Massachusetts Department of Environmental Protection - Drinking Water Program **R-Ph**

Radionuclide Photon Activity Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: _____ **City / Town:** _____

PWS Name: _____ **PWS Class:** COM ☐ NTNC ☐ TNC ☐

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information		Date Collected	Collected By
		☐ (**M**)ultiple ☐ (**S**)ingle	☐ (**R**)aw ☐ (**F**)inished		

Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below:	
		(1) Reason for Resubmission	(2) Collection Date of Original Sample
☐ RS ☐ SS	☐ Original ☐ Resubmitted ☐ Confirmation	☐ Resample ☐ Reanalysis ☐ Report Correction	

SAMPLE NOTES – (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: _____ **Primary Lab Name:** _____ **Subcontracted? (Y/N)** _____

Was this sample composited by the Lab?	COMPOSITE SAMPLE NOTES List the composited source by DEP Source Code (XXXXXXX-XXX) and dates collected, up to four consecutive quarterly samples per single entry point.
☐	

LAB SAMPLE NOTES

Contaminant	RESULT	Std Dev (+/-)	MCL	MDL	Lab Method	Date Analyzed	Lab Sample ID#	Analysis Lab MA Cert#	Analysis Lab Name
GROSS BETA (pCi/L)			*						
POTASSIUM (mg/l)		------							
POTASSIUM-40 (pCi/L)		------		The potassium-40 beta particle activity must be calculated by multiplying elemental potassium concentrations (in mg/L) by a factor of 0.82.					
ADJUSTED GROSS BETA (pCi/L)		------	**50**	Exceedance of *Adjusted Gross Beta* (Gross Beta minus Potassium-40) above the 50 pCi/L (screening level) requires additional analysis to identify the major constituents (photon activity) present in the sample. Appropriate doses must be calculated and summed to determine compliance. Doses must also be calculated and combined for measured levels of tritium and strontium to determine compliance.					
Photon Activity	**X**		Conversion pCi/4mrem **Y**	Calculate annual total dose equivalent (mrem) = 4 (X / Y)					
STRONTIUM-90 (pCi/L)			**8**						
TRITIUM (pCi/L)			**20,000**						
IODINE-131 (pCi/L)			**3**						
CESIUM-134 (pCi/L)			**20,000**						
STRONTIUM-89 (pCi/L)			**20**						
(pCi/L)									
(pCi/L)									

*The MCL for gross beta is 4 mrem/year. The sum of all photon activity radionuclides present, calculated as the annual total dose equivalent to the total body or to any organ, shall not exceed 4 mrem/year. Gross Beta testing is optional, unless specifically required by DEP.

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

Primary Lab Director Signature: _____

Date: _____

If not submitting these results electronically, mail TWO copies of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & Date) ☐ Accepted _____ ☐ Disapproved _____	Review Comments		☐ WQTS Data Entered