

## Summary of Ammonia Alternatives

Atwater WWTF

Merced County

### PERMIT REQUIREMENTS

	<b>Alternative #1</b> (Seasonal Limits Set As Criteria)		<b>Alternative #2</b> (Floating Limits)
<b>Final effluent limitations: (Ammonia, Total as N)</b>	Summer <u>(April 1 to October 31)</u>  16.3 mg/L (1-hour average)  5.0 mg/L (4-day average)  2.0 mg/L (monthly average)	Winter <u>(November 1 to March 31)</u>  18.5 mg/L (1-hour average)  8.2 mg/L (4-day average)  3.3 mg/L (monthly average)	Limits "float" based on the pH and temperature in the Atwater Drain at the time of discharge (i.e., 1-hour, 4-day, 30-day)
<b>Acute criteria basis:</b>	1/10th percentile of calculated acute criteria using 9 years of pH data from the Atwater Drain at R-2 (process is described in TWDRs)		pH conditions in the Atwater Drain at R-2 at the time of discharge
<b>Chronic criteria basis:</b>	1/10th percentile of calculated chronic criteria using 9 years of pH and temperature data from the Atwater Drain at R-2 (process is described in TWDRs)		pH and temperature conditions in the Atwater Drain at R-2 at the time of discharge
<b>5-year compliance schedule?</b>	Yes (for 30-day average and 4-day average)		Yes (for 30-day average and 4-day average)
<b>Effluent sampling frequency:</b>	Daily grab		4 grabs per day
<b>Receiving water sampling frequency:</b>	Weekly grab at R-1 and R-2		4 grabs per day at R-2, Weekly grab at R-1
<b>Special:</b>	Requires special study of pH and temperature of the Atwater Drain. Requires restriction on maximum effluent pH (7.6)		Mid-afternoon
<b>Interim effluent limitations: (Ammonia, Total as N)</b>	Summer <u>(April 1 to October 31)</u>  16.3 mg/L (1-hour average)	Winter <u>(November 1 to March 31)</u>  18.5 mg/L (1-hour average)	Set as floating acute criteria