

State Mixing Zone (MZ) Survey

Name: _____ Title: _____ Phone/Fax: _____

Email: _____ Mailing Address: _____

State: _____ EPA region: _____ Delegated/Non-delegated: _____ (D/N)

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Section I General Information

1. Number of NPDES permits currently authorized in your state _____ (#)
 - a. POTW _____
 1. conventional pollutants only _____
 2. conventional, non-conventional, toxics _____
 3. marine _____
 4. freshwater _____
 - b. POTW w/pretreated industrial discharges _____
 1. conventional pollutants only _____
 2. conventional, non-conventional, toxics _____
 3. marine _____
 4. freshwater _____
 - c. Industrial _____
 1. conventional pollutants only _____
 2. conventional, non-conventional, toxics _____
 3. marine _____
 4. freshwater _____

2. Number of NPDES permits incorporating MZ into water quality based effluent limits _____ (# or %)
 - a. MZ for chronic aquatic life criteria only _____
 - b. MZ for acute and chronic aquatic life criteria _____
 - c. MZ for human health criteria _____

3. Does your state regulation describe a process for MZ authorization? _____ (Yes/No)

4. Does your state provide generic dilution factors (as opposed or in addition to requiring specific MZ evaluations at every site)? _____ (Y/N)

5. If you answered "Yes" to #4, how many MZ in your state are generic? _____ (# or %)

6. Does your state assume chronic criteria will not be met within the MZ? _____ (Y/N)

7. Does your state MZ regulation authorize zones of initial dilution (ZID) in which acute criteria are not met? _____ (Y/N)
8. Does your state MZ regulation require a human health risk evaluation when pollutants in the MZ will exceed human health criteria? _____ (Y/N)
9. Does your state Antidegradation Policy directly address the use of MZ? _____ (Y/N)
10. How long has your state allowed MZ? _____ (Date or # of years)
11. Has your state ever denied a MZ request? _____ (Y/N)
 - a. dates/permit numbers _____
12. Does your state MZ regulation plan for reduced MZ use in the future? _____ (Y/N)
13. Does your state allow mixing zone authorizations in: (Y/N)
 - a. all waters _____
 - b. 303d listed waters _____
 - c. waters with TMDLs _____
14. Does your state prohibit MZ: (Y/N)
 - a. for some classes of pollutants _____ please list: _____
 - b. for particular use classes _____ please list: _____
 - c. for habitat with threatened or endangered species _____

Section II Setting MZ Boundaries

1. Does your state set absolute size restrictions for MZ? _____ (Y/N)
 - a. in marine waters? _____
 - b. in fresh waters? _____
2. Does your state determine MZ boundaries on the basis of a cross-sectional percentage or ratio of the wastestream area or volume to the receiving water? _____ (Y/N)
3. If more than one component in an effluent requires dilution to meet WQS, does your state determine the MZ boundary on the basis of the dilution required for the pollutant requiring the most dilution to meet WQS? _____ (Y/N)

4. Does your state automatically assign the portion of the waterbody required to achieve complete mixing (<5% difference in pollutant concentration compared to background) as the MZ? _____ (Y/N)

5. Does your state base MZ boundaries on anticipated impacts to: (Y/N)

a. the most vulnerable species in the ecosystem _____

b. the local species with the greatest economic value _____

c. other _____

6. Does your state apply instream flow calculations when determining dilution factors in MZ? _____ (Y/N)

7. If you answered "Yes" to #6, what design flow does your state use?

a. 7Q10 _____

b. 3Q2 _____

c. other _____

8. Does your state employ mathematical models to determine MZ size or dilution factors? _____ (Y/N)

9. Does your state employ instream modeling scenarios prior to MZ authorization (dye dispersion, test cards...)? _____ (Y/N)

Section III Pre-authorization Evaluation

1. Does your state routinely conduct a baseline evaluation of conditions and biota prior to MZ authorization? _____ (Y/N)

2. Does your state perform a cost/benefit analysis prior to MZ authorization? _____ (Y/N)

a. vis-à-vis impacts to public resources _____

b. vis-à-vis impacts to dischargers financial resources _____

Section IV Monitoring

1. Does your state routinely perform monitoring studies at MZ boundaries? _____ (Y/N)

a. water chemistry _____

b. biota abundance and diversity _____

2. Has your state conducted studies on the long-term impacts of individual or multiple MZ? _____ (Y/N) (please cite _____)

3. Does your state require W.E.T testing on the effluent? _____ (Y/N)
- a. chronic W.E.T. _____
- b. acute W.E.T. _____
4. Does your state tally the total annual discharge into MZ (gallons/year or pounds/year)? _____ (Y/N)
- a. conventional pollutants _____
- b. toxic pollutants _____

Section V Notification

1. Does your state post MZ locations with informational signs? _____ (Y/N)
2. Does your state maintain a list of all waters that have mixing zones? _____ (Y/N)
3. Does your state maintain maps of all MZ locations? _____ (Y//N)

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Thank you very much for providing this information. Please include any additional information, comments or questions with your response. As a final request, we would greatly appreciate a copy of your state’s antidegradation and MZ policies, or other forms or policy statements used to administer your MZ program.

Would you like to receive a copy of our final report? _____ (Y/N)

Thanks again for your help.

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