



October 2012 - December 2012

Gamma Spectroscopy Analysis, Portland Station

The estimated overall maximum biological effect from the trace amounts of radiation currently detected in Oregon from the events in Japan is about 0.000160 mrem per day. **To put this into perspective, a person would need to be exposed to this level all day, everyday for over 100 years to equal the exposure from ONE chest X-ray.**

Date	Cesium - 137		Iodine - 131	
	Activity pCi/m ³	Bio Effect mrem	Activity pCi/m ³	Bio Effect mrem
12/28/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/26/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/21/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/18/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/13/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/10/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/03/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/03/2012	<MDA*	<MDA*	<MDA*	<MDA*
11/29/2012	<MDA*	<MDA*	<MDA*	<MDA*
11/26/2012	<MDA*	<MDA*	<MDA*	<MDA*
11/13-21/2012	NO DATA			
10/29/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/18/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/13/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/10/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/06/2012	<MDA*	<MDA*	<MDA*	<MDA*
12/03/2012	<MDA*	<MDA*	<MDA*	<MDA*
11/29/2012	<MDA*	<MDA*	<MDA*	<MDA*
11/26/2012	<MDA*	<MDA*	<MDA*	<MDA*
11/13/2012	<MDA*	<MDA*	<MDA*	<MDA*
11/08/2012	<MDA*	<MDA*	<MDA*	<MDA*
11/05/2012	<MDA*	<MDA*	<MDA*	<MDA*
11/01/2012	<MDA*	<MDA*	<MDA*	<MDA*
10/25/2012	<MDA*	<MDA*	<MDA*	<MDA*
10/22/2012	<MDA*	<MDA*	<MDA*	<MDA*
10/15/2012	<MDA*	<MDA*	<MDA*	<MDA*
10/11/2012	<MDA*	<MDA*	<MDA*	<MDA*
10/08/2012	<MDA*	<MDA*	<MDA*	<MDA*
10/04/2012	<MDA*	<MDA*	<MDA*	<MDA*
10/01/2012	<MDA*	<MDA*	<MDA*	<MDA*

*Minimum Detectable Activity

Units

Picocurie (pCi): A unit of measurement that tells your the rate of decay of a sample of radioactive material.
 1 pCi = 0.037 Becquerel (Bq) = 2.22 radioactive decays per minute



**July 2012 - September 2012
 Gamma Spectroscopy Analysis, Portland Station**

The estimated overall maximum biological effect from the trace amounts of radiation currently detected in Oregon from the events in Japan is about 0.000160 mrem per day. **To put this into perspective, a person would need to be exposed to this level all day, everyday for over 100 years to equal the exposure from ONE chest X-ray.**

Sample End Date	Cesium - 137		Iodine - 131	
	Activity	Bio Effect	Activity	Bio Effect
09/27/2012	<MDA*	<MDA*	<MDA*	<MDA*
09/24/2012	<MDA*	<MDA*	<MDA*	<MDA*
09/20/2012	<MDA*	<MDA*	<MDA*	<MDA*
09/17/2012	<MDA*	<MDA*	<MDA*	<MDA*
09/14/2012	<MDA*	<MDA*	<MDA*	<MDA*
09/11/2012	<MDA*	<MDA*	<MDA*	<MDA*
09/07/2012	<MDA*	<MDA*	<MDA*	<MDA*
09/04/2012	<MDA*	<MDA*	<MDA*	<MDA*
08/30/2012	<MDA*	<MDA*	<MDA*	<MDA*
08/27/2012	<MDA*	<MDA*	<MDA*	<MDA*
08/23/2012	<MDA*	<MDA*	<MDA*	<MDA*
08/20/2012	<MDA*	<MDA*	<MDA*	<MDA*
08/16/2012	<MDA*	<MDA*	<MDA*	<MDA*
08/13/2012	<MDA*	<MDA*	<MDA*	<MDA*
08/09/2012	<MDA*	<MDA*	<MDA*	<MDA*
08/06/2012	<MDA*	<MDA*	<MDA*	<MDA*
08/02/2012	<MDA*	<MDA*	<MDA*	<MDA*
07/30/2012	<MDA*	<MDA*	<MDA*	<MDA*
07/26/2012	<MDA*	<MDA*	<MDA*	<MDA*
07/23/2012	<MDA*	<MDA*	<MDA*	<MDA*
07/19/2012	<MDA*	<MDA*	<MDA*	<MDA*
07/16/2012	<MDA*	<MDA*	<MDA*	<MDA*
07/11/2012	<MDA*	<MDA*	<MDA*	<MDA*
07/05/2012	<MDA*	<MDA*	<MDA*	<MDA*
07/03/2012	<MDA*	<MDA*	<MDA*	<MDA*

*Minimum Detectable Activity

Units

Picocurie (pCi): Measures the rate of decay of a sample of radioactive material.
 1 pCi = 0.037 Becquerel (Bq) = 2.22 radioactive decays per minute



April 2012 - June 2012
Gamma Spectroscopy Analysis, Portland Station

The estimated overall maximum biological effect from the trace amounts of radiation currently detected in Oregon from the events in Japan is about 0.000160 mrem per day. **To put this into perspective, a person would need to be exposed to this level all day, everyday for over 100 years to equal the exposure from ONE chest X-ray.**

Sample End Date	Cesium - 137		Iodine - 131	
	Activity pCi/m ³	Bio Effect mrem	Activity pCi/m ³	Bio Effect mrem
06/29/2012	<MDA*	<MDA*	<MDA*	<MDA*
06/25/2012	<MDA*	<MDA*	<MDA*	<MDA*
06/22/2012	<MDA*	<MDA*	<MDA*	<MDA*
06/29/2012	<MDA*	<MDA*	<MDA*	<MDA*
06/14/2012	<MDA*	<MDA*	<MDA*	<MDA*
06/11/2012	<MDA*	<MDA*	<MDA*	<MDA*
05/24/2012	<MDA*	<MDA*	<MDA*	<MDA*
05/22/2012	<MDA*	<MDA*	<MDA*	<MDA*
05/17/2012	<MDA*	<MDA*	<MDA*	<MDA*
05/14/2010	<MDA*	<MDA*	<MDA*	<MDA*
05/10/2012	<MDA*	<MDA*	<MDA*	<MDA*
05/07/2012	<MDA*	<MDA*	<MDA*	<MDA*
05/04/2012	<MDA*	<MDA*	<MDA*	<MDA*
05/01/2012	<MDA*	<MDA*	<MDA*	<MDA*
04/27/2012	<MDA*	<MDA*	<MDA*	<MDA*
04/24/2012	<MDA*	<MDA*	<MDA*	<MDA*
04/20/2012	<MDA*	<MDA*	<MDA*	<MDA*
04/17/2012	<MDA*	<MDA*	<MDA*	<MDA*
04/12/2012	<MDA*	<MDA*	<MDA*	<MDA*
04/09/2012	<MDA*	<MDA*	<MDA*	<MDA*
04/05/2012	<MDA*	<MDA*	<MDA*	<MDA*
04/02/2012	<MDA*	<MDA*	<MDA*	<MDA*

*Minimum Detectable Activity

Units

Picocurie (pCi): Measures the rate of decay of a sample of radioactive material.
 1 pCi = 0.037 Becquerel (Bq) = 2.22 radioactive decays per minute



**January 2012 - March 2012
 Gamma Spectroscopy Analysis, Portland Station**

Samples are taken and analyzed twice a week. Data is updated on the web, once a month.

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Sample End Date	Cesium - 137		Iodine - 131	
	Activity pCi/m ³	Bio Effect mrem	Activity pCi/m ³	Bio Effect mrem
03/29/2012	<MDA*	<MDA*	<MDA*	<MDA*
03/26/2012	<MDA*	<MDA*	<MDA*	<MDA*
03/29/2012	<MDA*	<MDA*	<MDA*	<MDA*
03/19/2012	<MDA*	<MDA*	<MDA*	<MDA*
03/15/2012	<MDA*	<MDA*	<MDA*	<MDA*
03/12/2012	<MDA*	<MDA*	<MDA*	<MDA*
03/08/2012	<MDA*	<MDA*	<MDA*	<MDA*
03/05/2012	<MDA*	<MDA*	<MDA*	<MDA*
03/01/2012	<MDA*	<MDA*	<MDA*	<MDA*
02/27/2012	<MDA*	<MDA*	<MDA*	<MDA*
02/24/2012	<MDA*	<MDA*	<MDA*	<MDA*
02/21/2012	<MDA*	<MDA*	<MDA*	<MDA*
02/17/2012	<MDA*	<MDA*	<MDA*	<MDA*
02/12/2012	<MDA*	<MDA*	<MDA*	<MDA*
02/07/2012	<MDA*	<MDA*	<MDA*	<MDA*
02/03/2012	<MDA*	<MDA*	<MDA*	<MDA*
01/31/2012	<MDA*	<MDA*	<MDA*	<MDA*
01/27/2012	<MDA*	<MDA*	<MDA*	<MDA*
01/24/2012	<MDA*	<MDA*	<MDA*	<MDA*
01/20/2012	<MDA*	<MDA*	<MDA*	<MDA*
01/17/2012	<MDA*	<MDA*	<MDA*	<MDA*
01/12/2012	<MDA*	<MDA*	<MDA*	<MDA*
01/09/2012	<MDA*	<MDA*	<MDA*	<MDA*
01/06/2012	<MDA*	<MDA*	<MDA*	<MDA*
01/03/2012	<MDA*	<MDA*	<MDA*	<MDA*

*Minimum Detectable Activity

Units

Picocurie (pCi): Measures the rate of decay of a sample of radioactive material.
 1 pCi = 0.037 Becquerel (Bq) = 2.22 radioactive decays per minute