

Public Water Systems: Common Problems and Errors

Inventory

- Inventory updates - Water systems must notify DOW of inventory changes (sample sites, contact, etc.).
- ETT - Water systems need to address NOV's in a timely manner. Contact DOW promptly with any questions. All federal violations carry weight: once a system accumulates 11 points or greater, they are referred to the Division of Enforcement.
 - 10 points – acute violations (including Nitrates MCLs)
 - 5 points – other health-based violations (MCL, MRDL, TT), plus TCR MR repeats and Nitrates MR
 - 1 point – all other Monitoring and Reporting (M&R)

DBP/TOC

- M&R – Violations have decreased over the years, but we are expecting an increase due to Stage II going into effect. Be aware of the following:
 - Incorrect or omitted location codes
 - Missing analysis dates
 - Incorrect dates
- Stage II implementation – expecting increase in MCL and M&R violations due to Locational Running Annual Average (LRAA). Be aware of the following:
 - Missing site plans (possible M&R violation)
 - Pulling from incorrect locations
 - Smaller systems will need the most help for reporting
- Stage II schedules

Table 1: Standard Monitoring Compliance Dates

If you are a system serving:	Schedule: ¹	Begin Compliance Monitoring by:
At least 100,000 people or part of a combined distribution system serving at least 100,000 people	Schedule 1	April 1, 2012
50,000 to 99,999 people or part of a combined distribution system serving 50,000 to 99,999 people	Schedule 2	October 1, 2012
10,000 to 49,999 people or part of a combined distribution system serving 10,000 to 49,999 people	Schedule 3	October 1, 2013
Less than 10,000 or part of a combined distribution system serving less than 10,000	Schedule 4	October 1, 2013 ²

TCR/GWR

- No samples
- Duplicate lab sample number
- Exceeded hold time or bad date
- Missing location code
- No analysis time
- Insufficient submission
- Sample missing result
- Wrong collection year
- Wrong lab receipt year
- No additional samples taken (5 samples required the month following a TC+)
- Repeats not linked appropriately to originating TC+ sample
- Repeats labeled as “routine”
- Non -acute MCL: too many TC+

Public Notice

PN/PN Certification Form

- Missing primary and secondary distribution dates
- Failure to list secondary method or failure to perform secondary distribution
- Missing signature of responsible party and/or date signed
- Failure to complete and submit PN certification form
- Missing or altered mandatory language
- Not listing all or any contaminants for violations
- Mandatory language not word for word
- Dates not listed for when violation occurred
- PN was not performed within required time frame

CCR

Reporting

- Incorrect data reporting
- Not reporting violations received for the year

CCR distribution

- Failure to directly deliver CCR
- Failure to perform Good Faith Efforts distribution method
- Provided to customers late
- Provided to DOW late

eCCR

- eCCR dead URL link
- eCCR notification language - does not indicate or describe the eCCR link or does not provide proof of eCCR notification to DOW
- eCCR Good Faith Efforts cannot be another electronic method
- Note: Mailing notification that the CCR is available online but having a dead link does not equate to direct delivery.

CCR certification and CCR packet

- Certification Form filled out improperly or distribution methods selection left blank
- Certification does not indicate how CCRs are made available on request
- Good Faith Efforts distribution method not indicated on CCR certification
- Missing signature and date of signature on certification

Chemical monitoring issues

- Systems don't know their chemical schedules and are overly reliant on the lab, so they don't sample enough or sample too much
- Chemical sampling should take place at the plant tap
- Failure to notify lab once they have a detect which calls for quarterly sampling
- Once quarterly or annual sampling for a detect is done and results have been reliably below detect levels systems fail to send in a written request to reduce the monitoring

Lead/Copper monitoring issues

- Laboratories do not send lead/copper directly to DOW, therefore some systems fail to mail signed copies of their results
- Incorrect sampling points, systems use sampling points that are not in the SDWIS database
- Three-year monitoring period is easy to forget, so some systems fail to sample
- A few systems have sampled out of the warmer months (June-Sept.), samples pulled prior to that or after that unless on six-month monitoring do not count.
- When a system pops the lead or copper exceedance, there is usually enough time to take more samples to get out of the exceedance, but system waits until after the monitoring period to send the results
- Plant tap is not considered a legitimate lead/copper sampling point because it's not in the distribution system

MOR Compliance

- Failing to report distribution chlorine residuals **EVERY DAY** water is distributed to the public:
Community systems - must report at least one chlorine residual every day.
Non-community systems - must report at least one chlorine residual every day the system is open and serving water to the public
- Failing to submit the MOR (within 10 days after the monitoring period)
Address MORs to:
MOR Compliance
CTAB, 4th Floor
Division of Water
200 Fair Oaks Lane
Frankfort, KY 40601
Seasonal systems must submit the MOR for all operational months on record with the state. If a seasonal system opens late or closes early, documentation must be submitted indicating the system is closed; otherwise they will receive a violation for failure to submit.
- Not accurately completing the entire plant summary (producers) or distribution summary (all systems):
Compliance determination is extracted from the summaries. Incomplete, inaccurate, and missing summaries are automatically flagged for potential violations and require additional review. A complete and accurate summary will glide through compliance.

A common mistake causing an incomplete plant summary arises from not entering the plant tap/entry point chlorine residuals on p. 5 of the MOR, not indicating Y or N regarding chloramine use, and not indicating the total days of distribution operation on p. 7.

Producers often misunderstand the Entry Point Residual Disinfectant (EPRD) portion of the plant summary regarding “total lowest chlorine samples recorded” and report a value of 1 or 2. “Total lowest chlorine samples recorded” does not mean how many samples were at the lowest analytical value, but rather how many samples were reported that month. Systems must report the lowest value of chlorine exiting the plant and entering the distribution system (with either an online chlorine analyzer or grab sample). Multiple samples may be analyzed, but only the lowest or minimum value is reported each day of production. Therefore, the total lowest chlorine samples recorded should be equal to the total of days of production. If the number of samples is less than the total days of production, it is automatically flagged as a potential violation.

- Reporting the incorrect PWSID for purchases and sales:
Must report PWSID, not just system name. A system cannot report buying or selling water to itself. Do not report inactivated systems. All consecutive connections must be inventoried with the state, including emergency and seasonal connections.
- Submitting multiple/different distribution chlorine residual data pages for each plant/or area of the distribution system:
One PWSID = One Distribution System. For systems with multiple plants or isolated distribution areas, the distribution chlorine residual data page and summary represents the entire distribution system. Submit only one distribution data page and summary that reflects the entire system. For multiple plants, submit one distribution data and summary page with the primary plant’s MOR or include that identical distribution data and summary page with each additional plants’ MOR.
- Entering zeros as a place holder:
Only enter the measured analytical value of the given parameter. “0 gallons pumped” is an appropriate analytical value if there was no production. Conversely, for water quality parameters, “0 mg/L free chlorine” is not an analytical value if no sample was actually measured, in which case this data line must be left blank. (Otherwise, the reported zero is considered a test result, which would be below the regulatory minimum in free chlorine and may result in a violation.)
- Failing to report abnormal circumstances because it does not fit into the standard MOR format:
Include an additional note/page clearly explaining the situation and any relevant data.

- Submitting massive amounts of extraneous data:
Only submit the relevant MOR data pages except if additional information is necessary as aforementioned or as requested by DOW. Extraneous data pages greatly increase document processing time. If every public water system were to include just 5 unnecessary pages, that would equal 2,300 extraneous pages that DOW would have to process.
- Not reviewing the final MOR before submitting to the DOW:
Review all data before signing and dating the MOR. Your signature acknowledges that all data within the MOR is true, accurate, and complete.
- Attempting to have violations rescinded for missing compliance data:
Violations will not be rescinded for failing to properly complete the report (for example, not transferring a chlorine residual from a bench sheet or log book onto the final report). Violations for failing to submit the MOR will only be rescinded if the water system can provide proof of mailing (certified mail receipt) or if the report does arrives at CTAB and the postmark date is within the appropriate time frame (misrouted mail that did not arrive on time).
- Inquiries about electronic MOR submission:
Electronic submission is not yet an option due to such challenges as budgeting to overcome including budgeting and compatibility with existing databases. At this time only the original hardcopy, signed and dated, is considered an official legally binding document.