



## At Sea/In Field Radiation Generating Device Authorization

<b>Authorized User:</b> Jerry McManus		<b>Authorization Number:</b> JM08052014	
<b>Institution/Organization and Department:</b> Columbia University		<b>Date Approved:</b> 08/05/2014	
		<b>Expiration Date:</b> 09/22/2014	
<b>Research Vessel/Field Location:</b> R/V Atlantis		<b>Cruise Dates:</b> 08/26/2014-09/11/2014	
<b>Isotope(s):</b> a. Cs-137	<b>Chemical/Physical Form:</b> a. Sealed source	<b>Maximum Activity:</b> a. 7.1 mCi	
<b>Instrument(s):</b> a. HEG-137(A3000) Serial # IPL MM-053			
<b>Authorized Radiation Workers:</b> Leonard Henry, Martin Fleisher, Cassandra Costa, Gisela Winckler, Florence Chen, Jacob Kremers, Jennifer Middleton, Christina Hernandez			
<b>Authorized Use and Storage Areas:</b> Lab Van			
<p><b>Conditions of Authorization:</b></p> <ul style="list-style-type: none"> <li>• A copy of this authorization shall be posted in the work area.</li> <li>• All applicable requirements of the Radiation Safety Manual must be followed.</li> <li>• Doors of work areas and storage areas must bear an appropriate 'Radioactive Material' sign.</li> <li>• All sealed radioactive sources must be sealed appropriately to prevent or minimize leaks and contamination.</li> <li>• All instruments which contain sealed radioactive sources must be properly shielded and labeled at the source.</li> <li>• All sealed radioactive sources must be properly secured or under direct control of authorized personnel.</li> <li>• Do not attempt to dismantle or compromise the integrity of the source housing.</li> <li>• Copies of the latest leak test results must be provided upon request.</li> <li>• Any changes in radioactive material, material use or storage areas, radiation, and/or possession limits will require an amendment to your Field Use Authorization prior to initiating your research.</li> </ul>			
<b>Approved:</b> _____ RSO/Radiation Safety Committee		<b>Date:</b> <u>8/5/2014</u>	