



## Analytical Methods Approved for Drinking Water Compliance Monitoring of Radionuclides

Analysis for the following contaminants shall be conducted in accordance with the methods in the following table, or their equivalent as determined by EPA. The methods for these contaminants are specified in 40 CFR 141.25. Additional methods are listed in Appendix A to Subpart C of Part 141. Monitoring requirements for these contaminants are specified in 40 CFR 141.26.

*The CFR is the legal reference for approved methods and takes precedence over this table. The table should accurately reflect the analytical methods information published in 40 CFR 141. If discrepancies are found, please notify the Safe Drinking Water Hotline (800-426-4791) so that EPA can correct the table.*

### Naturally Occurring Radionuclides:

#### Gross Alpha

Natural uranium and thorium-230 are approved as gross alpha calibration standards for gross alpha with co-precipitation and evaporation methods; americium-241 is approved with co-precipitation methods.

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
EPA 00-02	EPA	In Radiochemistry Procedures Manual: <i>Radiochemical Determination of Gross Alpha Particle Activity in Drinking Water by Co-precipitation</i>	June 1984	EPA 520/5-84-006	<a href="#">EPA 520/5-84-006</a>
7110 C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7110 C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7110 C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7110 C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
7110 C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7110 C-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>

### Gross Alpha and Beta

Natural uranium and thorium-230 are approved as gross alpha calibration standards for gross alpha with co-precipitation and evaporation methods; americium-241 is approved with co-precipitation methods.

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
EPA 00-01	EPA	In Radiochemistry Procedures Manual: <i>Radiochemical Determination of Gross Alpha and Gross Beta Particle Activity in Water</i>	June 1984	EPA 520/5-84-006	<a href="#">EPA 520/5-84-006</a>
EPA 900.0	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Gross Alpha and Gross Beta Radioactivity</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
Page 1 in EMSL LV 053917	EPA	In Radiochemical Analytical Procedures for Analysis of Environmental Samples: <i>Determination of Gross Alpha and Beta in Water</i>	March 1979	EMSLLV053917	<a href="#">EMSL LV 053917</a>
Page 1 in EPA 600/4-75-008	EPA	In Interim Radiochemical Methodology for Drinking Water: <i>Gross Alpha and Beta Radioactivity in Drinking Water</i>	Revised March 1976	EPA 600/4-75-008	<a href="#">600/4-75-008</a>
302	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 13<sup>th</sup> Edition</i>	1971		<a href="#">Standard Methods</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
7110 B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7110 B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7110 B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7110 B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7110 B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7110 B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7110 B-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
R-1120-76	U.S. Geological Survey	<i>In Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments, USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.</i>	1977		<a href="#">USGS</a>

## Radium-226

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
D2460-97	ASTM International	<i>Standard Test Method for Alpha-Particle-Emitting Isotopes of Radium in Water</i>	1997		<a href="#">ASTM International</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
D2460-07	ASTM International	<i>Standard Test Method for Alpha-Particle-Emitting Isotopes of Radium in Water</i>	2007		<a href="#">ASTM International</a>
D3454-97	ASTM International	<i>Standard Test Method for Radium-226 in Water</i>	1997		<a href="#">ASTM International</a>
D3454-05	ASTM International	<i>Standard Test Method for Radium-226 in Water</i>	2005		<a href="#">ASTM International</a>
Ra-04	Dept. of Homeland Security	In EML Procedures Manual, 28 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300	1997		<a href="#">HASL-300</a>
Ra-05	Dept. of Homeland Security	In EML Procedures Manual, 27 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300-ED.27-Vol. I	1990		<a href="#">HASL-300-Ed. 27</a>
EPA 903.0	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Alpha-Emitting Radium Isotopes</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
EPA 903.1	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Radium-226 – Radon Emanation Technique</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
EPA Ra-03	EPA	In Radiochemistry Procedures Manual: <i>Radiochemical Determination of Radium-226 in Water Samples</i>	June 1984	EPA 520/5-84-006	<a href="#">EPA 520/5-84-006</a>
EPA Ra-04	EPA	In Radiochemistry Procedures Manual: <i>Radiochemical Determination of Radium-226, De-emanation Procedure</i>	June 1984	EPA 520/5-84-006	<a href="#">EPA 520/5-84-006</a>
Page 13 in EPA 600/4-75-008	EPA	In Interim Radiochemical Methodology for Drinking Water: <i>Radium-226 in Drinking Water – Alpha-Emitting Radium Isotopes – Precipitation Method</i>	Revised March 1976	EPA 600/4-75-008	<a href="#">600/4-75-008</a>
Page 16 in EPA 600/4-75-008	EPA	In Interim Radiochemical Methodology for Drinking Water: <i>Radium-226 in Drinking Water – Radon Emanation Technique</i>	Revised March 1976	EPA 600/4-75-008	<a href="#">600/4-75-008</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
Page 19 in EMSL LV 053917	EPA	In Radiochemical Analytical Procedures for Analysis of Environmental Samples: <i>Determination of Radium-226 and Radium-228 in Water, Soil, Air and Biological Tissue</i>	March 1979	EMSLLV053917	<a href="#">EMSL LV 053917</a>
GA	Georgia Institute of Technology	<i>The Determination of Radium-226 and Radium-228 in Drinking Water by Gamma-ray Spectrometry using HPGE or Ge(Li) Detectors, Revision 1.2</i>	December 2004		<a href="#">Georgia Institute of Technology</a>
NY	NY Dept. of Health	<i>Determination of Ra-226 and Ra-228 (Ra-02)</i>	January 1980, Revised June 1982		Radiological Sciences Institute for Laboratories and Research, NY State Department of Health, Albany, NY
304	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 13<sup>th</sup> Edition</i>	1971		<a href="#">Standard Methods</a>
305	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 13<sup>th</sup> Edition</i>	1971		<a href="#">Standard Methods</a>
7500-Ra B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-Ra B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-Ra B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-Ra B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-Ra B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-Ra B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
7500-Ra C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-Ra C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-Ra C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-Ra C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-Ra C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-Ra C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500-Ra B-01	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
7500-Ra C-01	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
R-1140-76	U.S. Geological Survey	<i>In Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments, USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.</i>	1977		<a href="#">USGS</a>
R-1141-76	U.S. Geological Survey	<i>In Methods for the Determination of Radioactive Substances in</i>	1977		<a href="#">USGS</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
		<i>Water and Fluvial Sediments</i> , USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.			

## Radium-228

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
EPA 904.0	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Radium-228</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
EPA Ra-05	EPA	In Radiochemistry Procedures Manual: <i>Radiochemical Determination of Radium-228 in Water Samples</i>	June 1984	EPA 520/5-84-006	<a href="#">EPA 520/5-84-006</a>
Page 19 in EMSL LV 053917	EPA	In Radiochemical Analytical Procedures for Analysis of Environmental Samples: <i>Determination of Radium-226 and Radium-228 in Water, Soil, Air and Biological Tissue</i>	March 1979	EMSLLV053917	<a href="#">EMSL LV 053917</a>
Page 24 in EPA 600/4-75-008	EPA	In Interim Radiochemical Methodology for Drinking Water: <i>Radium-228 in Drinking Water – Sequential Method Radium-228/Radium-226</i>	Revised March 1976	EPA 600/4-75-008	<a href="#">600/4-75-008</a>
GA	Georgia Institute of Technology	<i>The Determination of Radium-226 and Radium-228 in Drinking Water by Gamma-ray Spectrometry using HPGE or Ge(Li) Detectors, Revision 1.2</i>	December 2004		<a href="#">Georgia Institute of Technology</a>
NJ	NJ Dept. of Environmental Protection	<i>Determination of Ra-228 in Drinking Water</i>	August 1980		State of New Jersey, Department of Environmental Protection, Trenton, NJ
NY	NY Dept. of Health	<i>Determination of Ra-226 and Ra-228 (Ra-02)</i>	January 1980, Revised June 1982		Radiological Sciences Institute for Laboratories and Research, NY State Department of Health, Albany, NY

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
7500-Ra D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-Ra D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-Ra D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-Ra D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-Ra D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-Ra D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500-Ra D-01	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
R-1142-76	U.S. Geological Survey	<i>In Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments, USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.</i>	1977		<a href="#">USGS</a>

## Uranium

If uranium (U) is determined by mass, a 0.67 pCi/μg conversion factor must be used. This conversion factor is based on 1:1 activity ratio of U-234 and U-238, characteristic of naturally-occurring uranium.



Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
D2907-97	ASTM International	<i>Standard Test Methods for Microquantities of Uranium in Water by Fluorometry</i>	1997		<a href="#">ASTM International</a>
D3972-97	ASTM International	<i>Standard Test Method for Isotopic Uranium in Water by Radiochemistry</i>	1997		<a href="#">ASTM International</a>
D3972-02	ASTM International	<i>Standard Test Method for Isotopic Uranium in Water by Radiochemistry</i>	2002		<a href="#">ASTM International</a>
D3972-09	ASTM International	<i>Standard Test Method for Isotopic Uranium in Water by Radiochemistry</i>	2009		<a href="#">ASTM International</a>
D5174-97	ASTM International	<i>Standard Test Method for Trace Uranium by Pulsed Laser Phosphorimetry</i>	1997		<a href="#">ASTM International</a>
D5174-02	ASTM International	<i>Standard Test Method for Trace Uranium by Pulsed Laser Phosphorimetry</i>	2002		<a href="#">ASTM International</a>
D5174-07	ASTM International	<i>Standard Test Method for Trace Uranium by Pulsed Laser Phosphorimetry</i>	2007		<a href="#">ASTM International</a>
D5673-03	ASTM International	<i>Standard Test Method for Elements in Water by Inductively Coupled Plasma-Mass Spectrometry</i>	2003		<a href="#">ASTM International</a>
D5673-05	ASTM International	<i>Standard Test Method for Elements in Water by Inductively Coupled Plasma-Mass Spectrometry</i>	2005		<a href="#">ASTM International</a>
D5673-10	ASTM International	<i>Standard Test Method for Elements in Water by Inductively Coupled Plasma-Mass Spectrometry</i>	2010		<a href="#">ASTM International</a>
D6239-09	ASTM International	<i>Standard Test Method for Uranium in Drinking Water by High-Resolution Alpha-Liquid Scintillation Spectrometry</i>	2009		<a href="#">ASTM International</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
U-02	Dept. of Homeland Security	In EML Procedures Manual, 27 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300-ED.27-Vol. I	1990		<a href="#">HASL-300-Ed. 27</a>
U-02	Dept. of Homeland Security	In EML Procedures Manual, 28 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300	1997		<a href="#">HASL-300</a>
U-04	Dept. of Homeland Security	In EML Procedures Manual, 27 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300-ED.27-Vol. I	1990		<a href="#">HASL-300-Ed. 27</a>
U-04	Dept. of Homeland Security	In EML Procedures Manual, 28 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300	1997		<a href="#">HASL-300</a>
200.8, Rev. 5.4	EPA	In Methods for the Determination of Metals in Environmental Samples, Supplement I	May 1994	EPA/600/R-94/111	<a href="#">National Environmental Methods Index</a>
EPA 00-07	EPA	In Radiochemistry Procedures Manual: <i>Radiochemical Determination of Thorium and Uranium in Water</i>	June 1984	EPA 520/5-84-006	<a href="#">EPA 520/5-84-006</a>
EPA 908.0	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Uranium – Radiochemical Method</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
EPA 908.1	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Uranium – Fluorometric Method</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
Page 33 in EMSL LV 053917	EPA	In Radiochemical Analytical Procedures for Analysis of Environmental Samples: <i>Isotopic Determination of Plutonium, Uranium, and Thorium in Water, Soil, Air and Biological Tissue</i>	March 1979	EMSLLV053917	<a href="#">EMSL LV 053917</a>
3125	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
3125	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-U B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-U B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-U B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-U B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-U B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-U B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500-U C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-U C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-U C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-U C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-U C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-U C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
7500-U B-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
7500-U C-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
R-1180-76	U.S. Geological Survey	In <i>Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments</i> , USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.	1977		<a href="#">USGS</a>
R-1181-76	U.S. Geological Survey	In <i>Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments</i> , USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.	1977		<a href="#">USGS</a>
R-1182-76	U.S. Geological Survey	In <i>Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments</i> , USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.	1977		<a href="#">USGS</a>

## Man-made Radionuclides: Gamma Emitters

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
D3649-91	ASTM International	<i>Standard Practice for High Resolution Gamma-Ray Spectrometry of Water</i>	1991		<a href="#">ASTM International</a>
D3649-98a	ASTM International	<i>Standard Practice for High Resolution Gamma-Ray Spectrometry of Water</i>	1998		<a href="#">ASTM International</a>
D3649-06	ASTM International	<i>Standard Practice for High Resolution Gamma-Ray Spectrometry of Water</i>	2006		<a href="#">ASTM International</a>
D4785-93	ASTM International	<i>Standard Test Method for Low-Level Analysis of Iodine Radioisotopes in Water</i>	1993		<a href="#">ASTM International</a>
D4785-00a	ASTM International	<i>Standard Test Method for Low-Level Analysis of Iodine Radioisotopes in Water</i>	2000		<a href="#">ASTM International</a>
D4785-08	ASTM International	<i>Standard Test Method for Low-Level Analysis of Iodine Radioisotopes in Water</i>	2008		<a href="#">ASTM International</a>
4.5.2.3	Dept. of Homeland Security	In EML Procedures Manual, 27 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300-ED.27-Vol. I	1990		<a href="#">HASL-300-Ed. 27</a>
Ga-01-R	Dept. of Homeland Security	In EML Procedures Manual, 28 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300	1997		<a href="#">HASL-300</a>
EPA 901.0	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Radioactive Cesium</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
EPA 901.1	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Gamma Emitting Radionuclides</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
EPA 902.0	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Radioactive Iodine</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
Page 92 in EMSL LV 053917	EPA	In Radiochemical Analytical Procedures for Analysis of Environmental Samples: <i>Isotopic Analysis by Gamma Ray Spectra using Lithium-Drifted Germanium Detectors</i>	March 1979	EMSLLV053917	<a href="#">EMSL LV 053917</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7120-97	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
7500-Cs B-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
7500-I B-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
R-1110-76	U.S. Geological Survey	<i>In Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments, USGS Series: Techniques of Water-Resource Investigation. Report</i>	1977		<a href="#">USGS</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
		Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.			

## Radioactive Cesium

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
D2459-72	ASTM International	<i>Standard Test Method for Gamma Spectrometry of Water</i>	1972		<a href="#">ASTM International</a>
D3649-91	ASTM International	<i>Standard Practice for High Resolution Gamma-Ray Spectrometry of Water</i>	1991		<a href="#">ASTM International</a>
D3649-98a	ASTM International	<i>Standard Practice for High Resolution Gamma-Ray Spectrometry of Water</i>	1998		<a href="#">ASTM International</a>
D3649-06	ASTM International	<i>Standard Practice for High Resolution Gamma-Ray Spectrometry of Water</i>	2006		<a href="#">ASTM International</a>
4.5.2.3	Dept. of Homeland Security	In EML Procedures Manual, 27 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300-ED.27-Vol. I	1990		<a href="#">HASL-300-Ed. 27</a>
Ga-01-R	Dept. of Homeland Security	In EML Procedures Manual, 28 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300	1997		<a href="#">HASL-300</a>
EPA 901.0	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Radioactive Cesium</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
EPA 901.1	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Gamma Emitting Radionuclides</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
Page 4 in EPA 600/4-75-008	EPA	In Interim Radiochemical Methodology for Drinking Water: <i>Radioactive Cesium in Drinking Water</i>	Revised March 1976	EPA 600/4-75-008	<a href="#">600/4-75-008</a>



Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
Page 92 in EMSL LV 053917	EPA	In Radiochemical Analytical Procedures for Analysis of Environmental Samples: <i>Isotopic Analysis by Gamma Ray Spectra using Lithium-Drifted Germanium Detectors</i>	March 1979	EMSLLV053917	<a href="#">EMSL LV 053917</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-Cs B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7120-97	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the			<a href="#">Standard Methods</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
		regulations or in Appendix A to Subpart C of Part 141 are approved.			
7500-Cs B-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
R-1110-76	U.S. Geological Survey	In <i>Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments</i> , USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.	1977		<a href="#">USGS</a>
R-1111-76	U.S. Geological Survey	In <i>Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments</i> , USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.	1977		<a href="#">USGS</a>

Radioactive Iodine

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
D3649-91	ASTM International	<i>Standard Practice for High Resolution Gamma-Ray Spectrometry of Water</i>	1991		<a href="#">ASTM International</a>
D3649-98a	ASTM International	<i>Standard Practice for High Resolution Gamma-Ray Spectrometry of Water</i>	1998		<a href="#">ASTM International</a>
D3649-06	ASTM International	<i>Standard Practice for High Resolution Gamma-Ray Spectrometry of Water</i>	2006		<a href="#">ASTM International</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
D4785-93	ASTM International	<i>Standard Test Method for Low-Level Analysis of Iodine Radioisotopes in Water</i>	1993		<a href="#">ASTM International</a>
D4785-00a	ASTM International	<i>Standard Test Method for Low-Level Analysis of Iodine Radioisotopes in Water</i>	2000		<a href="#">ASTM International</a>
D4785-08	ASTM International	<i>Standard Test Method for Low-Level Analysis of Iodine Radioisotopes in Water</i>	2008		<a href="#">ASTM International</a>
4.5.2.3	Dept. of Homeland Security	In EML Procedures Manual, 27 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300-ED.27-Vol. I	1990		<a href="#">HASL-300-Ed. 27</a>
Ga-01-R	Dept. of Homeland Security	In EML Procedures Manual, 28 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300	1997		<a href="#">HASL-300</a>
EPA 901.1	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Gamma Emitting Radionuclides</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
EPA 902.0	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Radioactive Iodine</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
Page 6 in EPA 600/4-75-008	EPA	In Interim Radiochemical Methodology for Drinking Water: <i>Radioactive Iodine in Drinking Water – Precipitation Method</i>	Revised March 1976	EPA 600/4-75-008	<a href="#">600/4-75-008</a>
Page 9 in EPA 600/4-75-008	EPA	In Interim Radiochemical Methodology for Drinking Water: <i>Radioactive Iodine in Drinking Water – Distillation Method</i>	Revised March 1976	EPA 600/4-75-008	<a href="#">600/4-75-008</a>
Page 92 in EMSL LV 053917	EPA	In Radiochemical Analytical Procedures for Analysis of Environmental Samples: <i>Isotopic Analysis by Gamma Ray Spectra using Lithium-Drifted Germanium Detectors</i>	March 1979	EMSLLV053917	<a href="#">EMSL LV 053917</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7120	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-I B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500-I C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-I C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-I C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
7500-I C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-I C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-I C	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500-I D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-I D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-I D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-I D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-I D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-I D	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7120-97	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
7500-I B-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
7500-I C-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
7500-I D-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>

### Radioactive Strontium 89 and 90

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
Sr-01	Dept. of Homeland Security	In EML Procedures Manual, 27 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300-ED.27-Vol. I	1990		<a href="#">HASL-300-Ed. 27</a>
Sr-01	Dept. of Homeland Security	In EML Procedures Manual, 28 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300	1997		<a href="#">HASL-300</a>
Sr-02	Dept. of Homeland Security	In EML Procedures Manual, 27 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300-ED.27-Vol. I	1990		<a href="#">HASL-300-Ed. 27</a>
Sr-02	Dept. of Homeland Security	In EML Procedures Manual, 28 <sup>th</sup> Edition, Vol. I, Department of Energy Report, HASL-300	1997		<a href="#">HASL-300</a>
EPA 905.0	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Radioactive Strontium</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
EPA Sr-04	EPA	In Radiochemistry Procedures Manual: <i>Radiochemical Determination of Radiostrontium</i>	June 1984	EPA 520/5-84-006	<a href="#">EPA 520/5-84-006</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
		<i>in Water, Sea Water, and other Aqueous Media</i>			
Page 29 in EPA 600/4-75-008	EPA	In Interim Radiochemical Methodology for Drinking Water: <i>Radioactive Strontium in Drinking Water</i>	Revised March 1976	EPA 600/4-75-008	<a href="#">600/4-75-008</a>
Page 65 in EMSL LV 053917	EPA	In Radiochemical Analytical Procedures for Analysis of Environmental Samples: <i>Determination of Strontium-89 and Strontium-90 in Water, Vegetation, Soil, and Biological Tissue</i>	March 1979	EMSLLV053917	<a href="#">EMSL LV 053917</a>
303	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 13<sup>th</sup> Edition</i>	1971		<a href="#">Standard Methods</a>
7500-Sr B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500-Sr B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500-Sr B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500-Sr B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500-Sr B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500-Sr B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500-Sr B-01	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to			<a href="#">Standard Methods</a>

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
		Subpart C of Part 141 are approved.			
R-1160-76	U.S. Geological Survey	In <i>Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments</i> , USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.	1977		<a href="#">USGS</a>

Tritium

Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
D4107-91	ASTM International	<i>Standard Test Method for Tritium in Drinking Water</i>	1991		<a href="#">ASTM International</a>
D4107-98	ASTM International	<i>Standard Test Method for Tritium in Drinking Water</i>	1998		<a href="#">ASTM International</a>
D4107-08	ASTM International	<i>Standard Test Method for Tritium in Drinking Water</i>	2008		<a href="#">ASTM International</a>
EPA 906.0	EPA	In Prescribed Procedures for Measurement of Radioactivity in Drinking Water: <i>Tritium</i>	August 1980	EPA 600/4/80-032	<a href="#">EPA 600/4/80-032</a>
EPA H-02	EPA	In Radiochemistry Procedures Manual: <i>Radiochemical Determination of Tritium in Water: Dioxane Method</i>	June 1984	EPA 520/5-84-006	<a href="#">EPA 520/5-84-006</a>
Page 34 in EPA 600/4-75-008	EPA	In Interim Radiochemical Methodology for Drinking Water: <i>Tritium in Drinking Water</i>	Revised March 1976	EPA 600/4-75-008	<a href="#">600/4-75-008</a>
Page 87 in EMSL LV 053917	EPA	In Radiochemical Analytical Procedures for Analysis of Environmental Samples: <i>Determination of Tritium in Water and Biological Tissue (Direct Method)</i>	March 1979	EMSLLV053917	<a href="#">EMSL LV 053917</a>
306	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 13<sup>th</sup> Edition</i>	1971		<a href="#">Standard Methods</a>



Method	Organization	Reference Title	Date	EPA Publication Number	Source of Method
7500- <sup>3</sup> H B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 17<sup>th</sup> Edition</i>	1989		<a href="#">Standard Methods</a>
7500- <sup>3</sup> H B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition</i>	1992		<a href="#">Standard Methods</a>
7500- <sup>3</sup> H B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 19<sup>th</sup> Edition</i>	1995		<a href="#">Standard Methods</a>
7500- <sup>3</sup> H B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 20<sup>th</sup> Edition</i>	1998		<a href="#">Standard Methods</a>
7500- <sup>3</sup> H B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> Edition</i>	2005		<a href="#">Standard Methods</a>
7500- <sup>3</sup> H B	Standard Methods	<i>Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition</i>	2012		<a href="#">Standard Methods</a>
7500- <sup>3</sup> H B-00	Standard Methods Online	Online version. Approval year is designated by the last 2 digits. Only online versions cited in the regulations or in Appendix A to Subpart C of Part 141 are approved.			<a href="#">Standard Methods</a>
R-1171-76	U.S. Geological Survey	<i>In Methods for the Determination of Radioactive Substances in Water and Fluvial Sediments, USGS Series: Techniques of Water-Resource Investigation. Report Number: 05-A5; by Thatcher, L.L., Janzer, V.J., and Edwards, K.W.</i>	1977		<a href="#">USGS</a>