

From: West, Kimberlee@Waterboards
To: Linck, Wendy@Waterboards; Roberson, Keith@Waterboards; Munn, Joshua@Waterboards
Cc: Karpowicz, Alyx@Waterboards
Subject: RE: Creek sampling for PFAS near Clover Flat Landfill
Date: Friday, February 17, 2023 12:06:07 PM

Keith - Holy cow, that is striking data! Thanks for sharing. Are there follow-up requirements for Clover Flat Landfill?

Wendy – thanks for digging into the fingerprinting. I still can't wrap my head around the transformation pathways. When Keith sends you the analytics, I'd love to be in the loop to learn what to look for.

Thanks for looping me!
Kimberlee West

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From: Linck, Wendy@Waterboards <Wendy.Linck@Waterboards.ca.gov>
Sent: Friday, February 17, 2023 11:29 AM
To: Roberson, Keith@Waterboards <Keith.Roberson@waterboards.ca.gov>; Munn, Joshua@Waterboards <Joshua.Munn@Waterboards.ca.gov>
Cc: West, Kimberlee@Waterboards <Kimberlee.West@Waterboards.ca.gov>; Karpowicz, Alyx@Waterboards <Alyx.Karpowicz@waterboards.ca.gov>
Subject: Re: Creek sampling for PFAS near Clover Flat Landfill

Hi Keith,

Thank you for the information. Would it ok if you could send analytical reports for the surface water samples. There is the presence of FTCA in the samples which is a biotransformation product from Fluorotelomer sulfonates (e.g. 6:2 FTS, 8:2 FTS). So it would be interesting not to see them detected..but I would like to do more research.

Thank you!

Wendy Linck

From: Roberson, Keith@Waterboards <Keith.Roberson@waterboards.ca.gov>
Sent: Friday, February 17, 2023 10:48:52 AM
To: Munn, Joshua@Waterboards <Joshua.Munn@Waterboards.ca.gov>
Cc: West, Kimberlee@Waterboards <Kimberlee.West@Waterboards.ca.gov>; Linck, Wendy@Waterboards <Wendy.Linck@Waterboards.ca.gov>; Karpowicz, Alyx@Waterboards <Alyx.Karpowicz@waterboards.ca.gov>

Subject: Creek sampling for PFAS near Clover Flat Landfill

Josh,

I want to let you know that R2 staff sampled the creek that flows alongside the Clover Flat Landfill outside Calistoga. We sampled the creek at three locations downstream from the landfill. The creek was sampled in late January, shortly after the atmospheric river events. We had wanted to sample the creek sooner but there was no water present to collect during the drought.

The results were striking: we found exactly the same PFAS compounds in the creek that were found in the landfill leachate and groundwater back in 2020, and the proportions matched up as well. Here is a table I quickly put together summarizing the data. (compounds NOT listed in the table below were ND both at the landfill and in the creek).

PFAS at Clover Flat Landfill and Downstream (data in nanograms per liter (ng/L))

Compound	Leachate	GW B-5A	GW B-5B	GW B-4	SW-1	SW-2	SW-3
PFHxA	1400	79	27	3	73	55	51
PFBA	210J	72	59	2.8J	23	21	17
PFOA	580	55	63	1.5J	39	31	26
PFHxS	310	26	15	<0.4 (ND)	8.6	8.6	8.2
PFOS	74J	24	11	<0.4 (ND)	4.8	4.0	ND
PFPeA	500	25	11	2.4	48	39	36
PFHpA	330	12	14	0.92J	10	8.6	8.5
PFBS	44J	7.3	13	<0.4 (ND)	5.5	5.3	4.6
5:3 FTCA	N/A	N/A	N/A	N/A	15	17	19

Landfill samples (Leachate, B-5A, B-5B, B-4) were collected March 30, 2020

Creek samples (SW-1, SW-2, SW-3) were collected January xx, 2023