



## IMPACT OF TEMPERATURE INCREASE (1° F) ON TTHM AND HAA5 FORMATION

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## CONCLUSIONS

- A temperature difference of 1° F is very small in terms of affecting TTHM and HAA5 formation. This temperature change alone would not result in a DBP compliance issue for the City of Sacramento's WTPs under current regulatory requirements.
- Operators at potable WTPs may observe discernable differences in DBP concentrations over increments of 5° C, which corresponds to 9° F.
- Increases in water temperature affect the water treatment process. Conventional processes, as well as disinfection become more efficient as temperature increases.



• Applied industry-accepted TTHM and HAA5 formation equations to assess impact of increase in temperature

> Used by USEPA in DBP regulatory development

Parameter	Temperature (°F)	
	59 increased to 60	76 increased to 77
Total Trihalomethanes	2.3 percent	1.4 percent
Sum of Five Haloacetic Acids	1.3 percent	0.8 percent