June 9, 2014

Pamela Creedon
California Central Valley Region Water Quality Control Board

Ms. Creedon,

The Dixon Chapter of the Solano County Taxpayers Association, the DC-SCTA, has the following comments on the proposed "new" Cease and Desist Order to be considered on August 7th or 8th, 2014.

We find that this Cease and Desist Order directly addresses an extremely costly solution to your largest "stakeholder" group, those of us who actually have to pay for it, rather than considering any and all alternatives and options being implemented efficaciously in other areas of the United States, Canada, and overseas. A primary fallacy in the underlying premise is that "dilution (really) is the solution" despite you and your staff's statement to the contrary. Eliminating evaporation from the ponds by utilizing the proposed activated sludge process essentially is allowing the existing constituents to continue their input into the first recoverable ground water system. We would agree with staff's comments that "there are better uses for water than substituting for evaporation" and further state that it would be in the interest of all to actually remove constituents while recovering certain usable elements such as potassium which are in short supply in the US.

The DC-SCTA is aware of a company called In-Pipe Technologies who has a treatment facility at Lake Apopka outside of Orlando, Florida, the lake is known as Disney World's Lake. According to data provided by In-Pipe, using a stand alone "ferrate treatment" system, more than 95% of all nitrates are removed as well as 50% of heavy metals and boron. If you really desire to clean up influent as well as existing wastewater at the ponds, you take the components out of that water rather than processing it more quickly to preserve water. But it doesn't stop there.

Another component to be added to this system is a bacterial treatment directly inside all of Dixon's sewer lines. This will accomplish a 50% reduction in biomass along with conversion of a portion of nitrates to nitrogen gas, significantly reducing the incoming load to our plant.

Both of these could be accomplished at a cost under 2 million dollars while exceeding the contemplated goals of both your staff and city of Dixon staff. Final solutions, if needed, could be contemplated after data is recovered during a two year trial period. A third process, series batch reactors, would bring the total cost to around $8 million, a far cry from $28.5 million for a process which essentially removes only nitrates.

We view the activated sludge process as a move toward forcing Dixon to spend additional millions on some form of tertiary treatment. Combined with having to haul away solids which are currently being bio-digested in an equilibrium state, none of this makes fiscal, financial, or element reduction sense.

The Dixon Chapter has been in communication with In-Pipe Technology CEO John Williams, who has provided us with data and documentation of their processes in differing climatological regimes. However, we are not tied to this specific company in attempting to find less costly solutions. While we, in the DC-SCTA, do not work full time as does city staff, we still seem to come up with solutions far better than those who are working on the taxpayers' dimes.

The DC-SCTA believes it would be in the best interests of all concerned, including the SWQCB, to actually remove constituents. We further believe it would behoove and benefit all concerned to extend the period for final compliance by at least two years to assess the data if allowed the opportunity to employ this alternate strategy.

The Board loses nothing with this approach. Constituents would be removed before and after entering the ponds. Landfills would not be impacted by sludge removal and emplacement. The taxpayers would be less impacted also as Mr. Williams has stated that the scope of the solution could be downgraded once the technology has been allowed to work over a period of time.

Comments directly related to the statements in the C&DO follow:
Under "Compliance History", #13 ... "The City complied with the capacity and I/I requirements but did not

take sufficient action resulting in full compliance with the 2005 CDO. Compliance with the 2005 CDO was partly hampered by a ratepayer initiative that prevented approval of a bond issue intended to fund the majority of planned compliance projects."

The truth of the matter was this was another flawed solution which forced the DC-SCTA to take action because our council relied on illogic. This "band aid" solution, as it was termed by one of the SWB's own, simply piped effluent 7 miles south of town for percolation, removing nothing. Essentially, this is what the SWB is again endorsing: a costly solution doing little in removing constituents of concern.

It should be mentioned that the DC-SCTA has qualified two referenda to again stop this foolishness. While the referendum concerning the actual rates is being disputed, we still have the initiative process if the council remains pig-headed. The point is, the DC-SCTA will not allow this to happen as we did once before. This is the full story behind #13 rather than the provided Reader's Digest version.

Under #14, reference is made to the " ... The 2008 CDO provided site-specific numeric groundwater limitations based on an assessment of background groundwater quality data available at that time ...". This has been touted by Ms. Creedon and legal personnel on her staff as "cut in stone". The Citizen's Wastewater Committee initiated and endorsed additional monitoring wells to demonstrate that indeed the groundwater in the vicinity was "highly variable" as to its constituent contents as opposed to using data miles away to decide on final effluent limits. This data has been dismissed or ignored as we have seen no alteration in the final effluent rates despite our consultant from Stantec, Joe DiGiorgio, stating that limits should logically be raised given the data provided.

#15 addresses the impact from residential salt discharging self regenerating water softeners. No credit is given to the DC-SCTA who was instrumental in pushing for State legislation as well as local regulation prohibiting the future installation of these instruments.

The last sentence in #15 demonstrates our point already mentioned in #14: "The 2008 CDO allowed the Discharger to request re-evaluation of the groundwater limits and final effluent limits by providing an updated groundwater quality evaluation." Your proposed C&DO goes no further down this road other than mentioning it. While the DC-SCTA does not approve of polluting the current ground water stream, and we are actually cleaning it by putting in less polluted residual effluent water, we wonder why this opportunity is not being addressed.

The statements in #16 again leave out vital information. While the SWB executive officer did indeed write a letter on January 30, 2013, this letter was almost a year late in addressing the final effluent limits which were to determine possible paths for wastewater plant improvements. However, there is no discussion of higher effluent limits, options, or alternatives, just a full out push to do another financially wasteful project while ignoring significant data proving that the conclusions of those involved at the bureaucratic level are at best debatable. Again, while it is mentioned that
" ... if wastewater treatment facility improvements are necessary ...", no further push is made to examine that possibility.

Under #17, a lot of undeserved credit goes to the "discharger" who after the fact of Measure L to repeal tripled sewer fees constituted the wastewater committee which actually provided these recommendations. While it is true that this committee was advisory to the council, it is likewise true that the solutions provided were "out of the box" of normal governmental thought.

In #19, the statement " ...The Discharger estimates that the large foot print of the treatment ponds and percolation basins causes salinity concentrations to increase by approximately 80 percent due to evapoconcentration from the time wastewater flows through treatment ponds until it percolates below the percolation basins." exemplifies the problem with the Board's current thought process. "Dilution is not the solution" has been said many times, including by Ms. Creedon and Ms. Wyels. Essentially you are endorsing "diluting" the constituents by preventing evapo-concentration rather than addressing the true problem of the constituents of concern. #24 reaffirms the focus on evapo-concentration.

Confirmation of one of the points made in the body of this letter is contained within #27: "Decommissioning the wastewater treatment ponds will require the removal of accumulated sludge. The sludge depth is estimated to be less

than two feet in the first three ponds and the total accumulation is estimated to be about 2,000 dry tons." Former city engineer Ron Tribbett has stated that this sludge had accumulated to the depth of four feet and had reached a biological equilibrium through destruction of microbes. If it is true that the depth has decreased, it further proves the non-necessity of removal, drying, and land filling.

Nothing needs to be done with the sludge. There is no proof in any of the trace element studies that "heavy metals" or other toxic constituents are entering the first recoverable ground water system. The combination of biological activity and clay soils has eliminated this potential.

#38 and #39 demonstrate that the Board relied on erroneous information in determining the 2008 effluent limits. These should be thrown out as non-indicative of the true nature of the groundwater in the area of percolation.

#45 and later paragraphs on nitrate are not debatable. We would just prefer a solution that is all encompassing rather than focused only on nitrate. Ferrate treatment removes not only boron but manganese as well as other metals not currently of concern. This C&DO needs to reflect the possibilities and not the limitations restricted to our consultant's desires for a pay day.

Under #63 is the statement "The economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order." If this is truly your belief, the bankrupting of our "valley communities" as well as the incentive to leave the State to "associated industry" by not paying attention to possibilities to reduce financial impacts on both of these stakeholder groups is of paramount importance. This is not the direction you are pursuing.

Under #64 (9) (e) is the following statement: " ... As a result, effluent quality with respect to boron is expected to improve and subsequently improve groundwater quality over time. However, it is not possible to predict the level of improvement that can be achieved or when it might occur." This rather ambiguous and amorphous deduction again points us toward the better solution of absolute removal of a determinable amount of boron in existing influent, once in the pond, and the influent already there. The ferrate treatment process at Lake Apopka is designed with a through put of 5 million gallons per day. Considering that our influent rate is currently 1.2 mgd, there is plenty of capacity to address and repeatedly remove additional amounts of constituents beyond the 50% level overall.

In conclusion, the DC-SCTA recommends a new or companion C&DO which addresses the ability to increase effluent limits while at the same time explores new or different technologies far superior to the "proven" activated sludge process. Costs are of ultimate concern to we, the taxpayers, and it is absolutely reprehensible for the SWB to not take these new possibilities into consideration. We have provided you with a solution which will directly address your constituents of concern. It is up to you to act and allow us to explore a possibility which will benefit every town in our fine State.

Respectfully,

Drew A. Graska
President, Dixon Chapter, Solano County Taxpayers Association