

Subject:	Procedure for Invalidating Total Coliform-Positive Samples based on Non-Representative Location	Date:	6-16-09
Unit:	Technical Services (jn)	Revised:	2/12/13/ 2/4/16
Purpose & Scope: How to (a) determine that total coliform (TC)-positive samples from a specific tap are eligible for invalidation due to a non-distribution plumbing problem; (b) instruct a PWS to replace the required samples; and (c) request sample invalidation.			
Procedure/Process: Explains steps for OAR 333-061-0036(6)(j)(B)			

- **A PWS has a positive routine sample for TC only (not TC and *E. coli*).** The agency representative for that PWS (whether County, Dept of Ag, or DWS) contacts the system and directs them to collect the required repeat samples immediately.
- **A sample is eligible for invalidation under OAR 333-061-0036(6)(j)(B)<sup>1</sup>** if ALL samples collected at the original routine sample location are positive for TC only, and all the samples collected upstream and downstream are negative. Note that the Department cannot invalidate a TC+ sample if all the repeat samples are TC-, or if the PWS has only one service connection.
- If the PWS discovers the cause of the coliform problem at the original location (for example, bad fixture or connection), then the system has the option to correct the problem and retain this sampling location in the future. If they choose to do so, after the problem is fixed, they may either:
  - Accept these coliform positive results from that location and complete a level 1 coliform investigation. Also, if required (for systems sampling quarterly rather than monthly), collect 3 routine samples the next month (end of procedure); or
  - Request that the recent TC+ sample(s) at the problem location be invalidated for this sampling period (continue with procedure).
- Once the routine and repeat results are determined to meet the criteria for invalidation (second bullet above), **the agency representative should:**

<sup>1</sup> See subsections (A) and (C) for other possible reasons for sample invalidation.

- Instruct the PWS to collect a “replacement” routine sample from a different site. This replacement sample must be collected in the same monitoring period as the original routine sample. If that period has already ended, the PWS will receive an M&R violation, but will not need to conduct a Level 1 Investigation once the previous positive samples become invalidated.
- Send a memo/email to DMCE (compliance.dw@state.or.us) to recommend invalidating the recent TC+ samples from the problem location. See example memo text below. If you include all needed information in a contact report, you may simply email DMCE the link to the contact report with your invalidation request.

This system’s October routine sample, #310721241, collected Oct. 17, 2015 at the Anderson house was TC+ EC-. The repeat sample #310722641 collected Oct. 24, 2015 at the same location was TC+ EC-, but all other repeat samples collected upstream and downstream were negative. This TC+ location is due to domestic or other non-distribution system plumbing problems because: [include reason]. This meets the criteria for sample invalidation as described in OAR 333-061-0036(6)(a)(F)(ii), so I recommend invalidating the sample results in SDWIS. The PWS will collect a routine sample on October 31 to replace the invalidated routine sample.

- Instruct the PWS to revise their Coliform Sampling Plan if they chose to eliminate the non-representative site from future sampling.
  - Document these proceedings in Contact Reports as needed.
- Note that if the invalidation is approved, the routine sample and all associated repeats will be removed from SDWIS – not just the positive samples. Furthermore, the system will not be required to take the temporary routines the following month.
  - DMCE will forward a copy of the approved “Invalidation Memo” to the PWS’s file.
  - Note: The original Total Coliform Rule and OAR 333-061-0036(6) refer to “total coliform-positive” samples throughout the rule sections. There are no references to expanding the invalidation allowance to include *E. coli*-positive samples in either document. If an unusual situation arises, we can evaluate it on a case-by-case basis.