

## **2012; a Year of Challenges**

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NeRWA one day wastewater classes this year have been dedicated to identifying the sources and reducing the costs of dealing with collection system inflow and infiltration (I/I). It has been an unusual year in that more I/I for many of us would have been a very real blessing.

You are required to maintain a minimum depth of 2 feet of water in your lagoon cells. This requirement is meant to protect the integrity of the seal in the bottom of the lagoon and thus to protect the quality of the groundwater. This has been a very real challenge for many operators this year. Many have resorted to running potable drinking water down the sanitary sewer to maintain that 2 foot minimum depth.

A system can decide to allow a cell to dry up but before you will be allowed to return flow to that cell your City Engineer will need to certify to the NDEQ that the seal meets or exceeds minimum permeability requirements. This means that your ratepayers may well be required to assume the costs of the excavation and the compaction of the floor of the cell before the cell can be returned to service.

If you have been land applying water from your ponds through the irrigation of fields, it has been difficult in a drought year to discontinue that service to your community farmers but you may need to do just that. As a side note, make sure that you are maintaining the required records at the City/Village office (not with the farmer). For a review of those requirements refer to Title 119 Chapter 12 of the Nebraska Administrative Code.

As water levels fall, it encourages more vegetative growth that you need to control. It may also expose areas of erosion and/or animal burrows that you will need to address by re-compacting with clay and perhaps applying riprap. Be sure that any concrete riprap is a maximum of 1 foot in diameter. Riprap is an excellent way to control erosion of the lagoon banks if you have erosion problems but to control vegetative growth in the riprap you will be limited to chemical applications.

Lagoon treatment of wastewater can be an excellent, low cost means of wastewater treatment but it does require some management. Be sure that you restrict access with the required signage and locked gates. Do not graze the area with livestock and keep vegetative growth controlled.

As an operator your challenges never end, only increase. I hope that next year we are all concerned with inflow and infiltration (I&I) once again but I guess we need to be careful what we wish for.