Comparing the impact of state temperature requirements

Approximately 1.4M cremations, separated by afterburner temperature requirements

- Higher temperatures use more fuel (Natural Gas, Therms)
- Higher temperatures take longer (duration, minutes)
- Higher temperatures produce no better emission results (% of cremations with emission incidents)

Data from cremators running Matthews Mpyre® system as of 5/20/2024. Emissions incidents defined as any cremation showing more than 10% exhaust opacity for more than 60 seconds during a complete cremation cycle.

	Temp Requirem	S							
	None		1400		1600		1800		
Cremation Years	Cases	Therms	Cases	Therms	Cases	Therms	Cases	Therms	
2020	40,575	22.7	32,813	24.7	160,085	23.9	11,639	33.2	
2021	45,638	24.2	37,752	23.6	181,633	24.1	14,739	32.7	
2022	46,714	25.1	40,182	26.4	193,459	24.7	14,523	31.7	
2023	74,321	25.5	62,473	27.4	341,866	25.1	25,995	30.8	
2024	13,923	25.0	12,149	28.2	70,359	24.1	5,780	30.2	
Overall	221,171	24.6	185,369	26.0	947,402	24.6	72,676	→ 31.7	1,42

	Temp Requirem							
	None		1400		1600		1800	
Cremation Years 🔻	Cases	Duration	Cases	Duration	Cases	Duration	Cases	Duration
2020	40,575	138.4	32,813	132.5	160,085	128.9	11,639	152.7
2021	45,638	140.7	37,752	130.5	181,633	131.2	14,739	152.9
2022	46,714	141.3	40,182	131.0	193,459	131.2	14,523	149.9
2023	74,321	144.6	62,473	133.2	341,866	131.7	25,995	147.5
2024	13,923	142.5	12,149	136.4	70,359	129.1	5,780	146.7
Overall	221,171	141.8	185,369	132.3	947,402	130.8	72,676	149.8

_1	Temp Requirem ▼							
	None		1400		1600		1800	
Cremation Years 🔻	Cases Emissions		Cases Emissions		Cases Emissions		Cases Emissions	
2020	40,575	0%	32,813	1%	160,085	1%	11,639	1%
2021	45,638	1%	37,752	1%	181,633	1%	14,739	1%
2022	46,714	1%	40,182	1%	193,459	1%	14,523	1%
2023	74,321	1%	62,473	1%	341,866	1%	25,995	2%
2024	13,923	1%	12,149	1%	70,359	1%	5,780	3%
Overall	221,171	1%	185,369	1%	947,402	1%	72,676	1%