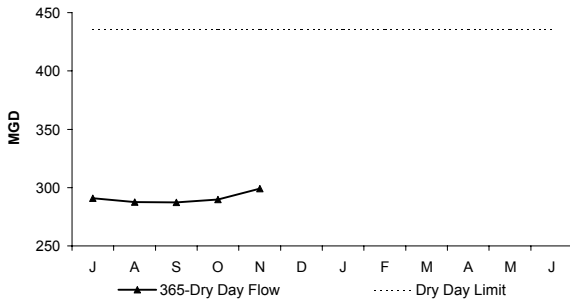


# Massachusetts Water Resources Authority Deer Island Treatment Plant Performance November 2002

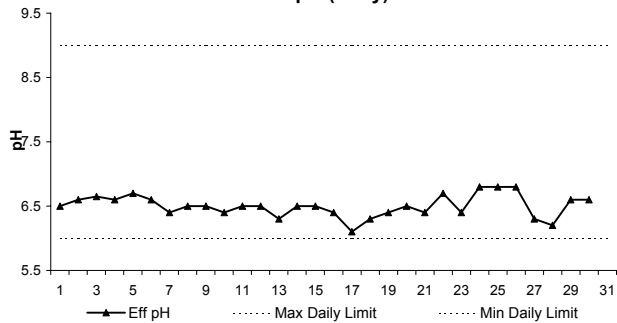
### Dry Day Flow



The November dry day flow is the average of all dry day flows for the period 12/1/2001 to 11/30/2002.

The dry day flow is calculated by averaging influent flows over the previous 365 days during dry weather.

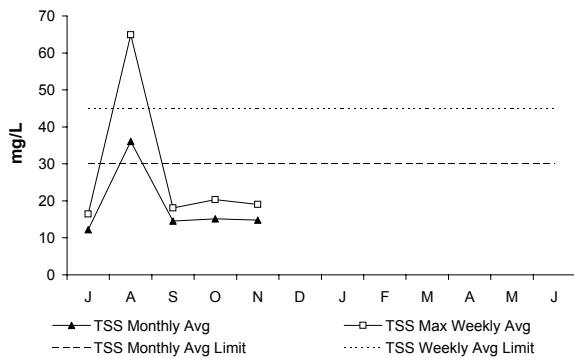
### pH (Daily)



In November, all pH measurements were typical for the season and within permit limits.

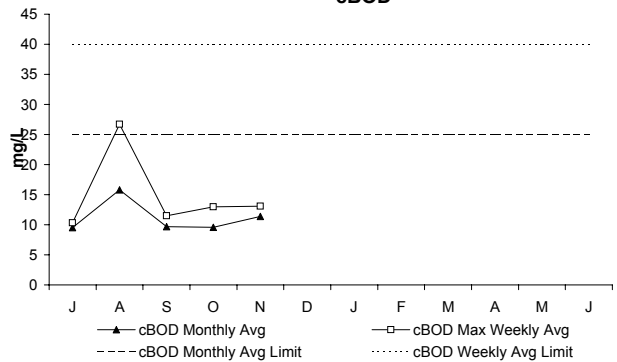
pH is a measure of the acidity or basicity of the effluent. Small fluctuations in pH do not have an adverse effect on marine environments. Because pure oxygen is used in the activated sludge reactors, the effluent pH tends to be at the lower pH range.

### TSS



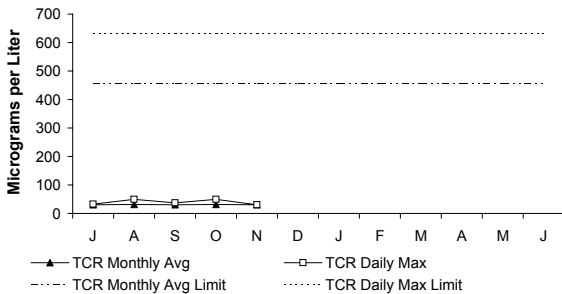
In November, both the weekly and monthly concentrations were below permit limits. Total Suspended Solids in the effluent is a measure of the amount of solids that remain suspended after treatment.

### cBOD



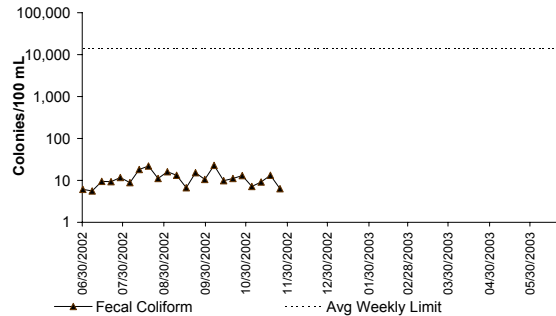
In November, both the weekly and monthly concentrations were below permit limits. Carbonaceous Biochemical Oxygen Demand is a measure of the amount of dissolved oxygen required for the decomposition of organic materials in the environment.

### TCR



In November, both the maximum daily and monthly concentrations were below permit limits. Total Chlorine Residual in the effluent is a measure of the amount of chlorine that remains after the disinfection/dechlorination process. If the chlorine residual in the effluent is too high, it may threaten marine organisms.

### Fecal Coliform by Week



In November, all permit conditions were met. Fecal Coliform is an indicator of the presence of pathogens. The levels of these bacteria after disinfection show how effectively the plant is inactivating many forms of disease-causing microorganisms. There are 4 conditions in the permit that must be met: daily geomean; a weekly geomean; 10% of all samples; and three consecutive samples not to exceed 14,000 col/100mL. 15