



**Rhode Island**  
Airport Corporation

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January 12, 2024

Mr. Aaron Mello  
Rhode Island Department of Environmental Management  
Office of Water Resources  
RIPDES Program  
235 Promenade Street  
Providence, Rhode Island 02908

Subject: 4th Quarter 2023 Report in Lieu of Sampling  
T.F. Green Airport  
Permit No. RI0021598

Dear Mr. Mello:

The RIPDES Permit No. RI0021598 ("Permit"), issued to the Rhode Island Airport Corporation (RIAC), requires that samples meeting certain criteria must be collected quarterly. RIAC submits this report in accordance with Part I.(A)(6)(i) of the Permit in lieu of 4th Quarter 2023 (Q4) sampling as the result of a "lack of a representative storm event during the entire quarterly monitoring period."

#### RIPDES Permit - Storm Event Criteria for Sampling

In accordance with Part I.(A)(6)(g) of the Permit, samples must be collected from a discharge resulting from a representative storm event. A representative storm event is "precipitation that: "(a) occurs at least seventy-two (72) hours from the previous measurable storm event", and (b), "is greater than or equal to 0.1 inches water equivalent per twenty-four (24) hours in magnitude". In addition, Parts I.A.1.(footnote 6) and I.A.2.(footnote 5) of the Permit require Q4 sampling to be conducted "while aircraft deicing is occurring". Parts I.A.1.(footnote 2) and I.A.2.(footnote 1) further define sampling event precipitation to be: "During snow events, the start of precipitation shall be assumed to occur when the total accumulation of snowfall is 0.5 inches in depth. During other freezing (i.e., sleet, freezing rain) or non-freezing (i.e., rain) precipitation events, the start of precipitation shall be assumed to occur when the total accumulation is 0.1 inches in depth."

Prior to precipitation events (where deicer is likely to be applied), weather forecasts (National Weather Service, Weather Underground, and local media forecasts) are used to assess whether the event will present a potential sampling opportunity. As precipitation begins, weather conditions and forecasts are continually monitored to determine if the minimum precipitation requirements for sampling will or are likely to be met (>0.1" for rain and freezing rain events, >0.5" for snow events). Sampling commences once the minimum depths are met and deicing activities have occurred. In addition, RIAC uses data derived from National Climatic Data Center (NCDC) Quality Controlled Local Climatological Data from the weather station at Rhode Island T. F. Green International Airport (PVD) to determine if an event met all criteria for a sampling event.

#### 4th Quarter 2023 Precipitation and Deicing Events

During the 4th Quarter of 2023, there were 26 days of measurable precipitation. Of these, 16 days resulted in precipitation depths greater than 0.1" (water equivalent). There were no days with measurable snowfall. During this Quarter, there were no days that tenants reported aircraft deicing concurrent with active precipitation.

A summary of daily deicing fluid application, collection, and weather summaries for the 4th Quarter of 2023 is attached.

#### Summary

The weather and deicing conditions between October 1 and December 31, 2023 did not yield a representative storm event concurrent with aircraft deicing. As such, RIAC did not collect samples during this period, and submits this report in lieu of monitoring in accordance with Part I.(A)(6)(i) of the Permit.

If you have any questions, please do not hesitate to call me at (401) 691-2490.

Sincerely,



Jay Brolin  
Manager Environmental Program

Attachments: Deicing Fluid Application and Collection (OCT, NOV, DEC 2023)

### PVD October 2023 Monthly Deicing Usage and Collection

Date	Applied				Estimated Amount Recovered			Weather						
	Type I	Pure Type I	Type IV	Type I Type IV	as PG Type IV	Collected	Diverted Terminal	Diverted Cargo	Date	Actuals (°)	Precip Amounts	Ground		
				Total		Yes			High	Low	Precip	Snow	Ground	
10/1/2023							0	0	1	71	52	0	0	0
10/2/2023							0	0	2	73	50	0	0	0
10/3/2023							0	0	3	81	45	0	0	0
10/4/2023							0	0	4	82	59	0	0	0
10/5/2023							0	0	5	73	58	0	0	0
10/6/2023							0	0	6	74	62	0	0	0
10/7/2023							0	0	7	70	54	0.33	0	0
10/8/2023							0	0	8	64	49	0	0	0
10/9/2023							0	0	9	62	42	T	0	0
10/10/2023							0	0	10	65	44	0.03	0	0
10/11/2023							0	0	11	69	46	0	0	0
10/12/2023							0	0	12	69	45	0	0	0
10/13/2023							0	0	13	64	46	0	0	0
10/14/2023							0	0	14	61	45	T	0	0
10/15/2023							0	0	15	61	47	0	0	0
10/16/2023							0	0	16	60	47	T	0	0
10/17/2023							0	0	17	63	46	0	0	0
10/18/2023							0	0	18	63	50	T	0	0
10/19/2023							0	0	19	66	45	0	0	0
10/20/2023							0	0	20	64	47	0.09	0	0
10/21/2023							0	0	21	59	54	1.05	0	0
10/22/2023	40	20.0	0	17.60	0	Yes	0	0	22	59	44	0	0	0
10/23/2023							0	0	23	63	44	0	0	0
10/24/2023							0	0	24	63	41	0	0	0
10/25/2023							0	0	25	75	48	0	0	0
10/26/2023							0	0	26	77	56	0	0	0
10/27/2023							0	0	27	71	55	0	0	0
10/28/2023							0	0	28	82	53	0	0	0
10/29/2023							0	0	29	59	47	0.76	0	0
10/30/2023							0	0	30	55	47	0.35	0	0
10/31/2023							0	6000	31	50	38	0	0	0

MONTHLY TOTALS 40 20 0 17.60 0 17.60 0 0 0 6000

2.61 0

6 0



### PVD November 2023 Monthly Deicing Usage and Collection

Date	Applied					Estimated Amount Recovered			Weather						
	Type I	Pure Type I	Type IV	Type I	as PG Type IV	Total	Collected	Diverted Terminal	Diverted Cargo	Date	Actuals (°)	Precip Amounts	Precip	Snow	Ground
11/1/2023															
11/2/2023	324.0	162.0	0	156.00	0	156.00	110	0	0	1	49	34	0.03	0	0
11/3/2023	552.0	276.0	0	263.60	0	263.60	Y	0	0	2	47	29	0	0	0
11/4/2023							Y	0	0	3	56	29	0	0	0
11/5/2023								0	0	4	62	37	0	0	0
11/6/2023	50.0	25.0	0	22.00	0	22.00	Y	0	0	5	65	41	T	0	0
11/7/2023								0	7000	6	52	41	0	0	0
11/8/2023	120.0	60.0	0	52.80	0	52.80	Y	0	2000	7	65	45	0.16	0	0
11/9/2023								8000	0	8	49	36	0	0	0
11/10/2023								23000	0	9	43	37	0.02	0	0
11/11/2023	235.0	117.5	0	111.80	0	111.80	Y	0	0	10	51	32	0	0	0
11/12/2023	483.4	241.7	0	223.00	0	223.00	100	0	0	11	54	33	0	0	0
11/13/2023	483.8	241.9	0	223.40	0	223.40	150	0	0	12	44	26	0	0	0
11/14/2023	335.4	167.7	0	160.68	0	160.68	Y	0	0	13	45	21	0.01	0	0
11/15/2023	598.6	299.3	0	273.80	0	273.80	102	0	0	14	50	31	0	0	0
11/16/2023	130.0	65.0	0	57.20	0	57.20	210	0	0	15	51	26	0	0	0
11/17/2023								0	0	16	64	37	0	0	0
11/18/2023								0	0	17	66	35	0	0	0
11/19/2023	286.2	143.1	0	135.00	0	135.00	Y	0	0	18	56	33	0.15	0	0
11/20/2023	501.6	250.8	0	232.80	0	232.80	Y	0	0	19	54	26	0	0	0
11/21/2023	233.0	116.5	0	109.80	0	109.80	Y	0	0	20	42	27	0	0	0
11/22/2023								0	0	21	42	24	0.11	0	0
11/23/2023	240.0	120.0	0	105.60	0	105.60	225	0	0	22	57	40	1.71	0	0
11/24/2023	310.0	155.0	0	136.40	0	136.40	Y	0	0	23	53	39	0	0	0
11/25/2023	255.0	127.5	0	112.20	0	112.20	Y	0	0	24	51	28	0	0	0
11/26/2023	559.0	279.5	0	253.80	0	253.80	400	0	0	25	37	23	0	0	0
11/27/2023								0	0	26	48	22	0.18	0	0
11/28/2023	250.0	125.0	0	115.60	0	115.60	Y	0	0	27	55	38	0.51	0	0
11/29/2023	320.0	160.0	0	140.80	0	140.80	Y	0	0	28	40	29	T	T	0
11/30/2023	90.0	45.0	0	39.60	0	39.60	Y	0	0	29	37	26	0	0	0
								0	0	30	47	26	0	0	0

MONTHLY TOTALS 6357.0 3178.5 0 2925.88 0 2925.88 1297 31000 9000

2.88 0

9 0

### PVD December 2023 Monthly Deicing Usage and Collection

Date	Applied				Estimated Amount Recovered			Weather								
	Type I	Pure Type I	Type IV	Type I Type IV	as PG Type IV	Collected	Diverted Terminal	Diverted Cargo	Date	Actuals (°)	Precip Amounts	High	Low	Precip	Snow	Ground
12/11/2023	180	90	0	79.20	0	380	0	0	1	55	0.05	55	38	0	0	0
12/12/2023							0	0	2	53	T	53	39	0	0	0
12/13/2023							0	0	3	46	0.67	46	41	0	0	0
12/14/2023							0	0	4	54	0.01	54	40	0	0	0
12/15/2023							0	0	5	43	0	43	32	0	0	0
12/16/2023	575	288	0	253.00	0	Y	11000	0	6	36	T	36	27	T	0	0
12/17/2023	796	398	0	350.24	0	Y	0	14000	7	33	0	33	22	0	0	0
12/18/2023	650	325	0	286.00	0	510	0	0	8	45	0	45	22	0	0	0
12/19/2023	451	226	20	198.44	10	Y	0	0	9	52	0	52	29	0	0	0
12/10/2023							0	0	10	61	0.64	61	43	0	0	0
12/11/2023							0	0	11	62	1.65	62	35	0	0	0
12/12/2023	285	143	0	125.40	0	Y	0	0	12	43	0	43	26	0	0	0
12/13/2023	439	220	0	193.16	0	Y	0	0	13	45	0	45	32	0	0	0
12/14/2023	325	163	10	143.00	5	Y	0	0	14	37	0	37	25	0	0	0
12/15/2023	450	225	0	198.00	0	Y	0	0	15	57	0	57	25	0	0	0
12/16/2023	345	173	0	151.80	0	430	0	0	16	54	0	54	30	0	0	0
12/17/2023	345	173	0	151.80	0	Y	0	0	17	57	0.62	57	35	0	0	0
12/18/2023							0	16000	18	60	2.43	60	44	0	0	0
12/19/2023	265	133	0	116.60	0	Y	0	0	19	48	0	48	32	0	0	0
12/20/2023	418	209	0	183.92	0	Y	0	0	20	44	0	44	29	0	0	0
12/21/2023	436	218	0	191.84	0	Y	0	0	21	38	0	38	24	0	0	0
12/22/2023	367	183.5	0	161.48	0	Y	0	0	22	36	0	36	19	0	0	0
12/23/2023	551	276	0	242.44	0	Y	0	0	23	42	0	42	19	0	0	0
12/24/2023	885	443	0	389.40	0	Y	0	0	24	46	0.02	46	35	0	0	0
12/25/2023							0	0	25	55	0	55	35	0	0	0
12/26/2023	520	260	0	228.80	0	Y	0	0	26	45	0	45	31	0	0	0
12/27/2023							0	0	27	49	0.02	49	37	0	0	0
12/28/2023							0	0	28	48	1.12	48	42	0	0	0
12/29/2023							0	0	29	47	0.02	47	41	0	0	0
12/30/2023	105	53	0	46.20	0	Y	0	0	30	47	T	47	37	0	0	0
12/31/2023	55	28	0	24.20	0	Y	19000	0	31	39	0	39	34	0	0	0

MONTHLY TOTALS 8443 4222 30 3714.92 15 3729.92 1320 30000 30000

7.25 0

11 0