Hi Regu,

I've reviewed the data in that CA nitrate report. Really we just need to look at Table 2 on Page 21. That table is a summary of all of the nitrate monitoring data; the remaining tables are just breakdowns of that data. As I had stated previously, with this summary data we can only estimate the 95th percentile as 2 times the standard deviation above the mean. This estimation really only applies to data that is normally distributed, which this data is not.

From Table 2:

- Public Water System Wells – There are likely a few very high nitrate concentrations skewing this data, since the median is 1.4 but the mean is 3.6, and the 75th percentile is only 4.3. This category has the highest nitrate reading in the entire report – 173.7 ppm. Using the 2x standard deviation rule, I estimated the 95th percentile at 19 ppm.

- Domestic Wells, SCVWD-Llagas Subbasin – The mean and the median for this set are fairly close, so the 2x SD rule is a bit more accurate. The 95th percentile of this set would then be 23.4 ppm.

- Domestic Wells, GAP/USGS Domestic Well Project – This data set is interesting, in that the standard deviation is only 0.9 ppm. Due to such a small SD, I did not calculate the 95th percentile for this set.

- Domestic Wells, Ag Order On-farm Domestic Wells – This data set also has a long tail upward, since the mean is over 3 times higher than the median, and the data has a highest standard deviations of all five data sets. Using the 2x SD rule, the 95th percentile is estimated as 42 ppm.

- Ag Order Irrigation Supply Wells – While this data is not from drinking water sources, I still calculated the 95th percentile. This data set also has a long tail upward. The 95th percentile is estimated as 37 ppm.

- If we had the raw data we could find the actual 95th percentiles, which would be higher than these estimations, but I doubt much higher. Given these numbers I don't see how we could justify a higher nitrate challenge concentration.

As far as the NSF test data is concerned, we do not have any performance data to share, other than our pass/fail rate for the nitrate/nitrite reduction claim. From September 2002 through July 2011, NSF ran 54 nitrate/nitrite reduction tests on POU RO systems. This was not 54 unique products, there are a few models that we tested more than once due to a failed test. The passing rate for this test was only 41%. So, as it stands now, this is a challenging test that many RO elements can't pass.

Regards,
Mike