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January 9, 2004

Water Docket (MC-4101T)
Docket Nos. OW-2002-0039 and OW-2002-0043
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Docket Clerk:

The Maryland Department of the Environment (MDE) appreciates the opportunity to comment on the proposed Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and the Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) as listed in the August 11, 2003 *Federal Register* (68 FR 47639) and August 18, 2003 *Federal Register* (68 FR 49547), respectively. MDE is responsible for the state drinking water program implementation of the Federal Safe Drinking Water Act.

Overall, MDE support EPA's efforts to increase public health protection by concurrently addressing risks from microbial contaminants and disinfection byproducts (DBPs). MDE concurs that a risk-based approach proposed under the LT2ESWTR in which surface water systems monitor for microbial contaminants and that only those systems finding higher levels of contaminants are required to provide additional protection against *Cryptosporidium* makes sense in theory, but we have significant concerns about the laboratory techniques and accuracy, cost of sample collection for small water systems, and the effect of climate conditions on the variability of *Cryptosporidium* levels. MDE also supports the Stage 2 DBPR premise that all customers, including those in consecutive systems, should receive water that meets DBP standards The appropriate approach to meet this goal includes basing the number of samples required on population served (not the number of treatment plants and/or bulk purchase entry points).

We are concerned about the implementation schedules included in the proposed rules. There is a need to provide timely public health protection. However, we believe that public health will be better protected by taking additional time at the outset of the rules in order to ensure that monitoring locations and frequencies are appropriate and therefore recommend changes from the proposed implementation schedule that will ultimately lead to better public

health protection. MDE suggests a delay in microbial monitoring for small water systems, and coordination of Initial Distribution System Evaluation concept and compliance monitoring.

MDE expands on these issues and provides greater detail in Attachment 1. Responses to those issues on which EPA specifically requested comment in the *Federal Register* notices are included in Attachment 2 (LT2ESWTR) and Attachment 3 (Stage 2 DBPR).

MDE appreciates the opportunity to provide comments on these proposed rules and looks forward to working with EPA to ensure that the final rules are both protective of public health and implementable at the state and local levels. Please direct any questions or concerns regarding these comments to my attention at: nreilman@mde.state.md.us.

Sincerely,

Nancy Reilman, Chief
SDWA Implementation Division
Water Supply Program
Maryland Department of the Environment

cc: Steve Maslowski, EPA Region III
Saeid Kasraei, MDE

Maryland Department of the Environment
Attachment 1
Overarching Comments on the Proposed LT2ESWTR and Stage 2 DBPR
January 9, 2004

Rule Development Process

MDE supports EPA's efforts to construct rules that address the needs of the various stakeholders through use of the Federal Advisory Committee Act (FACA). The proposed Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) appear to be consistent with the FACA Agreement in Principle with a few exceptions that EPA clearly indicates are not consistent with the Agreement and provides justification for the departure from the Agreement.

MDE suggests changes to the proposed rules that vary from the Agreement in Principle in areas where an alternative approach will provide equal or greater public health protection. These changes are discussed in detail later in these comments.

MDE also commend EPA for providing pre-publication versions of both rules as well as additional time for review and comment of the proposed rules. We believe that both actions will ultimately improve the quality of the final rules.

Overall Approach for the LT2EWSTR

MDE concurs with the risk-based approach proposed under the LT2ESWTR in which surface water systems monitor for microbial contaminants and only those systems finding higher levels of contaminants are required to provide additional protection against *Cryptosporidium*. This includes the proposed requirement for large systems to perform *Cryptosporidium* monitoring to determine risk from microbial contamination as well as the proposed requirement for small systems to perform indicator monitoring to determine the need to perform *Cryptosporidium* monitoring. States do have concerns with the proposed implementation schedule. These concerns are discussed in greater detail later in this Attachment.

MDE supports the use of the microbial toolbox for those systems that need to provide additional protection against *Cryptosporidium*. The use of the toolbox will give systems much needed flexibility to choose the option(s) that best suit their specific situation.

Specific comments on these and other LT2ESWTR issues are provided later in this Attachment as well as in Attachment 2.

Overall Approach for the Stage 2 DBPR

MDE supports the Stage 2 DBPR premise that all customers, including those in consecutive systems, should receive water that meets disinfection byproduct (DBP) standards. MDE believes that the appropriate approach to meet this goal includes basing the number of

samples required on the population served (not the number of treatment plants and/or bulk purchase entry points).

Specifically, MDE supports the use of locational running annual averages (LRAAs) to determine compliance with the Stage 2B TTHM and HAA5 MCLs of 0.080 mg/L and 0.060 mg/L, respectively, using a population-based approach for determining the number of samples required. The best way to control DBPs is at the water treatment plant (although states recognize the benefits of proper distribution system management); that DBP monitoring should be based on a combined distribution system to the extent that the interconnection of the systems justifies treating these systems as a single system for monitoring purposes; and that states need to be involved in determining when consecutive systems should be considered a combined system for DBP monitoring purposes.

Since changing to LRAAs using a population-based approach will result in a change in the number of samples required for most systems, additional monitoring to identify optimal DBP sampling points is appropriate for some systems. However, waivers should be available for systems in which additional monitoring would not assist in determining optimal sites.

MDE does not support the proposed approach of using the Stage 2A MCLs of 0.120 mg/L for TTHMs and 0.100 mg/L for HAA5s as LRAAs at Stage 1 monitoring locations three years following rule promulgation. The Stage 2A MCLs may cause more confusion than public health protection and are of limited value since EPA projects that only 2.8 percent of the systems in compliance with the Stage 1 RAAs will exceed the Stage 2 LRAAs. The Stage 2A MCLs will result in state and Federal data management tracking problems, an increase in regulatory complexity, expensive database upgrades, and monumental opportunities for monitoring and reporting violations.

In lieu of the transitional Stage 2A MCLs, water systems should be required to comply with the existing Stage 1 D/DBP RAA MCLs until such time as they are required to comply with the Stage 2B MCLs. This will allow water systems to focus their efforts and resources on planning for improvements needed to comply with Stage 2B MCLs.

Specific comments on these and other Stage 2 DBPR issues are provided later in this Attachment as well as in Attachment 3.

Implementation Schedule

MDE Position on Rule Implementation

To truly protect public health, monitoring must occur at appropriate locations at appropriate frequencies. This includes microbial monitoring to determine appropriate treatment under the LT2ESWTR, DBP monitoring to determine appropriate monitoring locations under the Stage 2 DBPR, and routine compliance monitoring. Failure to monitor at both the appropriate location and frequency may lead to treatment decisions that are not appropriate or DBP monitoring locations that are not representative of the water being delivered to the public. Ultimately, such deficiencies may lead to the need to repeat the monitoring at other

locations/frequencies at additional cost (which can take funds away from other public health protection activities).

The state drinking water program is the appropriate regulator to determine appropriate monitoring locations and frequencies. Through implementation of the SDWA, each state has established a solid relationship with its water systems. This relationship will allow states and water systems to work together to determine rule applicability, appropriate monitoring requirements, and whether a waiver from monitoring should be granted, especially for complex rules that affect water systems with advanced treatment trains and/or intricate distribution systems.

MDE's preference is that the LT2ESWTR and Stage 2 DBPR limit any deadlines for water system activity as well as enforceable activities within the first two years following rule promulgation. States and water systems need this time to work together to identify appropriate monitoring locations and develop appropriate schedules for microbial and DBP monitoring. Additionally, states use this time to prepare state rules, update state data systems, and undertake other implementation-related activities.

There is a need for simultaneous compliance with the LT2ESWTR and the Stage 2 DBPR. The state-preferred approaches described below are designed to allow systems to have the necessary information to make informed decisions on both rules at the same time.

MDE's Concerns

The proposed implementation schedule for the LT2ESWTR may be too aggressive to the point that it will be extremely difficult to implement.

Identification and Approval of Monitoring Locations

Although guidance from EPA on appropriate monitoring locations is appreciated, guidance cannot replace direct consultation with individual water systems. MDE believes that, in most cases, states will need to work with each water system to ensure the proposed monitoring location for the system is appropriate. EPA has requested comment on a number of instances where states believe direct state-water system interaction will be necessary, including requirements for systems that use surface water for only part of the year, monitoring for systems that recycle filter backwash water, and requirements for systems that use multiple source types.

The water system should receive approval, in writing, of the acceptability of LT2EWSTR monitoring locations in order to prevent debate or confusion later. The proposed rule requires that systems submit a monitoring plan, but does not indicate if the plans will be approved. If EPA intends to approve the plans, including locations, MDE is concerned that EPA, especially EPA HQ, will not have the manpower or knowledge of system-specific situations to approve every monitoring plan. If EPA does not intend to approve plans, MDE requests supporting justification for requiring systems to submit a plan. MDE does not support requiring monitoring plans just to ensure systems are aware of their monitoring requirements or to check that samples were taken on a specific date.

Large System Ability to Prepare for and Execute Monitoring

Although three months lead time may be acceptable for larger systems that have been following the rule, provided there are no major changes based on comments received, large systems on the smaller side of the definition, such as those between 10,000 and 50,000 people, may have difficulty preparing and submitting a monitoring plan within three months of rule promulgation and beginning monitoring within six months. Further, if EPA makes significant changes to the final rule based on comments received, large systems will need time to review and understand the changes and then prepare for initial compliance activities accordingly.

Large systems must be allowed reasonable time to budget for *Cryptosporidium* sampling and contract with a laboratory for the analysis. While some larger systems may be able to absorb these costs under their current budgets, the costs could pose a significant problem for some larger systems unless the rule happens to be promulgated just before the systems begins budgeting for the fiscal year when sampling occurs.

Depending upon the content of the final rule, it may not be possible for large systems to prepare a complete monitoring plan within 90 days of rule promulgation. Although this effective date may be reasonable if there are no major revisions resulting from public comment, the schedule presumes that systems are familiar with the content of the proposed rule and have begun preparing their plans prior to rule promulgation.

Follow-up Activities for Large Systems

Even if large systems are able to begin *Cryptosporidium* monitoring in the required timeframe, many systems will miss the first sample (or first few months of sampling), which will require follow-up activity by states or EPA. Follow-up activities will be time consuming, as direct contact with individual systems will be required. EPA is reminded that although some states may opt to assist EPA in such communications under early implementation, some states do not plan to participate in any early implementation activities. In those states, EPA will need to undertake the follow-up activities directly.

Small System Activities

MDE is concerned that the final rule needs to include adequate timing for small systems to budget for *Cryptosporidium* monitoring and contract with a laboratory for the analysis. The six-month window included in the proposed rule may not be adequate. Some systems will most likely need at least one year to secure the necessary funding.

Further, small systems that are required to monitor for *Cryptosporidium* must collect the same number of samples as large systems but must collect these samples at twice the rate. This proposal places an extreme economic impact on small systems that are much less likely to have the financial reserves necessary to implement such costly monitoring program on such an aggressive schedule.

To reduce the economic burden on small systems, EPA could allow small systems to follow the 24-month, one *Cryptosporidium* sample per month sampling strategy that is available to large systems. This approach will reduce the financial strain on small systems by spreading the sampling cost out over a two-year period instead of compressing the entire cost into a single 12-month period. However, this approach would extend the compliance date for small systems that are required to monitor for *Cryptosporidium* by twelve months.

Another option would be to allow small systems to use the 12-sample second highest value or the 8-sample maximum value to determine their bin classifications. This approach is based on EPA's Monte Carlo analysis that reveals that these sampling protocols also produce extremely low "false negative" bin classifications. While EPA's analysis indicates that each of these two methodologies produce extremely high "false positive" rates, public water systems should be given the option of reducing the monitoring requirements if they are willing to provide the additional treatment that would result from a higher risk bin classification.

Laboratory Capacity

MDE is concerned with laboratory capacity for *Cryptosporidium* including the overall number of approved laboratories, the geographic distribution of the approved laboratories, and the potential spiking of the number of *Cryptosporidium* samples that need to be analyzed in a short timeframe if many systems are required to monitor for *Cryptosporidium* at the same time. The FACA recognized this concern and included the following language in the Agreement in Principle under Section 2.11.a:

If the availability of adequate laboratory capacity or data management software for microbial monitoring under LT2ESWTR for large or medium systems is delayed then monitoring, implementation, and compliance schedules for both the LT2ESWTR and Stage 2 DBPR described under 2.11.c will be delayed by an equivalent period.

Coordination Between Large System and Small System Monitoring

While MDE acknowledges that it might be desirable to refine these trigger levels based on the results of the sampling that will be done by large systems, such revisions could not be implemented solely through guidance. States will have already developed their own state rules and will have difficulty implementing guidance criteria that differs from an established regulatory mandate. Further, the public should have the opportunity to review and comment on any proposed revision to the trigger criteria before it becomes a mandatory change.

Even if EPA provided additional time between the end of large system *Cryptosporidium* monitoring and small system indicator monitoring to allow adequate time for public review of a technical correction, states would still need time to incorporate the technical correction, if approved, into state regulations. Also, as indicated previously, any substantial lag between large system *Cryptosporidium* monitoring and small system *Cryptosporidium* monitoring could be a disincentive for laboratories to provide analytical services. MDE therefore suggests that EPA make any changes to the indicator triggers through a technical correction, if timing allows, or as part of the Six-Year Review.

MDE-Preferred Approach

Based on the foregoing discussion, MDE recommends the following approach for implementing the LT2ESWTR:

- Require systems to submit a microbial monitoring plan three months before monitoring is required to begin.

- Stagger *Cryptosporidium* monitoring for large systems over three phases:

System size	*Cryptosporidium* Monitoring	Bin Determination Date	Compliance Date
>50K	2 years of monitoring beginning 1 year after rule promulgation	3.5 years after rule promulgation	6.5 years after rule promulgation
30K-50K	2 years of monitoring beginning 2 year after rule promulgation	4.5 years after rule promulgation	7.5 years after rule promulgation
10K-30K	2 years of monitoring beginning 3 year after rule promulgation	5.5 years after rule promulgation	8.5 years after rule promulgation

- Allow small systems the option of monitoring for *Cryptosporidium*:
    - Over a two-year period beginning three years after rule promulgation (monitoring would occur in Years 3 and 4). Small systems would not perform indicator monitoring under this approach and would be required to comply with new bin requirements 8.5 years after rule promulgation (which is consistent with EPA's proposed schedule). EPA would need to carefully consider laboratory capacity under this approach as systems serving 10,000-30,000 people and small systems would be monitoring for *Cryptosporidium* at the same time. If capacity is indeed an issue, EPA should consider delaying small system *Cryptosporidium* monitoring until Years 4 and 5 (which would delay compliance for small systems by one year from the proposed approach) in order to provide this opportunity for small systems to gather more meaningful information in a more cost-effective manner.
    - Over a one-year period, but allow small systems the option of taking 8, 12, or 24 samples. Bin determinations would be made using the 8-sample maximum value, 12-sample second highest value or, 24-sample arithmetic mean, respectively. The system would need to acknowledge the risk of higher "false positives" under the first two approaches and agree to provide the treatment indicated based on the lower number of samples. *Cryptosporidium* monitoring would occur in Year 4 and small systems would be required to comply with new bin requirements 8.5 years after rule promulgation (which is consistent with EPA's proposed schedule). Small systems would have an opportunity to perform indictor monitoring under this approach, with indicator monitoring beginning 2.5 years after rule promulgation. EPA may need to adjust this schedule depending on the need for small systems to have additional time between indicator monitoring and *Cryptosporidium* monitoring in order to secure funding and contract with a

laboratory for analysis (currently six months is provided) or any necessary delay due to laboratory capacity.

Stage 2 DBPR Implementation Schedule

MDE supports the concept of water systems taking additional DBP samples to determine optimal locations for Stage 2B monitoring, but would prefer incorporating this additional monitoring into the initial round of compliance monitoring. An approach that retains the current implementation structure for most NPDWRs of setting specific requirements and allowing water systems three years to comply with the new requirements is preferred. The approach builds on the "Concurrent Compliance Monitoring" option that EPA briefly describes on page 49606 of the Stage 2 DBPR preamble and would be in addition to the proposed requirements for water systems to comply with the Stage 2A MCLs as a LRAA three years following rule promulgation.

EPA's Proposed Approach

EPA's proposed approach involves water systems performing additional DBP monitoring to identify optimal Stage 2B sampling locations through a process that does not include state review and/or approval prior to monitoring (e.g., Initial Distribution System Evaluation (IDSE), system-specific studies). Under the proposed approach, water systems would conduct additional DBP monitoring at an increased number of locations and submit a report to the primacy agency recommending optimal DBP sampling locations for Stage 2B monitoring. This monitoring would occur soon after rule promulgation and would be in addition to Stage 1/Stage 2A monitoring, but would not be used for compliance purposes.

Concerns related to the proposed implementation schedule include:

- The schedule does not allow ample time for states and water systems to determine those situations in which use of a combined distribution system is appropriate.
- States do not have input into determining DBP monitoring locations because water systems are not required to submit monitoring plans to the state nor receive state approval of the monitoring plan.
- States will face a large, focused workload in reviewing all large system monitoring results at the same time (two years after rule promulgation) and all small system monitoring results at the same time (four years after rule promulgation).
- DBP monitoring will be on a "years since rule promulgation" year instead of a calendar year making reductions in monitoring difficult to track.

MDE's Preferred Approach

As mentioned previously, the MDE approach builds on the "Concurrent Compliance Monitoring" option that EPA briefly describes on page 49606 of the Stage 2 DBPR preamble. Under this approach, water systems would be required to collect initial Stage 2B compliance samples at an increased number of locations instead of performing an IDSE or other system-specific study.

MDE and water systems would begin working together soon after rule promulgation to determine which systems will need to identify new monitoring locations for compliance with Stage 2B MCLs (e.g., identifying which systems are eligible for a small system waiver or the 40/30 certification and which systems are not) as well as which consecutive systems should be included in a larger combined distribution system (and therefore not required to prepare their own DBP monitoring plan). States would then work with those systems that need to identify new monitoring locations for compliance with Stage 2B MCLs. After initial discussions about appropriate locations, systems would develop a DBP monitoring plan, using EPA's IDSE guidance manual to assist in preparing the plan.

With respect to the number of samples that a system should collect, MDE generally supports the following as minimal monitoring requirements and suggest that states have the discretion to require additional monitoring based on system-specific situations:

Population	**Number of Samples for Initial Monitoring**	**Number of Samples for Reduced Monitoring**
<500	2 samples/year[2]	1 sample/3 years[1, 2]
501 to 3300	4 samples/ year[2]	1 samples/ year[2]
3301 to 10,000	4 samples/quarter[3]	2 samples/quarter[3]
10001 to 50,000	8 samples/ quarter[3]	4 samples/ quarter[3]
> 50,000	8 samples/quarter+ 2 samples per additional 50,000/quarter; up to a maximum of 48[3]	4 samples/quarter+ 1 sample per additional 50,000/quarter; up to a maximum of 24[3]

1 – 2 samples per year if TTHM and HAA5 high concentrations are at different locations.
2 – Taken during the month(s) of warmest water temperature as determined by the state. Surface water systems would sample 1/year.
3 – At least one quarterly sample must be taken during the month(s) of warmest water temperature as determined by the state.

Once a monitoring plan has been developed, the system would submit the plan to the state for approval. In order to allow states to ultimately require monitoring based on a calendar year, states suggest the rule require plans to be submitted by no later than XX years after rule promulgation as determined by the state. The "XX" would be consistent with the due dates under the LT2ESWTR and would apply to all systems regardless of source type.

Since states will have been working with their water systems in preparing the monitoring plan, states should be able to approve monitoring plans in a timely manner (most likely between three and six months depending on the complexity of the system). Water systems would have three years from state approval before compliance monitoring at the selected sites would be required. All samples collected would be used for determining compliance with the Stage 2B MCLs using LRAAs. After the first year of monitoring, water systems would have the

opportunity to request a reduction in the number of monitoring locations at which they are required to monitor (similar to the proposed requirement to recommend Stage 2B sites in the IDSE).

MDE supports including a requirement that systems repeat the initial increased compliance monitoring every nine years unless the system receives state approval to remain on the reduced monitoring schedule. This approach would be consistent with the Standard Monitoring Framework. MDE supports this approach because distribution systems can be influenced by several factors including population/distribution system growth closing or adding of wells, seasonal tourist demands, recent flushing events, and a host of other factors. However, states should have flexibility to waive the requirement if the system has not had major changes.

This approach will provide better public health protection than that provided under the proposed implementation schedule by ensuring that systems that are required to monitor do so in appropriate locations and with adequate oversight. Other benefits of this approach include:

- The schedule allows ample time for states and water systems to determine those situations in which use of a combined distribution system is appropriate.
- Systems would be required to receive state approval of their DBP monitoring plans thus ensuring the monitoring locations are acceptable to the state.
- States would be able to stagger the workload for reviewing DBP monitoring plans.
- States could require routine DBP monitoring on a calendar year basis instead of a "years since rule promulgation" year and incorporate the monitoring requirements into the Standard Monitoring Framework if the state so desires.

Comments in Case EPA Retains the Proposed Implementation Schedule

If EPA retains the proposed implementation schedule, EPA should consider using the term *primacy agency* in the rule language when referring to the entity to which systems must submit sample results, reports, or requests. Then, at the appropriate time, states and EPA could work together to inform water systems that the state has primacy for rule implementation and is then the primacy agency.

MDE Views on LT2EWSTR

Microbial Monitoring for Filtered Systems

Large filtered systems should monitor for *Cryptosporidium* for two years, as this will allow for the collection of an ample number of samples as well as account for seasonal variability.

MDE supports small filtered system indicator monitoring to determine the need to monitor for *Cryptosporidium*, as indicator monitoring will be more economically feasible for small systems. However, small systems should be allowed to bypass indicator monitoring and proceed directly to two years of *Cryptosporidium* monitoring if the system so desires. In addition, Maryland has more than two years of bacteriological monitoring, that meets the frequency and method established by EPA, for all surface water systems that should be eligible

for consideration as indicator monitoring as appropriate. The proposed rule is not clear on what coliform level will trigger *Cryptosporidium* monitoring for small water systems that utilize ground water under the influence.

While it might be desirable to refine the *Cryptosporidium* trigger levels based on the results of the sampling that will be done by large systems, such revisions could not be implemented solely through guidance. States will have already developed their own state rules and will have difficulty implementing guidance criteria that differs from an established regulatory mandate. Further, the public should have the opportunity to review and comment on any proposed revision to the trigger criteria before it becomes a mandatory change.

Even if EPA provided additional time between the end of large system *Cryptosporidium* monitoring and small system indicator monitoring to allow adequate time for public review of a technical correction, states would still need time to incorporate the technical correction, if approved, into state regulations. Also, as indicated previously, any substantial lag between large system *Cryptosporidium* monitoring and small system *Cryptosporidium* monitoring could be a disincentive for laboratories to provide analytical services. EPA should make any changes to the indicator triggers through a technical correction, if timing allows, or as part of the Six-Year Review.

As indicated previously, state involvement in identifying microbial sampling locations and establishing sampling schedules is critical to ensure that the data collected is useful in determining appropriate treatment requirements.

Bin Determinations

The use of four bins for classifying filtered water systems is appropriate. We do not have data that suggests different average *Cryptosporidium* concentrations for determining bin breakpoints or data to suggest different additional treatment requirements (e.g., the additional level of *Cryptosporidium* protection required for each bin).

Bin determinations need to be approved by the regulating agency (either the state drinking water program or the delegated county health department). This will avoid any confusion as to the level of treatment each surface water system is required to provide.

States should be given the opportunity to include the results of the source water assessments in evaluating the appropriate bin for surface water systems (section 141.709). MDE is comfortable with the strictly mathematical approach based on data collected for *cryptosporidium* analysis only on prescheduled days in deciding the bins. Variable climatic conditions will greatly affect *cryptosporidium* concentrations and therefore monitoring on preselected dates may underepresent the risk if storms do not occur on these dates. The variability of *cryptosporidium* levels is documented in the summary of our study of ***cryptosporidium*** occurrence in the Potomac Basin (see attachment). States should be given the opportunity to increase the Bin designation of a source by one bin if the collected data does not include any testing during significant storm events, by evaluating *cryptosporidium* data along with other factors - such as identified source of contaminants, size of watershed, *E. coli* levels, and type of source (lake, reservoir or free flowing stream). Alternatively the monitoring

requirements could be structured to include sampling of at least two storm events, where the sampling includes collection during multiple times during an event. MDE is also concerned that the analytical method selected by the EPA is not that effective at separating cysts from other colloidal material that would be present during storm events and that monitoring during these periods would also underepresent the level of risk.

Need to Perform a Second Round of Source Water Monitoring

MDE is concerned that the status quo will be a second round of across-the-board source water monitoring for all surface water systems six years after initial bin determination. MDE would prefer an approach where states could use existing information, such as source water assessment results, sanitary surveys, and ambient water quality monitoring, to determine the need for additional source water monitoring.

Failure to Monitor/Deviation from the Monitoring Schedule

MDE strongly disagrees with EPA's proposal that a water system that misses one microbial sample automatically be placed in Bin 4 and required to install the highest level of protection against *Cryptosporidium*. MDE also disagrees with EPA's proposal that a water system must take all microbial samples within two days of the planned monitoring date. MDE recognizes the need for systems to collect an adequate number of samples and that the samples need to be distributed across the entire monitoring period. However, based on past work with water systems, sampling dates can be missed and there are protocols to address these events when they occur. MDE prefers to continue using this flexibility and to determine the consequences of a missed sample or missed sampling dates on a case-by-case basis.

The need for states and water systems to work together to address deviations from monitoring plans and missed samples is another example of why a delay in microbial monitoring by 18 months should be considered. Without such a delay, many water systems would need to work with their EPA Region to address these issues if their state does not yet have primacy.

The sampling requirements of the proposed rule are complex and are expected to be difficult to implement for very small systems, which may inadvertently miss a limited number of samples. The automatic classification of systems that have sampling difficulties into the highest risk bin is overly stringent. A more appropriate approach may be to classify those sources that fail to complete all of their monitoring into a bin one level higher than indicated based upon the data collected. Some flexibility should be provided for systems to complete up to an additional year of sampling in lieu of automatically being classified into a higher or the highest bin.

Laboratory Issues

There are concerns with laboratory capacity for *Cryptosporidium*. These concerns include the overall number of approved laboratories, the geographic distribution of the approved laboratories, and the potential spiking of the number of *Cryptosporidium* samples that need to be analyzed in a short timeframe if many systems are required to monitor for *Cryptosporidium* at the same time. EPA must ensure that adequate laboratory capacity is available or delay

implementation of the rule in accordance with the FACA Agreement in Principle. In addition, the poor accuracy at the test method for raw water samples is also a concern.

Microbial Toolbox

MDE supports the use of the microbial toolbox for those systems that need to provide additional protection against *Cryptosporidium*. The use of the toolbox will give systems much needed flexibility to choose the option(s) that best suit their specific situation.

However, there are concerns with different aspects of the toolbox concept including: some of the presumptive credits EPA is proposing for various tools; states' ability to determine appropriate credit for some tools where EPA does not offer a presumptive credit; the design criteria related to some tools; and the level of reporting needed to receive credit for the use of various tools.

Disinfection Profiling/Benchmarking

MDE disagrees with the disinfection benchmark requirement for viruses for sources that already have a disinfection profile for *Giardia lamblia*. Current disinfection practices aimed at inactivating *Giardia lamblia* typically result in inactivation ratios for viruses that are much greater than needed. Unnecessarily focusing water system attention on virus inactivation ratios may lead to greater confusion than true public health protection and could lead some water systems to inappropriately reduce their chlorine dose believing their dose to be higher than necessary. Additionally, states will need to focus resources on reviewing viral disinfection profiles instead of undertaking other activities that could directly increase public health protection.

Variances and Exemptions

Variances and exemptions should not be allowed under the LT2ESWTR for the reasons listed. MDE generally does not use exemptions and prefers to use other mechanisms, such as Consent Orders, in instances where water systems cannot achieve compliance in the required timeframe.

Public Right-to-Know

MDE supports the public's right to know about the quality of its water and the risks posed by violations of drinking water standards. MDE concurs that the Public Notification Rule and the Consumer Confidence Report Rule are the appropriate vehicles to provide this information and that the proposed Tier 2 and Tier 3 violations are consistent with the Tiers established in the Public Notification Rule. New health effects language for microbial contaminants is needed.

Data Management Issues

EPA must be cognizant of the impact the requirements of this rule will have on data management systems, especially with consideration of the proposed requirements for electronic reporting by large systems directly to EPA. If the data management aspects of this rule are not properly addressed, states will not be able to implement the rule as intended.

MDE supports EPA's efforts to streamline reporting and recordkeeping requirements. One of the driving forces behind the data management requirements in a proposed rule is the amount of data needed at the water system, state, and Federal levels. EPA must continue to closely monitor the reporting and recordkeeping requirements for both water systems and states and ensure that there is an appropriate business need for the data to be reported and/or stored. Water systems need a broad range of data to perform their everyday work, but states only need a subset of that data to perform *their* everyday work, and EPA needs yet a smaller subset of that data to do *their* everyday work.

With respect to LT2ESWTR reporting and recordkeeping requirements, MDE is concerned about the requirement for electronic reporting for large systems due to problems encountered in ICR and UCMR reporting. MDE is also concerned with the level of reporting required as systems implement various toolbox options.

Special Primacy Requirements

MDE generally supports the proposed special primacy requirements and appreciate the flexibility provided by these requirements.

Estimated Cost

EPA's estimates may underestimate the total costs to state drinking water programs to implement the LT2ESWTR. The proposed rule is complex and will require significant monitoring and reporting by systems and significant oversight of these activities by states. The economic analysis implies an annualized total cost to each state of less than $25,000, but appears to be developed based upon a single year of implementation. Several of the implementation activities will span multiple years, especially the technical assistance, compliance, and enforcement related efforts. EPA should revise the cost analysis be to reflect a multiple year implementation effort.

The estimate also appears to significantly underestimate the implementation cost of the rule. Specifically, it may not accurately capture the costs of revisions to primacy applications, state rule adoption, technical assistance to water systems, enforcement activities, plan review for treatment improvements, and significant data management requirements.

Further, the implementation activities in the first six to nine years following promulgation of the final rule are expected to be quite significant with somewhat of a reduction in activity after that time. EPA should discount the labor and material costs associated with implementation over a 10-year period rather than a 20-year period as in the proposed rule.

MDE Views on Stage 2 DBPR

DBP Health Effects

One key issue related to public health risk is the conclusions that EPA draws from the reproductive and developmental health effects data. In the "Risk to Public Health" section (page 49562 of the preamble), EPA describes its belief "that the weight of evidence of both the reproductive and developmental toxicological and epidemiological databases suggests that exposure to DBPs may induce potential adverse health effects on reproduction and fetal development at some DBP exposures. However, additional toxicological work is necessary to quantify the mode of action for the effects observed." In this section, EPA does not quantify the potential risks. MDE supports this type of general discussion of the potential sub-chronic health risks to present the potential acute health concerns with DBPS.

However, in the "Benefits of the Proposed Stage 2 DBPR" section (page 49629 of the preamble), EPA discusses how it does not believe that the available evidence provides an adequate basis for quantifying potential reproductive and developmental risks, but then in the next column quantifies the potential risks. EPA should delete the language that quantifies the potential risk and instead is consistent with the language on page 49562.

Consecutive Systems and Combined Distribution Systems

DBP monitoring should be based on a combined distribution system to the extent that the interconnection of the systems justifies treating them as a single system for monitoring purposes and that states need to be involved in determining when consecutive systems should be considered a combined system for DBP monitoring purposes.

In the event a wholesaler proposes to include one or more consecutive systems in its DBP monitoring plan, states and the water systems will need to work together to determine appropriate monitoring locations for initial Stage 2B monitoring as well as any reduction in monitoring. The systems involved would need to work with the state to determine the appropriate monitoring locations as well as how public notification would be handled in systems where a sample was not taken.

Population-Based DBP Monitoring

MDE supports population-based monitoring for all water systems in an effort to provide equal protection to all. MDE does not anticipate significant transitional costs associated with moving from a plant-based to a population-based approach.

DBP MCLs

As indicated previously, MDE supports the Stage 2B MCLs, but does not support the Stage 2A MCLs.

Significant Excursions

MDE supports control of peak DBPs if there is a sub-chronic health affect associated with the exposure and believes that EPA should define a significant excursion as any result that exceeds the sub-chronic level for each DBP. If EPA is unable to set such scientifically supportable limits, the significant excursion requirements should be deferred until such time as limits can be set.

MDE concurs with EPA's proposal that incurring a significant excursion should not require public notification nor additional language in the Consumer Confidence Report.

IDSE

As indicated previously, MDE supports the concept of an Initial Distribution System Evaluation (IDSE) to identify appropriate DBP monitoring locations, but does not support the IDSE as a regulatory requirement.

Variances and Exemptions

MDE concurs that variances should not be allowed under the Stage 2 DBPR for the reasons listed and also believes that exemptions should not be allowed.

Best Available Technologies

MDE recognizes EPA's need to identify best available technologies (BATs) for a proposed rule, but does not agree that there is a practical or affordable BAT that consecutive systems can use to address high DBP levels exists. This is especially true if the water delivered to the consecutive system is at or near DBP MCLs.

The proposed BAT for consecutive systems is *improved distribution system and storage tank management to reduce detention time plus the use of chloramines for disinfectant residual maintenance*. Management of hydraulic flow and minimizing residence time is a practice that all systems (producing and purchasing) should practice and MDE supports this as a worthwhile activity for all types of water systems. However, chloramination is an extremely complex treatment and most consecutive systems buy water because, among other reasons, they do not want to operate chemical feed systems. Treating purchased water with chloramines would raise many issues for consecutive systems as this treatment involves using either a liquid or gaseous form of ammonia, a dangerous chemical that requires careful, daily observation and adjustments. Also, consecutive systems would need to address issues that arise if the system that they purchase water from practices chlorination and not chloramination. In addition, chloramines contribute to nitrification problems in low flow areas and tanks that need to be monitored on a

frequent basis (monthly if no problems, daily to weekly if problems). EPA needs to clearly consider all impacts of naming chloramination as a BAT for consecutive systems. Additionally, the consecutive system BAT contradicts the premise of the Stage 1 Rule that DBPs are best controlled through TOC removal and optimizing disinfection practices.

Public Right-to-Know

MDE supports the public's right to know about the quality of its water and the risks posed by violations of drinking water standards. MDE concurs that the Public Notification Rule and the Consumer Confidence Report Rule are the appropriate vehicles to provide this information and that the proposed Tier 2 and Tier 3 violations are consistent with the Tiers established in the Public Notification Rule.

With respect to the need for changes to the health effects language for DBPs to address potential reproductive and developmental health endpoints, MDE supports EPA's proposal that additional health effects language is not needed at this time. Any new language could cause undue alarm among the public as the reproductive and developmental endpoints are not well defined at this time. However, the current Public Notification Rule does provide water systems the latitude to include additional language in their public notices and EPA might consider including suggested language in the rule preamble for those systems that desire to include health effects language on potential sub-chronic endpoints.

Data Management Issues

In addition to the general concepts on this issue discussed in the LT2ESWTR section of these comments, which apply equally to the Stage 2 DBPR, MDE is concerned with the potential data management implications of EPA promulgating the DBP monitoring scheme included in the proposed rule. Specifically, programming data management systems to determine compliance for DBPs under a scenario in which some water systems perform DBP monitoring on a plant-based approach while other water systems perform DBP monitoring on a population-based approach would be quite costly. Changing to a population-based approach for all water systems would negate this problem and allow for consistency across systems.

MDE commends EPA for determining that no additional data is needed at the Federal level and therefore not including any additional reporting requirements for states.

Attachment 2
Maryland Department of the Environment
Response to EPA Requests for Comment on the Proposed LT2ESWTR
January 9, 2004

Section IV.A Additional Cryptosporidium Treatment Technique Requirements for Filtered Systems (pages 47665-47679)

MDE concurs with the risk-based approach proposed under the LT2ESWTR in which surface water systems monitor for microbial contaminants and only those systems finding higher levels of contaminants are required to provide additional protection against *Cryptosporidium*. This includes the proposed requirement for large systems to perform *Cryptosporidium* monitoring to determine risk from microbial contamination as well as the proposed requirement for small systems to perform indicator monitoring to determine the need to perform *Cryptosporidium* monitoring.

With respect to the specific issues on which EPA requested comment, EPA should provide states with flexibility to address these concerns on a case-by-case basis. The need to address these issues is another example of why EPA should modify the LT2ESWTR implementation schedule to better ensure state participation.

Requirements for systems that use surface water for only part of the year

States need to be involved in making monitoring determinations for systems that use surface water for only part of the year. States may have historical knowledge that the source has been used on a more permanent basis, in which case, complete monitoring would be appropriate.

However, in instances when a surface water source is truly only used for part of the year, the state and water system will need to work together to determine an appropriate monitoring strategy. This might entail increased monitoring (more than two samples per month) to complete the monitoring over a shorter time frame. Another approach may be to allow the system to collect the required number of samples over a longer period of time (e.g., taking two samples per operational month for three or more years). State input into determining the appropriate monitoring plan is critical.

Monitoring for systems that recycle filter backwash water

Although consideration of the recycle stream may not be necessary in all situations, states need flexibility to determine how to address recycle streams in those instances where the state deems such action to be necessary. In some cases, monitoring downstream of the introduction of the recycle flow would be appropriate, while in other cases, supplemental monitoring on the return stream may be more suitable.

Bin assignment for systems that fail to complete required monitoring

MDE does not support EPA's proposal that a system that fails to complete required monitoring be automatically assigned to Bin 4. Please refer to Attachment 1 for further detail on this issue.

Monitoring requirements for new plants and new sources

Development of a new source is typically a multiple year process. In most cases, there will be adequate time to conduct source water quality monitoring prior to treatment plant design to allow for construction of the facilities necessary for proper treatment.

However, in some cases, systems switch to alternate sources under emergency conditions without having extensive data available for the alternate source. States need the discretion to be able to allow a system to use such a source based on available data and then require the system to collect the required data from the source while the source is in use. The state would ultimately make a bin classification for the source and the system would be required to make appropriate changes based on the classification, but would still be able to use the alternate source in the interim.

Determination of LT2ESWTR bin classification

Bin determinations need to be approved by the regulating agency (either the state drinking water program or the delegated county health department). This will avoid any confusion as to the level of treatment each surface water system is required to provide.

Source water type classification for systems that use multiple sources

Systems should evaluate each source independently and assign appropriate bin classifications based on monitoring of each source. If the sources are blended prior to use, the ability to monitor only the blended source should be allowed at the discretion of the state.

Section IV.C Options for Systems to Meet *Cryptosporidium* Treatment Requirements (pages 47681-47715)

MDE supports the use of the microbial toolbox for those systems that need to provide additional protection against *Cryptosporidium*. The use of the toolbox will give systems much needed flexibility to choose the option(s) that best suit their specific situation.

However, MDE has concerns with different aspects of the toolbox concept including: some of the presumptive credits EPA is proposing for various tools as well as states' ability to determine appropriate credit for some tools where EPA does not offer a presumptive credit.

Watershed Control Program

MDE generally supports inclusion of this tool, but recognizes that this tool will require significant effort on the part of both the state and the water system. However, 0.5 log presumptive credit may not be sufficient to represent the advantages of some watershed programs. In some states such New York, EPA has recognized that a watershed control program can provide 2 or 3 log equivalent treatment. This has been demonstrated by allowing unfiltered surface water systems. States should be allowed flexibility to designate a higher credit than the 0.5 log presumptive credit when applicable.

States should have flexibility in determining the "area of influence" for a watershed control program. In many cases, the area of concern will be the entire watershed, but in some instances, the state may determine a smaller area is appropriate.

MDE believes that there may be confidential business information (CBI) and Homeland Security concerns associated with making information on the watershed control program available to the public. This CBI includes the location of intake structures, dams, and water treatment facilities. One potential way to deal with CBI is to restrict dissemination of maps and locational information to the public.

Alternative Source

MDE does not object to this tool, but us unsure if this option will be widely used due to the burden of performing *Cryptosporidium* monitoring at both the current intake as well as the alternative source.

With respect to EPA's specific requests for comments:

- Systems should first conduct a thorough source water assessment or watershed sanitary survey to obtain information that can be used to evaluate intake management strategies to reduce *Cryptosporidium* levels in the plant influent. Systems might be able to eliminate or control possible contaminating activities that were identified by the source water assessment. If not, then systems might be able to change the location and/or depth of the intake to reduce the water quality impacts associated with the activities.
- Plants that use multiple sources, which enter a plant through a common conduit, should be required to conduct *Cryptosporidium* monitoring of each source to determine the *Cryptosporidium* levels of each source. Monitoring each source will allow the system to know the amount of *Cryptosporidium* loading to expect at the plant if the ratio of flows from the different sources changes significantly. This approach would also extend to plants that use separate sources that enter the plant at different points. States should have flexibility to determine if the source water quality is substantially the same as other sources in order to waive unnecessary testing.

Off-Stream Raw Water Storage

MDE generally supports inclusion of this tool, but is concerned that the proposed rule does not include a presumptive credit. Systems that construct off-stream storage could confirm the effectiveness of the reservoir through a second round of source water monitoring conducted downstream of the off-stream storage. This "efficacy-verification" is consistent with the approach that the EPA has proposed for new presedimentation and bank filtration systems.

Pre-Sedimentation Basin with Coagulation

MDE generally supports inclusion of this tool and the 0.5 log presumptive credit. However, most presedimentation basins do not have chemical addition, and the basins are more accurately described as raw water reservoirs. Please provide clarification on this matter in the guidance manual.

Lime Softening

MDE generally supports inclusion of this tool and the 0.5 log presumptive credit.

Bank Filtration

MDE generally supports inclusion of this tool and the 0.5 log and 1.0 log presumptive credits.

Combined Filter Performance

MDE generally supports inclusion of this tool and the 0.5 log presumptive credit.

Roughing Filter

MDE supports inclusion of this tool and the position that the technology needs to be proven in order to receive any credit. More information is needed to assist states in distinguishing between roughing filters and screens.

Second Stage Filtration

MDE supports inclusion of this tool and the 0.5 log presumptive credit. States need flexibility to determine appropriate treatment designs and therefore, MDE does not support EPA establishing a minimum depth for secondary filters. The granular filtration process is a complex combination of physical and hydraulic characteristics and, in some cases, biological activity.

Membranes

MDE supports inclusion of this tool, but is concerned with the process needed to determine the appropriate credit to apply.

Bag Filters and Cartridge Filters

MDE supports inclusion of these tools, but does not necessarily support EPA's approach to determining the presumptive credit for each technology. EPA is proposing a 1 log credit for bag filtration if the system can demonstrate 2 log removal and a 2 log credit for cartridge filters if the system can demonstrate 3 log removal. These are the only tools that require a system to demonstrate a higher level of removal to receive the credit. MDE is concerned that this may lead to systems not choosing these technologies from the microbial tool box. These treatment systems will be utilized by very small non-community water systems that require filtration. It is important that small systems have treatment options.

Ultraviolet Disinfection

MDE generally supports inclusion of this tool and the requirement that credit would be based on log inactivation using the IT table. This is a technology that is expected to be used by small water systems. EPA should make certain that this option is available.

Individual Filter Performance

MDE supports inclusion of this tool and the 1 log presumptive credit. MDE supports only allowing one of the filter performance credits per system (either the combined filter performance credit or the individual filter performance credit).

Demonstration of Performance

MDE would appreciate EPA providing as much guidance as possible on various approaches to demonstrating the additional credit. However, all additional credit assigned should be site specific and not awarded across the board to different sources and treatment plants as the physical and chemical reactions involved in the removal process are unique to each site.

Section IV.D Disinfection Benchmarks for Giardia lamblia and Viruses (pages 47715-47718)

MDE disagrees with the disinfection benchmark requirement for viruses for sources that already have a disinfection profile for *Giardia lamblia*. Current disinfection practices aimed at inactivating *Giardia lamblia* typically result in inactivation ratios for viruses that are much greater than needed. Unnecessarily focusing water system attention on virus inactivation ratios may lead to greater confusion than true public health protection and could lead some water systems to inappropriately reduce their chlorine dose believing their dose to be higher than necessary. Additionally, states will need to focus resources on reviewing viral disinfection profiles instead of undertaking other activities that could directly increase public health protection.

Section IV.F Compliance Schedules (pages 47719-47722)

The preferred implementation schedule is described in Attachment 1.

Section IV.G Public Notice Requirements (pages 47722-47723)

MDE supports the public's right to know about the quality of its water and the risks posed by violations of drinking water standards. MDE concurs that the Public Notification Rule and the Consumer Confidence Report Rule are the appropriate vehicles to provide this information and that the proposed Tier 2 and Tier 3 violations are consistent with the Tiers established in the Public Notification Rule. MDE also supports EPA's determination that no new health effects language for microbial contaminants is needed.

Section IV.H Variances and Exemptions (page 47723-47724)

MDE concurs that variances and exemptions should not be allowed under the LT2ESWTR for the reasons listed.

Section IV.J System Reporting and Recordkeeping Requirements (page 47724-47731)

MDE is concerned that the proposed reporting requirements for the various toolbox options will result in the need for substantial enhancements to state database management systems. The level of data EPA is suggesting that systems report to states is beyond the data that states need to perform their everyday work.

MDE agrees that a water system needs to track applicable water quality parameters in order to ensure that the toolbox option is being properly implemented, but does not agree that states need to receive this information. State staff will be evaluating treatment plants and their operations on an on-going basis. The installation of the new treatment processes and their operation will be closely tracked through our existing approval procedures. MDE prefers an approach under which the system certifies that the approved toolbox components were operated the entire month in conformance with the plant's approved operations plan rather than requiring systems to report numerous data elements.

Laboratory Approval (pages 47734-47736)

Given the specialized nature of the work and desire to avoid duplication and confusion in the laboratory certification process, states recommend that the EPA maintain a national laboratory certification program for *Cryptosporidium* through the initial and follow-up rounds of *Cryptosporidium* analysis.

Section IV.M Requirements for Sanitary Surveys Conducted by EPA (pages 47736-47737)

Requirements for sanitary surveys should be consistent across system type and not dependent on the primacy agency. EPA should include requirements consistent with the requirements established under other rules. The frequency of the sanitary survey of the watershed should not be a component of this regulation.

Attachment 3
Maryland Department of the Environment
Response to EPA Requests for Comment on the Proposed Stage 2 DBPR
January 9, 2004

III.G Overall Public Health Risk (pages 49557-49565)

MDE supports EPA's discussion in the preamble of the potential sub-chronic health endpoints and the state of current research, but does not support attempts to quantify the potential risk or draw definitive conclusions from the existing data due to the lack of completeness. Based on this, and in response to a request for comment from EPA, the sub-chronic endpoints should not impact the final Stage 2 DBPR. MDE supports EPA's efforts to obtain additional data on sub-chronic health effects of DBPs and offers its assistance in those efforts.

V.A.3 MCLG for Chloroform (pages 49576-49579)

MDE does not have data to suggest a different MCLG for chloroform (proposed as 0.07 mg/L).

V.B.3 MCLGs for TCAA and MCAA and Health Effects Data on DBAA and MBAA (pages 49579-49582)

MDE does not have data to suggest different MCLGs for TCAA (proposed as 0.02 mg/L) and MCAA (proposed as 0.03 mg/L). MDE does not have additional health effect information on DBAA or MBAA, for which MCLGs have not yet been established.

V.C.3 Consecutive Systems (pages 49582-49584)

DBP monitoring should be based on a combined distribution system to the extent that the interconnection of the systems justifies treating these systems as a single system for monitoring purposes and that states need to be involved in determining when consecutive systems should be considered a combined system for DBP monitoring purposes.

The best location for control of DBP concentrations is at the water treatment plant; and DBP monitoring should be based on a combined distribution system to the extent that the interconnection of the systems justifies treating these systems as a single system for monitoring purposes.

Comments regarding EPA's proposed definitions:

- *Consecutive system:* Is 60 days per year an appropriate length of time to use; do the 60 days need to be consecutive; and is a longer length of time (possibly six months) more appropriate?
- *Finished water:* The application of corrosion control chemicals is post-treatment and should not affect the determination of whether the water is finished water.

- *Wholesale system:* The above comments on the definition of *consecutive system* apply equally to this definition.
- *Consecutive system entry point:* The above comments on the definition of *consecutive system* apply equally to this definition.
- *Combined distribution system:* This definition appears to be appropriate provided states have input in the final determination as to which systems should be considered a *combined distribution system*.

With respect to the monitoring requirements, MDE supports EPA's proposal to provide states with the opportunity to specify alternative requirements for multiple consecutive systems in a combined distribution system.

MDE does not object to the proposed requirement that all consecutive systems comply with the monitoring requirements for disinfectant residual monitoring and the MRDLs for chlorine and chloramines.

V.D.3 MCLs for TTHM and HAA5 (pages 49584-49587)

MDE supports the proposed approach over the alternative approaches considered by the FACA for the reasons discussed in the preamble. Specifically, MDE supports using locational running annual averages (LRAAs) to determine compliance with DBP MCLs, maintaining TTHM and HAA5 MCLs of 0.080 mg/L and 0.060 mg/L, respectively, and maintaining the Stage 1 MCL for bromate of 0.010 mg/L.

V.F.3 BAT for TTHM and HAA5 (page 49588-49590)

MDE does not object to the three proposed BATs for wholesale systems to address TTHM and HAA5.

V.G.3 MCL, BAT, and Monitoring for Bromate (pages 49590-49592)

MDE supports EPA's decisions regarding regulation of bromate as proposed. MDE supports changing the criterion for reduced bromate monitoring from a source water annual average bromide level of less than 0.05 mg/l to a treated water running average bromate level of less than 0.0025 mg/l as well as EPA's decision that bromate monitoring should not be required at non-ozone systems that use hypochlorite.

V.H.3 IDSE (pages 49592-49595)

Since changing to LRAAs using a population-based approach will result in a change in the number of samples required for most systems. Additional monitoring to identify optimal DBP sampling points is appropriate for some systems, but waivers should be available for systems for which additional monitoring would not assist in determining optimal sites.

All non-transient non-community water systems should be required to perform additional monitoring to determine optimal Stage 2 DBP monitoring locations, but should also be eligible for waivers.

MDE supports small system waivers and believes that states should have flexibility in defining applicability. MDE supports a population cutoff of 500 people, but also recognizes that some low population systems have lengthy distribution systems and therefore suggests that states have discretion to apply this waiver. MDE supports waivers for systems larger than 500 people if the distribution system is short.

V.I.3 Monitoring Requirements and Compliance Determinations for Stage 2A and 2B TTHM and HAA5 MCLs (pages 49495-49605)

MDE supports basing DBP monitoring requirements on the population served, not the number of treatment plants and/or bulk entry points for the reasons listed in the preamble. The population-based approach would ensure more equal and rational monitoring requirements among systems serving similar populations than the plant-based approach does, while providing generally improved representation of DBP occurrence throughout the distribution system. Such an approach would simplify implementation and reduce transactional costs to states by facilitating determination of the number of sampling locations. A complete discussion of this issue is provided in Attachment 1.

States should have the authority to increase or decrease the monitoring sites/samples if situations due to physical system size, number of sources, location of source entry points, type and geometry of distribution system justify the changes. MDE is concerned that using a population-based approach without such discretion could result in situations where the wholesale system is actually required to collect fewer samples than the consecutive system that they supply (assuming a combined distribution system approach is not used). To address this issue, EPA should not set a maximum number of samples, but instead the rule should require the minimum number of samples and allow states to require more samples on a case-by-case basis if conditions warrant.

V.K.2 Public Notification Requirements (page 49607)

MDE supports the public's right to know about the quality of its water and the risks posed by violations of drinking water standards. MDE concurs that the Public Notification Rule and the Consumer Confidence Report Rule are the appropriate vehicles to provide this information and that the proposed Tier 2 and Tier 3 violations are consistent with the Tiers established in the Public Notification Rule.

With respect to the need for changes to the health effects language for DBPs to address potential reproductive and developmental health endpoints, MDE supports EPA's proposal that additional health effects language is not needed at this time. Any new language could cause undue alarm among the public as the reproductive and developmental endpoints are not well defined at this time. However, the current Public Notification Rule does provide water systems the latitude to include additional language in their public notices and EPA might consider

including suggested language in the rule preamble for those systems that desire to include health effects language on potential sub-chronic endpoints.

Also, as indicated previously, states concur that incurring a significant excursion should not require public notification nor additional language in the Consumer Confidence Report.

V.L.2 Variances and Exemptions (page 49607-49610)

MDE concurs that variances should not be allowed under the Stage 2 DBPR for the reasons listed.

V.N.3 System Reporting and Recordkeeping (page 49610)

MDE supports EPA's determination to retain the Stage 1 reporting and recordkeeping requirements. MDE does not support the IDSE as a separate activity and therefore does not support the proposed reporting requirement associated with the IDSE.