

were using methods that were relatively new. In addition, the method used for bromate during the WS studies was EPA Method 300.0 which was replaced by

EPA Method 300.1 in the Stage 1 DBPR, because Method 300.1 is more sensitive. Laboratories would be expected to have greater success in passing the bromate

PE samples using Method 300.1 and the bromate methods that are being proposed in today's rule.

TABLE V-19.—FIXED LIMIT EVALUATION OF WS PE STUDIES 36—41

[Average # and % of labs successfully completing studies]

DBP Sample	±20% of TV		±30% of TV		±40% of TV		±50% of TV	
	#Labs	%Labs	#Labs	%Labs	#Labs	%Labs	#Labs	%Labs
TTHM	609	73	731	88	773	93	788	94
HAA5 ¹	50	37	83	61	103	75	115	84
chlorite	55	63	68	78	72	82	74	85
bromate	45	50	52	57	57	64	60	68

¹ Study 38 was excluded from this analysis, because a valid DCAA true value was not available for the HAA sample.

Based on the results from the analyses described previously, EPA believes it is reasonable to set the TTHM acceptance criteria at ±20% around the study true values. The number of laboratories capable of performing TTHM analyses is large and the results described previously show that in the time frame of 1996–1998, over 70% of the laboratories could successfully meet the ±20% criteria. The PE studies conducted during the Information Collection Rule used the same acceptance criteria (USEPA 1996b).

The data indicate that ±40% are probably the tightest criteria that could be used to evaluate HAA5 PE samples. Setting this criteria balances the need for approval of enough labs to meet monitoring capacity and the need to provide data of acceptable accuracy. The ±40% criteria is consistent with the Information Collection Rule PE study acceptance criteria and it is tighter than the criteria established in the Stage 1

DBPR. During the Information Collection Rule, laboratories that were approved using the ±40% criteria were able to provide accurate and precise data as evidenced by the quality control data collected when the Information Collection Rule samples were analyzed (Fair *et al.* 2002). Of the 1,250 Information Collection Rule samples that were fortified with known amounts of HAAs, the median recovery was 103% and the recoveries ranged between 89% and 120% in 80% of the fortified samples. There were 1,211 Information Collection Rule samples that were analyzed in duplicate and the median relative percent difference for those HAA5 analyses was 4%. Ninety percent of the analyses had RPDs less than 21%. EPA believes laboratories that are certified using the ±40% criteria in PE studies should be capable of performing at a level comparable to the Information Collection Rule laboratories.

EPA believes chlorite PE samples should be evaluated using a ±30% criteria. Over 70% of the laboratories could meet this requirement for chlorite in the WS studies.

The percentage of passing labs for bromate is almost 60% when a ±30% criteria is applied to the WS study data. Since the data do not accurately reflect the bromate methods that are now being used by laboratories, EPA believes a greater percentage of laboratories would pass the bromate PE study using today's technology. Unfortunately, EPA does not have the data to verify this assumption, because EPA no longer conducts PE studies. Even if the assumption is flawed, a 57% acceptance rate would still provide enough certified laboratories to handle the number of bromate samples required for compliance monitoring under the Stage 1 DBPR.

The proposed acceptance criteria are listed in Table V-20.

TABLE V-20.—PROPOSED PERFORMANCE EVALUATION (PE) ACCEPTANCE CRITERIA

DBP	Acceptance limits (percent)	Comments
TTHM		
Chloroform	±20	Laboratory must meet all 4 individual THM acceptance limits in order to successfully pass a PE sample for THMs.
Bromodichloromethane	±20	
Dibromochloromethane	±20	
Bromoform	±20	
HAA5		
Monochloroacetic Acid	±40	Laboratory must meet the acceptance limits for 4 out of 5 of the HAA5 compounds in order to successfully pass a PE sample for HAA5.
Dichloroacetic Acid	±40	
Trichloroacetic Acid	±40	
Monobromoacetic Acid	±40	
Dibromoacetic Acid	±40	
Chlorite	±30	
Bromate	±30	

EPA is also proposing that the PE acceptance limits described previously become effective within 60 days of promulgation of the final rule. This will

allow the laboratory certification program to implement the fixed limits as soon as possible. Laboratories that were certified under the Stage 1 PE

acceptance criteria would be subject to the new criteria when it is time for them to analyze their annual DBP PE samples(s).