



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Mail Code 401-03

Division of Water Supply & Geoscience

Water System Operations Element

Bureau of Safe Drinking Water

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Commissioner

November 21, 2012

*Wanda*

~~JOSEPH FALLON~~

FORT MONMOUTH MAIN BASE

PO BOX 148

Oceanport, NJ 07757

Re: **Stage 2 Disinfectants and Disinfection Byproduct Rule  
Operational Evaluation Levels and Upcoming Training**  
PWSID Number: NJ1311001

*This letter applies to Schedule 1 systems (i.e. those systems serving 100,000 or more people OR those systems in which the largest system in their combined distribution system serves 100,000 or more people) and to Schedule 2 systems (i.e. those systems serving 50,000 to 99,999 people OR those systems in which the largest system in their combined distribution system serves 50,000 to 99,999 people).*

Dear Public Water System Owner/Operator:

The New Jersey Department of Environmental Protection (Department) is contacting you to describe how the next phase of requirements of the Stage 2 Disinfectants and Disinfection Byproduct Rule (Stage 2 DBPR) will affect your public water system and to provide you with information on upcoming training sessions.

The Stage 2 DBPR builds on existing regulations by requiring water systems to meet disinfection byproduct maximum contaminant levels (MCLs) at each disinfection byproduct monitoring site in the distribution system to better protect public health. All community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) that use or deliver water treated with a primary or residual disinfectant other than ultraviolet light are subject to the Stage 2 DBPR requirements.

On December 13, 2012, the Department will be conducting a training session at the South Brunswick Utilities Department, 540 Ridge Road, Monmouth Junction, NJ 08810 for all Schedule 1 and Schedule 2 systems to review the next steps required under the Stage 2 DBPR and to outline guidance for reducing DBPs and achieving results within the MCL limits. All Schedule 1 and Schedule 2 systems, particularly those with high results in the first two quarters, are strongly encouraged to attend. To register for the training please contact the New Jersey Water Association at (609) 242-7111 or [www.njwater.org](http://www.njwater.org).

This training will address the requirement under the Stage 2 DBPR to evaluate Operational Evaluation Levels (OELs). OELs are utilized to initiate a comprehensive review of system operations and act as an early warning for a possible Stage 2 DBPR MCL violation in the following quarter. The Stage 2 DBPR requires Schedule 1 systems to evaluate Operational Evaluation Levels (OELs) beginning upon receipt of 4<sup>th</sup> Quarter 2012 results. Schedule 2 systems are required to evaluate OELs beginning upon receipt of results from 2<sup>nd</sup> Quarter 2013.

The Stage 2 DBPR states that a system exceeds the OEL if one of the following occurs at any compliance monitoring location:

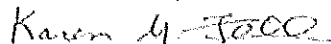
- TTHM compliance monitoring results for the two previous quarters plus two times the TTHM result for the current quarter, divided by 4, exceeds 0.080 milligrams per liter (mg/L); or
- HAA<sub>5</sub> compliance monitoring results for the two previous quarters plus two times the HAA<sub>5</sub> result for the current quarter, divided by 4, exceeds 0.060 mg/L.

See the attached example on determining if the OEL has been exceeded followed by a blank worksheet that should be used by the system quarterly to calculate if an OEL has been exceeded in accordance with the standards listed above.

In accordance with (40 CFR 141.626(b), if the OEL is exceeded, you must conduct an operational evaluation to determine the cause of the exceedance and submit a written report of the evaluation to the State no later than 90 days after being notified of the analytical result that caused the OEL exceedance. The operational evaluation must include an examination of system treatment and distribution operational practices that may contribute to TTHM and HAA<sub>5</sub> formation. The Department expects that any water system that has an OEL exceedance will follow the Environmental Protection Agency's (EPA's) Operational Evaluation Guidance Manual and complete the associated forms available from EPA's website at [http://www.epa.gov/safewater/disinfection/stage2/pdfs/draft\\_guide\\_stage2\\_operationalevaluation.pdf](http://www.epa.gov/safewater/disinfection/stage2/pdfs/draft_guide_stage2_operationalevaluation.pdf). Examples of completed operational evaluation reports based on a variety of system conditions are also outlined in the guidance manual.

If you have any questions regarding the Stage 2 OEL requirements, please contact Felicia Fieo at [felicia.fieo@dep.state.nj.us](mailto:felicia.fieo@dep.state.nj.us) or Kristin Tedesco at [kristin.tedesco@dep.state.nj.us](mailto:kristin.tedesco@dep.state.nj.us) or 609-292-5550.

Sincerely,



Karen M. Fell, Assistant Director  
Water System Operations  
Division of Water Supply & Geoscience

**Example - DETERMINING IF I HAVE AN OPERATIONAL EVALUATION LEVEL (OEL) EXCEEDANCE**

OEL Value for:

TTHM  $\geq$  0.080 mg/L

HAA<sub>5</sub>  $\geq$  0.060 mg/L

OEL Formula: quarter before previous quarter + previous quarter + 2(current quarter)

4

Date of Most Recent Sample: October 14, 2012

Result Received Date: November 10, 2012

**TTHM Results (mg/L):**

Site ID	Location	Quarter before previous Quarter	Previous Quarter	Current Quarter	Current Quarter	OEL (Average)	OEL exceeded?
DBP2-1	14 Main St	0.065	0.074	0.087	0.087	0.078	No
DBP2-2	37 High St	0.064	0.072	0.084	0.084	0.76	No
DBP2-3	42 Yard Ave	0.068	0.075	0.093	0.093	0.082	Yes
DBP2-4	98 Key Rd	0.066	0.070	0.082	0.082	0.075	No

**HAA<sub>5</sub> Results:**

Site ID	Location	Quarter before previous Quarter	Previous Quarter	Current Quarter	Current Quarter	OEL (Average)	OEL exceeded?
DBP2-1	14 Main St	0.033	0.041	0.050	0.050	0.044	No
DBP2-2	37 High St	0.042	0.048	0.055	0.055	0.050	No
DBP2-3	42 Yard Ave	0.037	0.043	0.046	0.046	0.043	No
DBP2-4	98 Key Rd	0.043	0.045	0.052	0.052	0.048	No

This example has a TTHM OEL exceedance at Site ID DBP2-3 and therefore an Operational Evaluation must be conducted on the system. Details for conducting an Operational Evaluation can be found at 40 CFR 141.626 and additional guidance is available in EPA's Operational Evaluation Guidance Manual (EPA 815-R-08-018).

**DETERMINING IF I HAVE AN OPERATIONAL EVALUATION LEVEL (OEL) EXCEEDANCE**

OEL Value for:

TTHM  $\geq$  0.080 mg/L

HAA<sub>5</sub>  $\geq$  0.060 mg/L

OEL Formula: 
$$\frac{\text{quarter before previous quarter} + \text{previous quarter} + 2(\text{current quarter})}{4}$$

Date of Most Recent Sample: \_\_\_\_\_

Result Received Date: \_\_\_\_\_

**TTHM Results:**

Site ID	Location	Quarter before previous Quarter	Previous Quarter	Current Quarter	Current Quarter	OEL (Average)	OEL exceeded?

**HAA<sub>5</sub> Results:**

Site ID	Location	Quarter before previous Quarter	Previous Quarter	Current Quarter	Current Quarter	OEL (Average)	OEL exceeded?

Is an Operational Evaluation Required? (circle one) Yes No

Operational Evaluation submitted to State on: \_\_\_\_\_