

Re: Effluent from septic tanks as a source of PFAS to the environment

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Laura Green <laura.carolyn.green@gmail.com>

Thu 3/11/2021 1:42 PM

To: Alex Elvin <elvin@mvcommission.org>;

Cc: Lucy Morrison <morrison@mvcommission.org>; Adam Turner <turner@mvcommission.org>; Edmund Crouch <crouch@greentoxicology.com>;

Dear Alex,

As I mentioned during last week's MVC hearing, septic tanks are an established source of PFAS that are injected directly into the ground and hence into groundwater. Since this fact seemed to be not well-known, and of some interest, I thought it might be helpful to provide you with some data.

So here, tabulated below, is my upper-bound estimate (that is, an estimate based on several worst-case assumptions) of how much PFAS **might** potentially enter the ground from the proposed synthetic field-system for MVRHS (via dissolution by infiltrating rainwater), and how much (this time, making a "central tendency" estimate) likely **does** enter the ground directly from the existing septic systems that are located over your island's main aquifer.

Estimated quantities of PFAS that might , or that do , enter the ground over 10 years (grams)		
	Proposed synthetic field-system at MVRHS: potential leachate	Septic systems in Martha's Vineyard watersheds located over main aquifer: actual leachate
6 regulated PFAS	0.13	890
All PFAS measured in septic tank effluent	0.27	1,200

Please feel free to share this information as you deem appropriate.

And, of course, please feel free to call with any questions or to otherwise discuss this.

with thanks and best regards,

Laura

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