CHECKLIST

(USING NUREG 1556, VOL. 11 DATED 4/99)

Licensee/Applicant: Environmental Management Services, Inc. \_\_\_\_\_  
 Control Number: 471716 \_\_\_\_\_  
 Docket Number: 030-37671 \_\_\_\_\_  
 License Number: 04-29295-01 \_\_\_\_\_  
 Date of Application: 2/29/08 \_\_\_\_\_

### REGULATORY PERFORMANCE

Review of last three inspections reveals no **major regulatory considerations**.

DATE	INSPECTOR	VIOLATIONS
■		
■		
■		

Major violations/repeat violations:  
 Reviewer and inspector concerns:

### CONTENTS OF APPLICATION

#### ITEM 1 ACTION TYPE

(X) New ( ) Renewal ( ) Amendment

#### ADMINISTRATIVE REVIEW

(X) Current Guidance Used  
 (X) References in Application Based on Current Regulations  
 ( ) All Attachments Referenced Included (RSO Delegation of Authority missing)  
 (X) Signature on Application

#### ITEM 2 NAME AND MAILING ADDRESS

Name: Environmental Mangement Services, Inc. \_\_\_\_\_  
 Mailing Address: \_P.O. Box 31324  
 150 North Wiget Lane, Suite 101  
 Walnut Creek, CA 94598

**ITEM 3 ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED:**

Location of Storage and  
Use Address: \_\_\_\_\_

\_\_\_\_\_

Temporary Job Sites

**ITEM 4 PERSON TO BE CONTACTED ABOUT APPLICATION:**

Name: \_Jeff Thompson\_\_\_\_\_

Phone No.: 303-253-1312\_\_\_\_\_

Appendix C : Suggested Format for Providing Information Requested in Items 5 Through 11 of NRC Form 313

Item No.	Suggested Response	Yes	Description Attached
5.	<p><b>RADIOACTIVE MATERIAL</b></p> <p><b>Unsealed and/or Sealed Sources</b></p>	X	X
	<p>Applicants for a Type A broad scope license should request any form of byproduct material with atomic numbers from 1 through 83. The applicant should state the maximum quantity of each radionuclide to be possessed at any one time and the total cumulative quantity for all radionuclides. The applicant should separately list individual radionuclides needed in much larger quantities or in much smaller quantities than that described in the atomic number 1-83 request. The maximum quantities of nuclides with atomic numbers above 83 also should be listed separately.</p>	X	X

Item No.	Suggested Response	Yes	Description Attached
	<p>A separate listing should also be submitted for sealed sources needed in larger quantities than described in the atomic number 1-83 request. Applicants must provide the manufacturer's name and model number for each requested sealed source and device so that NRC can verify that they have been evaluated in an Sealed Source and Device (SSD) Registration Certificate or specifically approved on a license. This information need not be submitted if the licensee is authorized to possess the requested quantity of radioactive material in unsealed form and the licensee performs the required safety evaluation of the source and device.</p>		
	<p>Possession requests should be categorized into general areas of use, e.g., research and development activities, routine gauging activities, self-shielded irradiators, instrument calibrators, and medical applications.</p>		

Item No.	Suggested Response	Yes	Description Attached
	<p>Licensees who possess radioactive materials in excess of the quantities listed in 10 CFR 30.72 must provide with the application either of the following: (1) an evaluation showing that the maximum off-site dose due to a release of radioactive materials would not exceed 0.01 Sv (1 rem) effective dose equivalent or 0.05 Sv (5 rem) to the thyroid; or (2) an emergency response plan for responding to the release in accordance with the criteria listed in 10 CFR 30.32(i)(3).</p>		
	<p>Applicants for a Type B or Type C broad scope license should request any chemical or physical form of byproduct material specified in 10 CFR 33.100, Schedule A. Type B licensees should request the quantity of material specified in 10 CFR 33.11(b). Type C licensees should request the quantity of material specified in 10 CFR 33.11(c).</p>		

Item No.	Suggested Response	Yes	Description Attached
	<b>Financial Assurance and Recordkeeping for Decommissioning</b>		
	Applicants requesting authorization to possess licensed material in excess of the limits specified in 10 CFR 30.35, 10 CFR 40.36, and 10 CFR 70.25 must submit a decommissioning funding plan (DFP) or certification of financial assurance for decommissioning.	N/A	
6.	<b>PURPOSE FOR WHICH LICENSED MATERIAL WILL BE USED</b>		
	Describe in general terms the use or purpose of each requested radioisotope.	X	X

Item No.	Suggested Response	Yes	Description Attached
7.	<b>INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM</b>		
	<b>Executive Management</b>		
	The applicant must describe administrative controls and provisions relating to organization and management and management review necessary to assure safe operations. It is recommended that the applicant submit an organizational chart describing the management structure, reporting paths, and the flow of authority between executive management, the RSC (for Type A broad scope), and the RSO (For Type A and Type B broad scope).	X	X

Item No.	Suggested Response	Yes	Description Attached
	<b>Radiation Safety Committee</b>		
	Applicants for a Type A broad scope license should submit the following:		
	<ul style="list-style-type: none"> <li>• Description of the duties and responsibilities of the RSC.</li> </ul>	X	X
	<ul style="list-style-type: none"> <li>• Criteria used for selecting members to the RSC, including what members and number of members constitutes a quorum. Members should be indicated by position title, rather than by name.</li> </ul>	X	X
	<ul style="list-style-type: none"> <li>• Criteria used by the RSC and RSO for approving new users and new uses.</li> </ul>	X	X

Item No.	Suggested Response	Yes	Description Attached
	In addition, applicants for a Type A broad scope license who are requesting the flexibility to make some program changes and revise some procedures previously approved by the NRC without amendment of the license, as described in Section 1 of this document, should submit the following:	X	X
	<ul style="list-style-type: none"> <li>● A description of the duties and responsibilities of the RSC, including:</li> </ul>	X	X
	- review and approval of permitted program and procedural changes prior to implementation;	X	X
	- implementation of program and procedural changes;	X	X
	- audit of licensed operations to determine compliance; and	X	X

Item No.	Suggested Response	Yes	Description Attached
	<p>- taking appropriate actions when noncompliance is identified, including analysis of the cause, corrective actions, and actions to prevent recurrence.</p>	X	X
	<ul style="list-style-type: none"> <li>• A description of the process for procedure and program review and approval, including documentation of the specific change. At a minimum, documentation shall state the reason for the change and summarize the radiation safety matters that were considered prior to approval of the change.</li> </ul>	X	X
	<b>Radiation Safety Officer</b>		
	For Type A and Type B applicants:		
	<ul style="list-style-type: none"> <li>• Submit the name of the proposed RSO;</li> </ul>	X	

Item No.	Suggested Response	Yes	Description Attached
	<ul style="list-style-type: none"> <li>Describe the training and experience for the proposed RSO that demonstrates the individual is qualified to perform the duties required under the license;</li> </ul>	X	X
	<ul style="list-style-type: none"> <li>Submit a statement delineating the RSO's duties and responsibilities ; and</li> </ul>	X	X
	<ul style="list-style-type: none"> <li>Submit a "Radiation Safety Officer Delegation of Authority" signed by the licensee's executive management.</li> </ul>	X	
	For Type B applicants:		
	<ul style="list-style-type: none"> <li>Submit the criteria used by the RSO to approve new users and uses of byproduct material.</li> </ul>		

Item No.	Suggested Response	Yes	Description Attached
	For Type C applicants:		
	Submit the name of the person who will serve as the individual responsible for the day-to-day operation of the radiation safety program, e.g., Radiation Safety Officer, who will be contacted if there are further questions about this application, and who is duly authorized to act for the applicant or licensee as required by 10 CFR 30.32(c).		

Item No.	Suggested Response	Yes	Description Attached
8.	<b>TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS (INSTRUCTIONS TO WORKERS)</b>		
	Submit a description of the radiation safety training program developed for each group of workers, including: topics covered; qualifications of the instructors; method of training; method for assessing the success of the training; and the frequency of training and refresher training; or identify the model training program described in the appropriate base NUREG corresponding to your particular type of licensed program and submit a statement that this training program will be implemented.	X	X

Item No.	Suggested Response	Yes	Description Attached
	<p>In addition, if you are a Type A broad scope licensee or applicant, and you want the flexibility to revise your radiation safety training program without amendment of the license, as discussed in Sections 1 and 8.7.2 of this document, describe the process that will be used to revise and implement your submitted training program.</p>	X	X
9.	<b>FACILITIES AND EQUIPMENT</b>		

Item No.	Suggested Response	Yes	Description Attached
	<p>Describe the criteria your RSC and/or RSO, as appropriate, will use to review and approve facilities and equipment. Your description will need to include your method of classifying laboratories based on type, toxicity and quantity of byproduct material being requested. Sample diagrams should be provided for each classification scheme. These should take into consideration shielding, the proximity of radiation sources to unrestricted areas, and other items related to radiation safety. When reviewing facilities where radioactive materials may become airborne, sample diagrams should take into consideration description of the ventilation systems, including pertinent airflow rates, pressures, filtration equipment and monitoring systems. For special application facilities, you will need to specify their locations, (i.e. buildings and room numbers) and special considerations that your RSC and/or RSO will use in authorizing byproduct material</p>	X	X

Item No.	Suggested Response	Yes	Description Attached
10.	<b>RADIATION SAFETY PROGRAM</b>		
	<b>Audit Program</b>		
	Describe the mechanisms used by executive management to ensure that adequate oversight of the program is exercised. In addition, if you are upgrading your limited scope license to a Type A broad scope license or you are renewing your Type A broad scope license, describe the RSC's involvement in these oversight mechanisms.	X	X
	The applicant is not required to, and should not, submit its program for conducting the annual audit required by 10 CFR 20.1101 to the NRC for review during the licensing phase. The adequacy of this audit program will be reviewed during NRC inspection.		



Item No.	Suggested Response	Yes	Description Attached
	Discuss how the RSC and/or RSO, as appropriate, will assure that instruments are properly calibrated at prescribed frequencies.	X	X
	Submit procedures for instrument calibration or state that instruments will be calibrated by a vendor who is licensed by NRC or an Agreement State to perform instrument calibrations. Licensees who want authorization to calibrate their own survey instruments may commit to implementing the model procedures published in Appendix O of this document.	X	
	In addition, if you are a Type A broad scope licensee or applicant, and you want the flexibility to revise your instrument specifications and procedure for calibration of instruments without amendment of the license, as discussed in Sections 1 and 8.7.2 of this document, describe the process that will be used to revise and implement these submitted procedures.	X	X

Item No.	Suggested Response	Yes	Description Attached
	<b>Material Receipt and Accountability</b>		
	Describe your administrative procedures to assure control of procurement and use of byproduct material.	X	X
	While the applicant is required to develop and implement safe opening procedures for packages containing radioactive material, the applicant need not submit the procedures during the licensing process. These procedures will be reviewed during inspection.		
	Describe your administrative controls and provisions relating to materials control, accounting and security.	X	X

Item No.	Suggested Response	Yes	Description Attached
	<p>In addition, if you are a Type A broad scope licensee or applicant, and you want the flexibility to revise your administrative procedures to assure control of procurement and use of byproduct material and your administrative controls and provisions relating to material control, accounting and security, without amendment of your license, as discussed in Sections 1 and 8.7.2 of this document, describe the process that will be utilized by your Radiation Safety Committee to revise these administrative procedures, controls, and provisions.</p>	X	X
	<b>Occupational Dose</b>		
	<p>Submit a description of the method for demonstrating compliance with the referenced regulations or a statement that an evaluation has disclosed that individuals do not require monitoring.</p>	X	X

Item No.	Suggested Response	Yes	Description Attached
	<p>In addition, if you are a Type A broad scope licensee or applicant and you want the flexibility to revise your personnel dosimetry program without amendment of the license, as discussed in Sections 1 and 8.7.2 of this document, describe the process that will be used to revise and implement your submitted personnel dosimetry program.</p>	X	X
	<b>Public Dose</b>		
	<p>No response is required from the applicant, but records and written materials documenting compliance will be examined during inspection. During NRC inspections, licensees must be able to provide documentation demonstrating, by measurement or calculation, that the total effective dose equivalent to the individual likely to receive the highest dose from the licensed operation does not exceed the annual limit for members of the public. For guidance about accepted methodologies for determining doses to members of the public, see Appendix Q of this document.</p>		

Item No.	Suggested Response	Yes	Description Attached
	<b>Safe Use of Radionuclides and Emergency Procedures</b>		
	Provide your procedures for safe use of radionuclides, including security of materials and emergencies. As an alternative, you may state, "We will adopt the procedures for the safe use of radionuclides and emergencies as published in Appendix R of NUREG-1556, Volume 11, "Program-Specific Guidance About Licenses of Broad Scope."	X	X
	In addition, if you are a Type A broad scope licensee or you are applying for a Type A broad scope license, and you want the flexibility to revise your safe use and emergency procedures without amendment of the license, as described in Sections 1 and 8.7.2 of this document, discuss the process that will be used to revise and implement your submitted safe use and emergency procedures.	X	X

Item No.	Suggested Response	Yes	Description Attached
	<b>Surveys</b>		
	Submit procedures to evaluate radiological hazards, both external and internal. If you wish, you may state, "we will survey our facility and maintain contamination levels and perform bioassays of occupationally exposed workers in accordance with the survey frequencies and contamination levels published in Appendix S of NUREG-1556, Volume 11, "Program-Specific Guidance About Licenses of Broad Scope."	X	X
	Submit your leak test procedures, or, as an alternative, you may state, "we will implement the model leak test program published in Appendix T of NUREG-1556, Volume 11, "Program-Specific Guidance About Licenses of Broad Scope."	X	X

Item No.	Suggested Response	Yes	Description Attached
	In addition, if you are a Type A broad scope licensee or you are applying for a Type A broad scope license, and you want the flexibility to revise your survey or leak test program without amendment of the license, as described in Sections 1 and 8.7.2 of this document, discuss the process that will be used to revise and implement your submitted survey and leak test program.	X	X
	<b>Transportation</b> No response is needed from applicants during the licensing phase.		
11.	<b>WASTE MANAGEMENT</b>		
	Provide procedures for waste collection, storage, and disposal by any of the authorized methods described in this section. Applicants should contact appropriate Regional Office of the NRC for guidance to obtain approval of any method(s) of waste disposal other than those discussed in this section.	X	X

James L. Montgomery, Reviewer

R/A

April 23, 2008  
Date