

Is Your Laboratory the Weakest Link?

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South Valley's Experience

- Local yogurt manufacturer discharging process water outside the acceptable range (5 – 9)
- 83 separate violations documented by a continuous meter
- SVWRF no not properly notified of violations
- Violations documented by field sampling
- Ongoing spill issues
 - 8,000 gallons yogurt waste pH 11.9
 - Undocumented/reported spills
- Possibility of willful or negligent discharge
- Consideration of “Economic Benefit”

Looking into an Enforcement Action

- Groups Involved
 - General Manager
 - Facility Attorney
 - State DWQ
 - EPA Region 8
 - EPA CID

Questions Asked

- Employee training
- Equipment calibration
- SOPs
- Documentation
- Quality Control
- Employee Ethics Training

Result of the Review

- More Testing
 - Documentation of field calibration equipment
 - Duplicate samples
 - Brought back samples to facility lab within holding time.
 - Analysis by a certified lab
 - employee training, equipment calibration, written SOPs, and proper quality control

There is a huge difference between providing data for routine reporting compared to supporting possible litigation.

Pretreatment's Part

- Sampling Issues
 - Written SOPs
 - Training records
 - Proper technique
 - Proper containers
 - Adequate volume
 - Preservation
 - Holding times
 - Cross contamination
 - COC and other supporting documentation

A Good Laboratory

- Experienced management
- Properly trained employees
- Use approved methods
- Written SOPs
- Equipment functioning & maintained properly
- Acceptable quality control per batch
- Data reviewed by second party
- Properly “Flagged” data
- Proficiency testing
- Initial and ongoing training
- Supporting data is available for review

National Environmental Laboratory Accreditation Program



“generate data of known and documented quality”

Audit Your Laboratory Annually

- Clean and well organized
- Adequate space
- Reconstruct supporting information
- Ask to see training records
- Employee turnover
- Adequate equipment for volume of samples
- Equipment maintenance records
- Document storage
- Sample storage and disposal
- Disposal of hazardous waste

Other Things to Watch For

- Pay attention to “flagged” data
- Immediately review reports and ask questions
- Watch for substituted methods
- Reporting outside calibration curves
- Dilution to remove interferences
- Modified methods
- Use of adequate sample volume
- Proper Method Detection Limit (MDL)