

Lagoon Tips

In a perfect world lagoons would be odorless, large enough to hold endless influent and meet NPDES limits. OK, since none of us live in this perfect world, here are some possible tips to help run your lagoon more successfully.

Operation:

- If you have more than one lagoon, try to running in series (one after the other), granted, it puts the entire wastewater organic load on one lagoon, but this allows you to polish the other lagoon(s).
- Recirculating water from the final cell to the influent of the lagoon helps to “freshen up” sewage. I would suggest doing this continuous, but if this is not possible, recirculating during the Spring, when the lagoons are turning over would be an excellent time.
- By introducing air/aeration to the influent wastewater, you can “freshen up” possible septic sewer water.

Sampling:

- Use samples out of lagoon to check to see if your permit parameters are in compliance, THEN wait for the results. If your results comply, start your discharge from the lagoon. Do not open your discharge pipe to do a “check” sample, once you open the pipe, this becomes a discharge and has to be reported to NDEQ.
- If possible, sample early in the morning, remember your lagoons work by “mother nature” meaning sunlight and wind make the lagoon work.

“Paint-like” Algae:

- A blue-green algae has become predominant, especially during the hot Nebraska summers. Aerating your lagoons will help to break up the algae but not eliminate it, so I would suggest not discharging the lagoons during these months.

Dredging:

- Experts recommend that lagoons be dredged every 25 years, but of course this depends on your organic load to your lagoon. I suggest a sludge profile be done on your specific lagoon and follow up on your lagoons approximately every 3 to 5 years. Sludge profiling is a service that Nebraska Rural Water Association can provide for you.

These tips by no means are solutions to all lagoon problems. However, they may be simple changes that could be made to make your lagoons operate more effectively. If you have additional topics, which you would like to have addressed or possible solutions to a common problem I did not discuss, please contact me for information for a future news article.