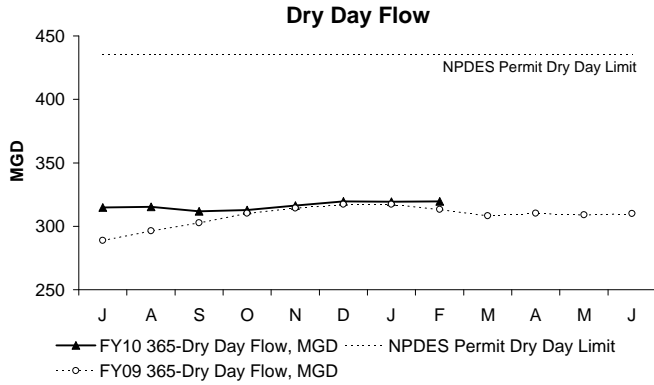
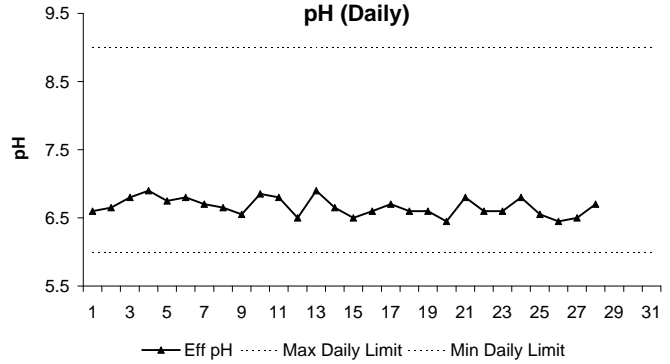


**Massachusetts Water Resources Authority
Deer Island Treatment Plant Performance
February 2010**



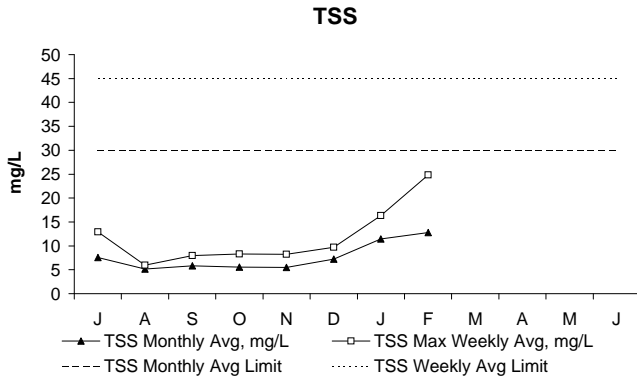
February's Dry Day Flow is the average of all dry day flows for the period from 3/1/2009 to 2/28/2010. The Dry Day Flow for February was below the permit limit.

Dry Day Flow is calculated by averaging influent flows over the previous 365 days during dry weather.

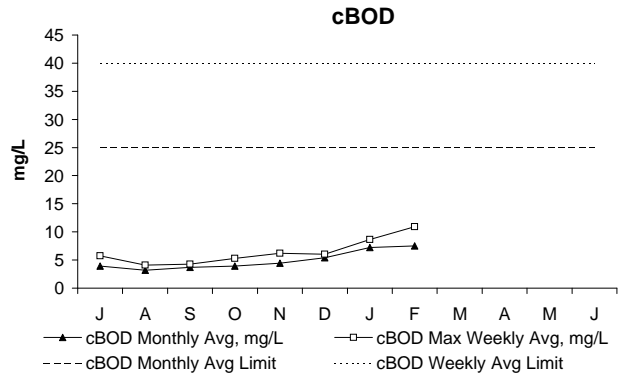


In February, all pH measurements were fairly typical for the season and within permit limits.

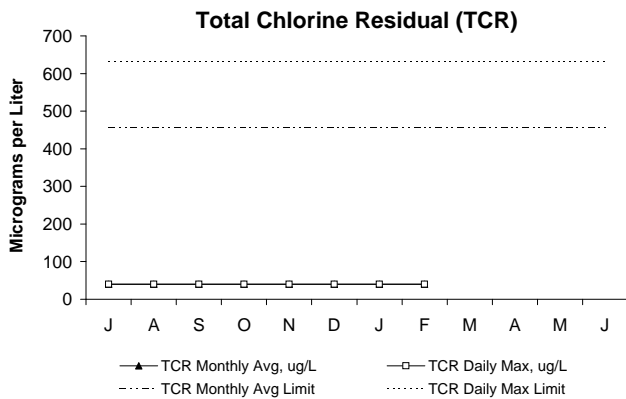
pH is a measure of the acidity or basicity of the effluent. Small fluctuations in pH do not have an adverse effect on marine environments. Because pure oxygen is used in the activated sludge reactors, the effluent pH tends to be at the lower range.



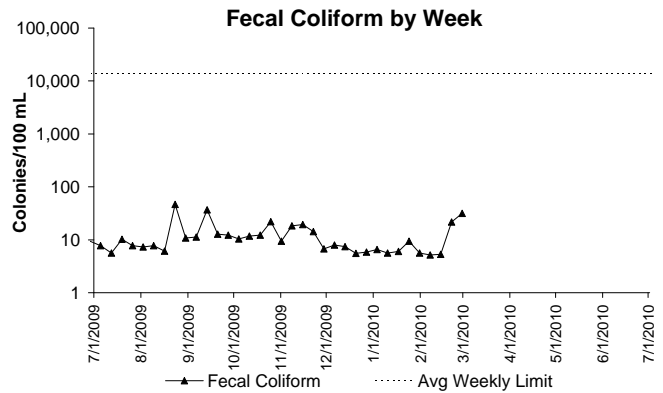
In February, both the weekly and monthly concentrations of TSS were below permit limits. TSS typically trend slightly higher in the winter months due to slower settling as a result of the wastewater being denser and also because plant flow in the winter are on average slightly higher. The much higher TSS Max Weekly Avg for February is due to poorer settling due to high plant flows during the last five days in the month resulting from several heavy rainstorms. TSS, or Total Suspended Solids in the effluent, is a measure of the amount of solids that remain suspended after treatment.



In February, both the weekly and monthly concentrations of cBOD were well below permit limits and within the expected ranges for this season. The slight increase in cBOD in February is due to poorer removal because of high plant flows during the last five days in the month resulting from several heavy rainstorms. cBOD, or Carbonaceous Biochemical Oxygen Demand, is a measure of the amount of dissolved oxygen required for the decomposition of organic materials in the environment.



In February, both the maximum daily and monthly concentrations of TCR were below permit limits. TCR, or 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.



In February, all permit conditions for Fecal Coliform 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. The slight increase in Fecal Coliform near the end of February is due in part to shorter disinfection chlorine contact times resulting from high plant flows during the last five days in the month.

There are four conditions in the permit that must be met: daily geomean; weekly geomean; 10% of all samples; and greater than three consecutive samples not to exceed 14,000 col/100mL.