

ATTACHMENT 9

City of Manchester's Monthly PFAS Monitoring Reports
2019–2023

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jan-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0				
PFHxS	0	0				
PFOA	0	0				
PFOS	0	0				

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Feb-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0				
PFHxS	0	0				
PFOA	0	0				
PFOS	0	0				

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Mar-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0				
PFHxS	0	0				
PFOA	0	0				
PFOS	0	0				

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Apr-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0	0	0		
PFHxS	5.23	0	0	0		
PFOA	14.1	9.51	0	0		
PFOS	10.6	5.51	7.58	0		

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
May-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0	0			
PFHxS	0	0	0			
PFOA	15.8	12.4	0			
PFOS	14.00	4.74	9.39			

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jun-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0	0			
PFHxS	0	0	0			
PFOA	9.97	7.77	0			
PFOS	14.7	9.05	11.6			

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jul-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0	0			0
PFHxS	0	0	0			33.0
PFOA	15.8	9.84	0			60.0
PFOS	15.0	7.52	18.7			15.4

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Aug-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0	0	0		0
PFHxS	7.94	0	0	0		41.3
PFOA	11.3	11.6	0	0		79.0
PFOS	6.39	4.76	0	0		20.0

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Sep-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0	0	0	0	0
PFHxS	0	0	0	0	0	55.1
PFOA	11.2	9.38	0	0	32.0	92.5
PFOS	8.26	0	8.99	0	7.72	19.5

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Oct-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0	0	0		0
PFHxS	0	0	0	0		75.8
PFOA	11.7	14.8	0	0		78.7
PFOS	5.7	8.56	15.1	0		15.1

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Nov-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0	0	0	0	0
PFHxS	5.09	0	0	0	0	74.8
PFOA	13.7	9.33	0	0	20.6	81.2
PFOS	10.5	0	6.11	0	12.0	13.2

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Dec-19	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0	0	0	0	0
PFHxS	0	0	0	0	0	81.00
PFOA	13.4	8.72	0	0	15.2	62.6
PFOS	14.2	7.97	7.98	0	10.8	19.8

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jan-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA			0.0		0.0	0.0
PFHxS	7.2	8.3	0.0		10.0	73.6
PFOA	13.4	13.3	0.6		14.1	69.6
PFOS	14.7	22.8	5.9		21.3	12.7

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Feb-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA			0.0		17.9	0.0
PFHxS			0.0		11.8	55.1
PFOA	10.4	6.1	1.1		17.0	57.2
PFOS	10.6		16.7		99.1	15.5

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Mar-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA						
PFHxS						
PFOA						
PFOS						

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Apr-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA						
PFHxS						
PFOA						
PFOS						

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
May-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA			0.0		0.0	0.0
PFHxS	7.1	0.0	0.0		0.0	59.8
PFOA	15.3	10.0	1.5		105.0	61.2
PFOS	12.1	5.6	29.8		18.7	14.7

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jun-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA			0.0		0.0	0.0
PFHxS	4.9	0.0	0.0	0.0	0.0	84.1
PFOA	13.6	11.2	1.1	0.0	0.0	59.0
PFOS	8.4	7.0	22.0	0.0	0.0	17.1

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jul-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA			0.6		9.2	0.0
PFHxS	7.0	4.9	0.0		20.3	90.7
PFOA	12.5	12.9	0.8		83.7	55.3
PFOS	15.1	23.7	0.0		242.0	19.3

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Aug-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA			0.6		0.0	0.0
PFHxS	7.8	8.3	0.0		6.6	80.8
PFOA	15.6	16.3	1.1		14.0	59.0
PFOS	50.6	23.4	20.0		51.8	29.7

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Sep-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA			0.6	0.0	0.0	0.0
PFHxS			0.0	0.0	0.0	64.8
PFOA	11.4	11.0	1.0	0.0	12.8	45.6
PFOS	14.9	9.1	18.6	0.0	7.7	25.8

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Oct-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA			0.0	0.0	0.0	0.0
PFHxS	6.4	5.7	0.0	0.0	7.9	69.0
PFOA	14.8	12.3	0.8	0.0	14.7	55.7
PFOS	20.5	6.4	13.7	0.0	15.3	24.3

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Nov-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA			0.0		0.0	0.0
PFHxS	5.9	5.1	0.0		0.0	76.1
PFOA	12.5	12.1	0.8		0.0	60.4
PFOS	11.4	6.7	10.0		0.0	22.3

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Dec-20	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA			0.0		0.0	0.0
PFHxS	10.5	8.5	0.0		10.4	12.1
PFOA	17.4	14.8	1.2		15.9	24.2
PFOS	45.6	27.0	44.8		42.1	31.1

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jan-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND			ND
PFHxS	6.3	7.3	ND			44.2
PFOA	13.9	14.0	1.1			28.4
PFOS	18.5	15.5	35.5			14.4

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Feb-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		0.0	0.0
PFHxS	8.4	0.0	0.0		6.8	33.0
PFOA	14.3	10.0	1.8		10.8	40.7
PFOS	40.2	10.2	29.8		110.0	15.4

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Mar-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	N/D	N/D	1.08	0	0	0
PFHxS	5.93	0	0	0	0	39.8
PFOA	0	10.2	1.62	0	11.4	48.3
PFOS	11.8	4.69	37	0	0	21.8

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Apr-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0	0	0		0	0
PFHxS	5.95	5.64	0		0	24.2
PFOA	12.4	12.7	1.11		0	38.4
PFOS	10.3	2.1	34.3		0	15.9

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
May-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0.0	0.0			0.0	0.0
PFHxS	6.6	5.4			0.0	21.8
PFOA	12.6	13.7			4.9	31.0
PFOS	11.7	7.2			6.0	18.0

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jun-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0.0	0.0	N/D		N/D	N/D
PFHxS	4.4	4.6	N/D		N/D	22.9
PFOA	11.8	12.3	2.0		11.4	27.8
PFOS	12.7	9.7	N/D		18.1	24.6

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jul-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0.0	N/D	N/D		N/D	N/D
PFHxS	7.4	5.3	N/D		N/D	18.9
PFOA	17.7	20.6	1.8		N/D	54.4
PFOS	12.7	8.8	14.2		N/D	21.9

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Aug-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0.0	N/D	N/D		N/D	N/D
PFHxS	8.8	5.2	N/D		N/D	21.9
PFOA	20.8	19.4	N/D		20.0	59.6
PFOS	20.7	0.0	14.2		7.9	20.6

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Sep-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0.0	0.0	N/D		N/D	N/D
PFHxS	5.7	0.0	N/D		N/D	N/D
PFOA	14.0	20.1	1.9		22.6	60.5
PFOS	10.7	5.6	13.6		9.5	24.1

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Oct-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0.0	0.0	N/D		N/D	N/D
PFHxS	4.5	5.4	N/D		N/D	N/D
PFOA	17.8	14.4	1.3		8.3	58.9
PFOS	13.4	5.2	7.9		18.2	21.5

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Nov-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0.0	0.0			N/D	N/D
PFHxS	5.9	4.5			N/D	22.7
PFOA	15.3	11.3			7.1	62.5
PFOS	10.2	6.6			25.8	27.3

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Dec-21	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	0.0	0.0	N/D		N/D	N/D
PFHxS	4.9	N/D	N/D		N/D	20.8
PFOA	16.5	7.2	N/D		14.2	65.9
PFOS	11.9	N/D	9.8		10.0	19.4

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jan-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND	ND	ND	ND
PFHxS	4.8	0.0	0.0	ND	ND	22.7
PFOA	13.7	8.4	0.0	0.0	ND	69.8
PFOS	9.5	0.0	5.4	ND	ND	58.7

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Feb-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	N/D
PFHxS	5.1	ND	ND		4.9	5.3
PFOA	15.0	6.0	ND		14.4	14.3
PFOS	9.1	ND	ND		8.5	6.4

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Mar-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	N/D
PFHxS	ND	ND	0.647		ND	N/D
PFOA	13.0	11.0	1.32		17.8	5.72
PFOS	8.36	4.71	7.04		42.2	N/D

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Apr-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		5.77	
PFHxS	5.29	ND	ND		ND	
PFOA	10.3	8.74	1.17		17.7	
PFOS	6.17	ND	ND		ND	

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
May-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND			ND	N/D
PFHxS	4.8	4.5			ND	5.5
PFOA	16.6	13.0			17.0	16.6
PFOS	11.8	4.5			ND	10.9

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jun-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	N/D
PFHxS	11.5	9.1	ND		ND	14.2
PFOA	18.6	11.9	1.3		6.9	66.0
PFOS	63.4	30.0	22.4		5.4	16.7

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jul-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	N/D
PFHxS	4.7	ND	ND		ND	14.3
PFOA	10.1	9.8	ND		14.5	53.3
PFOS	14.5	6.6	ND		32.2	17.9

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Aug-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	N/D
PFHxS	ND	ND	ND		ND	17.9
PFOA	11.9	7.8	ND		ND	58.8
PFOS	8.9	ND	12.5		ND	17.4

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Sep-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	N/D
PFHxS	5.6	3.0	ND		6.8	15.1
PFOA	13.5	7.2	0.7		13.6	54.6
PFOS	9.7	4.7	25.1		11.7	17.7

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Oct-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	ND
PFHxS	3.0	3.1	ND		ND	12.2
PFOA	12.1	9.1	1.2		ND	49.3
PFOS	6.6	4.2	17.9		ND	17.5

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Nov-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND			ND	ND
PFHxS	4.2	2.6			ND	23.5
PFOA	8.6	7.6			17.4	55.2
PFOS	7.7	5.0			27.5	25.9

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Dec-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND	ND	ND	ND
PFHxS	7.4	5.3	ND	ND	ND	26.9
PFOA	15.5	11.2	1.2	ND	7.0	52.5
PFOS	11.7	6.3	ND	ND	ND	25.1

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jan-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	ND
PFHxS	7.3	4.7	0.0		ND	27.8
PFOA	13.6	10.2	1.1		18.7	45.3
PFOS	9.6	5.0	10.4		ND	21.6

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Feb-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	ND
PFHxS	5.2	3.5	0.0		ND	20.5
PFOA	12.6	7.2	1.7		16.3	39.3
PFOS	9.1	4.0	15.6		20.7	18.3

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Mar-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND	ND	ND	ND
PFHxS	5.57	4.02	ND	ND	4.87	17.2
PFOA	14.3	10.2	0	0	15.9	38.4
PFOS	8.21	0	0	0	5.43	14.9

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Apr-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	ND
PFHxS	7.22	3.7	ND		ND	17.8
PFOA	16.4	9.44	1.2		18.4	58.4
PFOS	11.9	4.8	ND		9.86	19.4

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
May-22	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND	ND	ND	ND
PFHxS	6.0	4.5	0.0	0.0	ND	16.0
PFOA	15.0	14.1	0.0	0.0	7.2	56.8
PFOS	10.0	5.6	0.0	0.0	5.6	17.5

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jun-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND	ND	20.0	ND
PFHxS	5.9	2.8	0	ND	ND	15.8
PFOA	14.4	12.8	1.6	0	20.0	51.0
PFOS	12.6	4.9	14.7	ND	58.0	18.0

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Jul-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND	ND	ND	ND
PFHxS	7.3	5.0	0.0	ND	ND	16.2
PFOA	19.6	17.8	1.6	0.0	9.4	49.6
PFOS	14.5	11.7	15.0	ND	13.4	28.7

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Aug-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND	0.0	ND	ND
PFHxS	6.8	7.1	0.0	0.0	ND	20.3
PFOA	20.4	18.7	1.3	0.0	ND	86.4
PFOS	16.8	7.2	0.0	0.0	ND	16.2

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Sep-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND	ND	ND	ND
PFHxS	6.7	4.0	0.0	0.0	ND	23.2
PFOA	20.7	11.6	1.2	0.0	ND	83.9
PFOS	18.0	6.8	0.0	0.0	ND	17.2

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Oct-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND	ND	ND	ND
PFHxS	6.4	3.8	0.0	0.0	2.1	26.6
PFOA	15.0	9.8	0.0	0.0	10.9	74.9
PFOS	17.8	8.4	0.0	0.0	17.3	16.7

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Nov-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND		ND	ND
PFHxS	6.4	5.5	0.0		5.2	31.9
PFOA	14.8	11.9	0.0		15.4	75.5
PFOS	13.9	5.4	3.2		37.1	14.7

Parameter	Influent Results	Effluent Results	Sludge Results	Ash Results	Septic Results	Landfill Leachate
Dec-23	ng/L	ng/L	ng/g	ng/g	ng/L	ng/L
PFNA	ND	ND	ND	ND	ND	ND
PFHxS	2.7	0.0	ND	ND	ND	37.3
PFOA	10.0	5.8	1.3	0.0	ND	73.8
PFOS	10.0	5.8	10.3	0.0	ND	13.5