



## SUCSESSES

### ANIMAL WASTE FARM

#### Case Study- Hog Farm

- Company:** Chinook Group
- Process:** Amines production facility
- Location:** Ontario. Canada
- Operation:** Approximately 125,000 gallons/day of effluent flowing directly to local body of water from existing holding lagoon.
- Treatment:** Installed aerators and bacterial feed system in the existing lagoon. A new treatment building houses 3 above ground steel bioreactors, a filter system and all of the automated controls for an automated treatment system. All controls are relayed through a PLC to a main plant control room for intermittent supervision of on-line status. This system is fully enclosed from the elements.
- Results:** Odors were alleviated immediately. The system automation provides for automatic diversion back to the holding lagoon if the effluent sampler detects any out-of-limit samples. The filter unit is a continuous run, self-backwashing system. The first two bioreactors have been created to provide flow direction through the fixed film media and aeration. The final bioreactor is currently in use as a polishing unit with the allowance for future expansion. Due to the geographical location of this facility temperature becomes a factor in the winter months. Recommendations are for blower driven aeration/diffusion systems to maintain higher liquid holding temps. With proper temperature considerations, this system performs well for direct discharge applications.
- Conclusions:** BS-100 bioreactor system, enclosed from the elements, works well.