#### LABORATORY DATA EXCHANGE FOR SMALL TREATMENT FACILITIES

Narragansett Bay Commission Walter Palm, Laboratory Manager



## What Lab data is needed for operational purposes?

- BOD data
- TSS data
- Fecal Coliform data
- pH data
- Misc.



## The data needs for a small treatment facility

- May require monitoring test results and licensed contract lab test results
- May use a combination of bench sheets and spreadsheets for:
  - Test Quantitation
  - Averaging, % removal, and monthly loading amounts
  - Plotting trends of specific parameters such as ammonia, phosphorous, metals, etc.
  - DMR reporting requirments



#### Who are your internal customers?

- Plant Superintendent
- Company Engineers
- Shift Supervisors
- Senior Managers

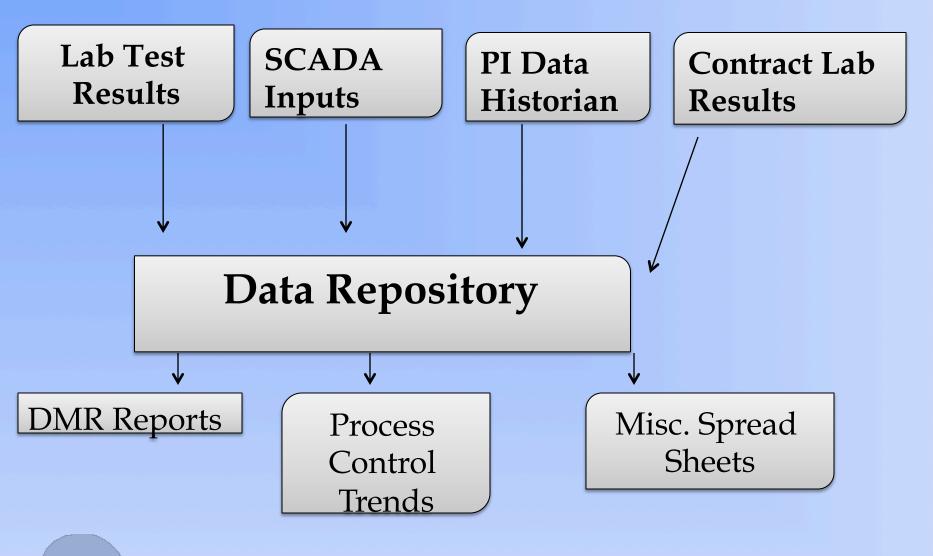


### Data Repository: Common Data Housing Location

- The core of a LIMS is a common electronic location to store lab results and process information.
- Giving "internal customers" the ability to extract information from a data repository improves efficiency and productivity.
- The data exchange needs of a small treatment facility can be met by having the ability to quickly find pertinent information related to the treatment process.



#### Work Flow



### large facilities

- May be have a full service licensed lab in-house
- Will need to be very efficient in processing many parameter analyses each day
- Will need to monitor more lab quality controls to assure confidence in all results
- Will need to be almost entirely paperless to be able to generate results in "real time."
- Will have the ability to interface all lab equipment and operational systems (SCADA, PI, etc.)



# More LIMS vendors are developing targeted products for snall labs

Features of these systems include:

- Report building functions
- Dashboard view
- Multiple ways to import data
- Trend functions



### Any Questions?



