



State of Louisiana
Department of Environmental Quality



BUDDY ROEMER
Governor

PAUL TEMPLET
Secretary

October 10, 1989

Mr. Bill Peard
PPG
P.O. Box 1000
Lake Charles, Louisiana 70602

Dear Mr. Peard,

Since you expressed an interest in the 1989 triennial revision of the Louisiana Water Quality Standards, we have enclosed a ~~response to major comments received at the public hearing or in writing during the comment period.~~ We appreciated your input in the review process. Your comments assisted the Office of Water Resources in making a meaningful revision of the water quality standards and we thank you for your participation. We would like to invite your participation in future revisions of the Louisiana Water Quality Standards.

The sale and distribution of the revised water quality standards (LAC 33:IX) is now the responsibility of the State Register. Copies may be obtained through their office at the address below. Inquiries on the applicability or interpretation of the standards, however, should be addressed to the Office of Water Resources.

Office of State Register
P.O. Box 94095
Baton Rouge, Louisiana 70804-9095

Sincerely,

Dugan S. Sabins
Water Quality Standards Coordinator

Enclosure

DSS:CCM

SL 105857

Response to Major Comments on the 1989 Proposed
Revision to the Louisiana Water Quality Standards

The following is a response to the major comments on the proposed Water Quality Standards revision received by the Department orally at the August 4 public hearing or in writing by the comment period deadline. A verbal response to some of these comments has been made previously to commenters on the phone or in meetings.

1. COMMENT: DEQ has not allowed adequate time for review and comment on the proposed water quality standards.

RESPONSE: The Department feels that adequate time for review and comment has been given for the Water Quality Standards (WQS) revision. The revision process has been ongoing since January of 1988 and included a public meeting held in June of last year to present information and receive comments. Comments received as a result of that meeting were incorporated into the revision. Progress in the WQS revision and an opportunity to ask questions and provide comments were given at three professional society meetings with the Louisiana Water Pollution Control Association and Environmental Health Association, the most recent in June of this year. Other key dates in the WQS revision process included a notice of availability and of the public hearing on June 20, 1989 in six state newspapers, 45 days in advance of the public hearing. We have satisfactorily met all EPA requirements for public participation and exceeded all requirements of the State Administrative Procedures Act (APA). Copies of the proposed WQS revision were sent to over 20 industrial, environmental, and governmental groups over a month in advance of the hearing, and a day earlier in the case of the Louisiana Chemical Association. This effort was well beyond requirements of the APA. In addition, we have shown a willingness to discuss, at any time, the proposed revision and have made all documents used to develop the revision available for review in our office. Indeed some commenters reviewed these documents before initiation of rulemaking. We believe the fact that over 75 people attended the public hearing (19 making presentations) and that over 30 written comments were received is testimony that there was ample time for review.

- 2a. COMMENT: The fiscal and economic impact statement for Administrative Rules greatly underestimates costs incurred by industry in removing conventional pollutants such as chlorides, sulfates, total dissolved solids, or temperature.

COMMENT: The fiscal and economic impact statement for Administrative Rules greatly underestimates costs incurred by the state in treating water for drinking purposes.

RESPONSE: The development of the fiscal and economic impact statement followed approved procedures of the APA and the Legislative Fiscal Office. It was not possible to provide extensive quantifications of all possible impacts or benefits from the proposed WQS revision but equal consideration was given to both costs to the regulated community and benefits to municipalities and the public. Indeed it is probable that for every cost for treatment to remove a toxic substance from a wastewater discharge, there will be an equal benefit in reduced costs to municipalities who must remove pollutants from a drinking water source, to fisheries to protect from toxic contamination, and the public in the form of health related benefits. We considered the existence of newly required EPA technology limits for toxic substances in estimating costs to industry since all discharges must meet these limits regardless of the WQS. Therefore, a significant amount of the costs to meet new limits required by the WQS revision were already required by EPA to meet new technology limits. On one issue regarding nontoxic substances such as sulfates, we had already agreed to the request of industry commenters to remove Monte Sano Bayou, and there is no new requirement in the WQS revision that goes beyond what is already in place. Also, the WQS revision does not give any competitive economic edge to neighboring states because of new, more stringent, requirements for Louisiana. EPA has required all states to revise their WQS to control toxic substance discharges to the basic level of protection we are proposing for Louisiana. We just happen to be ahead in doing so and have received commendation from Region VI EPA for our effort.

3. COMMENT: The numerical criteria developed by EPA do not include considerations of other factors such as technical achievability, cost/benefit analysis, limits of detection and environmental fate because they are not intended to be used as standards.

RESPONSE: There appears to have been some confusion about the water quality-based limits in the water quality standards and the technology-based limits developed and published separately by EPA. The water quality-based limits as provided in the WQS revision were designed to protect human health, fish and wildlife, and other sensitive water uses. Concerns for technical achievability, cost/benefit analysis, limits of detection, and other such factors were accommodated in the technology-based limits which were derived separately. The two were developed to complement each other, and, when developing a permit, the most stringent will be applied. In effect, the WQS are a safety net to be sure that we are not endangering human health by setting limits for technology only. Once again, EPA could be contacted for concurrence of this and many

commenters have been urged to check with their EPA permit writers. In many cases, a check of discharger permit limits on the Mississippi River shows that, for most dischargers, EPA technology limits are more restrictive than the proposed WQS limits. The Mississippi River has also been noted to be substantially in compliance with the proposed WQS and therefore concerns about "realistic" or "economically unachievable" limitations are largely unfounded.

4. COMMENT: Some of the proposed standards depart in several significant ways from EPA's methodology.

RESPONSE: The statement by some commenters that the proposed WQS "depart" in significant ways from EPA methodology is not supported by fact. As mentioned previously, we have carefully coordinated the development of the WQS with EPA and used only the acceptable and necessary methodology. The Department had no intention to use and has not used any method that is not scientifically valid or approved by EPA. Because there are several EPA guidance documents available, it is possible that many commenters have been confused by the procedures and methodology used. We have made several attempts to further explain our methods to commenters and feel most of this confusion has been cleared up.

- 5.a. COMMENT: EPA water quality criteria are not final rules but are intended as guidance on potential environmental effects which can be used along with other factors to derive regulatory requirements.
- b. COMMENT: Provide a type of document explaining how the numerical criteria for toxicity were established for each substance.

RESPONSE: There have been several comments about the EPA guidance documents and that the Department has made improper or unjustified use of them and other EPA documents. We prepared a documentation package and distributed it before the public hearing that adequately explains our use of EPA guidance documents. Apparently many commenters have failed to read the documentation so we have made every attempt to explain it in phone conversations and at meetings. We feel the documentation package adequately answers the majority of the concerns about the use of EPA documents. We have also been assured by EPA Region VI that we have made proper use of them and they are satisfied with every standard developed in addition to a stated EPA minimum value number. There seemed to be some confusion among commenters as indicated when one commenter challenged us for using an EPA proposed limit in one statement, while in another statement, this commenter complained that we should have used the EPA limit instead of developing a more state specific one. We have

stated repeatedly that the proposed WQS contain only those limits that were required to protect state waters and that in their development we used only established EPA-approved and scientifically defensible methodology. We have also stated names and telephone numbers of appropriate EPA personnel who will discuss this concern with any commenter. In short, comments that we have gone "drastically" lower than EPA or "depart" from EPA methodology, or make incorrect or unscientific application of EPA data, or use insufficient data to derive standards are not justified.

6. COMMENT: DEQ has selectively made changes in the EPA assumptions that were used to derive Gold Book human health criteria that has resulted in substantially lower concentrations for specific toxic substances than those published by EPA.

RESPONSE: EPA has concurred with all of the assumptions we have made in developing the WQS and we have, therefore, not used any method or procedure that is not an EPA accepted approach to developing a water quality standard. Indeed the standards will enable us to be more certain than ever before that our waterbodies are safe to swim and fish in and that the water can be safely and economically treated for human consumption.

7. COMMENT: Aquatic life criteria were revised from recommended Gold Book Criteria in an arbitrary and capricious manner to yield the lowest possible values.

RESPONSE: There were no instances in the WQS revision where the State proposed something not consistent with EPA policy or guidance. There were instances where we proposed stricter limits than the minimum EPA allowable level, but this was not only allowed but encouraged by EPA where the state felt that its local situation required a stricter limit. We worked very closely with Region VI EPA in developing the revision, and in some instances, directly with EPA officials in Washington, D.C. and the Cincinnati Health Effects Laboratory. We can provide the necessary EPA documentation to show that they are in agreement with all assumptions in the revision that go beyond EPA minimum requirements. In some cases, we were urged by EPA to develop more protective WQS where the EPA guidance limits were out of date or under review.

8. COMMENT: Some of the proposed numerical criteria are below the detection limits for the compounds listed and would establish an unreasonable standard for the stream.

RESPONSE: The repeated statement that criteria in the revision are below detection limits and are therefore an unreasonable standard is

not warranted. EPA has for years established below detection limit standards for certain very toxic compounds that can build up in sediments and fish tissue at very low water concentrations. This has been a well established practice by EPA and we have followed it in our proposed WQS. The standard for instream water must be set at whatever concentration is required by accepted scientific calculations to prevent the build-up of toxic substances such as hexachlorobenzene in sediment and fish. This level may be below the detection limit in the waterbody but can be calculated at an above detection limit in effluent for adequate control. Therefore, EPA expects the State to provide a below detection limit standard if it is required to protect water uses or they will not approve the proposed WQS revision. The limit of detection is not to be considered when developing a limit for a very toxic compound that threatens human health and EPA routinely expects it to be ten to fifty times below any level that shows an unacceptable observed effect.

9. COMMENT: The limits for several pollutants have been set extremely low based on conservative interpretations of existing health data. In some cases very low limits have been set even where EPA has determined there is insufficient data on which to base a standard.

RESPONSE: The statement that some numerical criteria in the revision are not "listed" by EPA due to insufficient data and should be deleted or revised is not warranted. EPA has elaborate "national" criteria guidelines and when they are not fulfilled recommends that the states develop their own using approved methodology. The 25 compounds referred to by commenters had their criteria developed in just such a way and have been approved by EPA as acceptable in lieu of national criteria.

10. COMMENT: By selecting the most restrictive standards and by adding one layer of conservative assumptions upon another, DEQ is guaranteeing that many streams which are currently water quality limited will never meet all designated uses.

RESPONSE: As a result of the revised WQS, there are no waterbodies in the State that will not be able to meet their designated uses if the water quality is acceptable. Where the proposed WQS are not met, we can reasonably be assured that a pollution problem exists and state corrective action is required to protect water uses.

11. COMMENT: The designated uses given to some of the streams appears to focus more on theoretical uses (swimming, recreation) rather than on actual uses (industrial, commercial, transportation and drainage) of

the stream. As a result, standards appear to be set at a more restrictive level than needed to protect the actual and foreseeable uses of the stream.

RESPONSE: There seemed to be a serious misunderstanding by some commenters pertaining to designated water uses. The Clean Water Act requires all states to protect their waterbodies for "fishable-swimable" goals. Therefore, all state waters must be protected for those uses unless documentation is provided that natural conditions such as intermittent water flow preclude recreation or propagation of fish and wildlife. There are no "theoretical uses". The Clean Water Act goal is that the opportunity for recreation should not be limited by unsafe water quality. The fact that navigation or high current flows such as occur on the Mississippi River make swimming unsafe at certain times of the year does not mean that less restrictive water quality standards and, therefore, larger pollutant loads can be allowed. There is heavy recreational boating use along the entire length of the Mississippi, and swimming and fishing are common at low water stages. Also, we must consider that the lack of recreational use on a stream today may be due to perceived unsafe water quality and that if that fear were removed, increased recreational use would occur. Whatever the uses of a waterbody - industrial, commercial, transportation, drainage, or swimming - the most sensitive use must be protected. If a use such as swimming, which is a goal of the Clean Water Act, is to be removed from a waterbody, then EPA will require ample documentation that it cannot be attained and why. At present, all waterbodies in Louisiana except certain intermittent streams are designated for fishable-swimable water uses to meet requirements of the Clean Water Act.

- 12a. COMMENT: Human health criteria based on 20 g/day of fish consumption is too conservative for Louisiana and should be raised.
- b. COMMENT: Human health criteria based on 20 g/day of fish consumption is too restrictive.

RESPONSE: The use of 20 grams per day for fish consumption is justifiable and does not exceed any EPA requirement. The fish consumption level is conservative for a state like Louisiana where sport fishing and home consumption of catch is a cultural tradition. The 20 grams per day equates to a mere 4.9 ounces or 1 small fish fillet per week and only 16 pounds per year. It was derived from a more current (1984) national fish consumption estimate by the U. S. Department of Agriculture and updated the very low number first derived by EPA in 1979. It is likely that a number calculated strictly for Louisiana would be greater than 20 grams.

SL 105863

- 13a. COMMENT: Incidental ingestion rate of 0.089 L/day of water is unrealistically conservative.
- b. COMMENT: Incidental ingestion rate of 0.089 L/day of water is not conservative enough.

RESPONSE: An incidental ingestion rate is justifiable and does not exceed any EPA requirement. The incidental ingestion factor is conservative in that it does not consider skin absorption of a toxic which may be as significant a route of pollutant uptake as oral ingestion. Its development and application is within EPA guidelines.

- 14a. COMMENT: The use of the 10^{-6} Risk Factor in calculating human health protection criteria is unnecessarily conservative and should be replaced by 10^{-5} Risk Factor.
- b. COMMENT: The use of 10^{-6} Risk Factor is not protective enough as it does not consider the synergistic (combined) effects of toxic substances, only the individualistic effects of specific compounds, and therefore, should be increased.

RESPONSE: The use of a 10^{-6} (1 in 1 million) risk level for a carcinogen is a justifiable level to protect for human health and does not exceed any EPA requirement. The concentrations that were calculated based on this risk level are achievable in most Louisiana waterbodies except the Calcasieu River where severe toxic contamination is already known to exist. A 10^{-5} risk level as recommended by some commenters if calculated into WQS limits would allow pollutant levels ten times higher than what are already being achieved in most waterbodies. The accumulative conservatism and compounding of safety factors as mentioned by many commenters is nothing more than standard EPA methodology. The State has not added any safety factors that EPA has not approved or that are not needed to adequately protect human health. We have added only the amount necessary to assure the citizens of the State that the water is safe to use.

15. COMMENT: The proposed human health criteria for Public Water Supply Sources are more conservative the EPA Drinking Water Standards.

RESPONSE: There has been some confusion over the use of EPA drinking water standards when developing instream Water Quality Standards. We spent considerable time since the public hearing explaining this issue and feel that most commenters now understand the difference. EPA expects that the state will set standards on a raw drinking water source such as the Mississippi River that will be more stringent than finished drinking water standards. This is because

the Mississippi River, in addition to being a drinking water source, must also be protected for fishing (and consumption of fish and other aquatic life) as well as swimming and diversion into sensitive estuaries. To protect all these uses requires a stricter standard. The drinking water standard was developed for finished drinking water only and takes into consideration the ability of the municipality to pay for expensive removal of toxic pollutants. The WQS revision will reduce cost to municipalities for treatment of drinking water and provide consumers with an added sense of security. We have provided commenters with the citations for appropriate EPA documents that explain this situation in greater detail.

16. COMMENT: Some of the proposed numerical criteria for total phenols and for eight chlorinated phenols are not based on human health protection and are not technically supported in DEQ's background document.

RESPONSE: The use of taste- and odor- and fish-tainting properties of some pollutants such as chlorinated phenols in setting standards is justified for drinking water sources such as the Mississippi River. EPA does consider this a human health issue and develops limits based on them. The numbers in the revised WQS are those from the previous WQS and have not been revised. Because of the occurrence of the many taste and odor incidents in Lower Mississippi River drinking water, we felt these limits were more than justified and can be achieved with existing treatment.

17. COMMENT: The proposed standards depart from EPA methodology on mixing zones. The use of an "historical" low flow rather than an "average" low flow (7Q10) is too restrictive.

RESPONSE: The development of a new mixing zone policy does not depart from EPA methodology. It was developed to help clear up confusion expressed by EPA and industry with the old policy. EPA recommends a standard flow level to be used (7Q10) but encourages the states to use lower levels if the states feel it is necessary to protect unique local water uses. The use of the more restrictive historical low flow was chosen because of the use of the Mississippi River as a drinking water source for over a million people and it's eventual use as diversion water to our sensitive estuaries. The historical low flow only applies to the large Mississippi and Atchafalaya Rivers and not to smaller streams as alleged by some commenters. The WQS revision also allows for ample consideration of local site-specific conditions and can be considered on a case-by-case basis under a variance procedure. The comment that the zone of initial dilution is too restrictive and

provides a "ten-fold" safety factor is not accurate. The allowance of a zone of initial dilution is new to the WQS and gives dischargers a benefit not previously allowed. EPA required the "safety" factor and would not have approved the zone of initial dilution otherwise.

18. COMMENT: DEQ should provide provisions for variances based on scientifically justified, site specific factors where limited water quality data is used to establish a state-wide standard.

RESPONSE: The new section on variances allows for a change in WQS based on the presentation of scientifically justified site-specific factors where limited water quality data is used to set a statewide standard.

19. COMMENT: The limitation on the duration of a variance from the numerical criteria to three years is unnecessarily restrictive and a permanent variance provision should be provided if a criteria is determined to be inappropriate for a specific water body.

RESPONSE: The limitation of the variance to three years as proposed is the limit of time allowed by EPA. We are not allowed to exceed this period as EPA must approve all variances. The language in the WQS is that required by EPA and allows complete flexibility for a discharger to present evidence that a standard is not appropriate. We have discussed this issue extensively with commenters and feel much of the concern has now been resolved.

20. COMMENT: It is premature for the standards to address sediment criteria, since EPA has not issued any sediment criteria yet.

RESPONSE: The Department did not propose applying the water quality standards directly to sediments. Instead a simple statement was added to the General Toxic Substance Section that states the policy that water quality standards for water will be set to protect from build-up of toxic substances in sediment and fish. No limits were proposed for sediments themselves. EPA concurred that Louisiana should protect for levels in the water that will not cause build-up of sediment or fish. Had such limits been in effect in the Calcasieu, the contamination problem we are seeing now could have been prevented.

In summary, the Department feels that the WQS revision is realistic, achievable, and economically acceptable. It does not require anything that is not necessary to protect, enhance, and maintain acceptable water quality in State waters. Indeed, as EPA has pointed out to us, there are many areas the revision did not go into that it could, or perhaps, should have. We decided to concentrate on a few especially weak areas such as toxic substances and, even there, we could have been justified in proposing more limits on more compounds. We were considerate of the needs of the regulated community and their ability to comply with the proposed limits. In our meetings and phone conversations with them, we made this concern known. Therefore, we believed it was prudent and necessary to move forward and adopt the proposed revision, and, indeed, EPA required that it be in place as quickly as possible to meet requirements of the Clean Water Act.

RECEIVED

SEP 15 1989



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI

1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

REPLY TO: 6W-QT

Ms. Maureen O'Neill
Assistant Secretary
Office of Water Resources
Department of Environmental Quality
P.O. Box 44091
Baton Rouge, Louisiana 70804-4091

KEYWORDS:

Dear Ms. O'Neill:

Some questions have recently arisen as to the Federal requirement for the adoption of water quality criteria to protect human health. I would like to explain what the requirements are and what Environmental Protection Agency policy and guidance is available for implementing the requirements. When the Water Quality Act of 1987 was enacted, it amended the Clean Water Act to add Section 303(c)(2)(B) which required the adoption of numeric criteria in water quality standards for all priority pollutants for which criteria have been published under Section 304(a), where the discharge or presence of the pollutant, in the affected water, could reasonably be expected to interfere with designated uses. This requirement clearly applies to the adoption of criteria to protect human health for any waterbody designated as a fishery or water supply.

The amended Clean Water Act provides that these criteria be adopted no later than three years after the enactment of the Water Quality Act, which is February 4, 1990. For your reference, I have enclosed a list of the 92 priority pollutants for which EPA has adopted human health criteria. I have also enclosed the Region 6 guidance on developing water quality standards to protect human health.

As you can see from the Clean Water Act and the enclosed guidance, the State is required to adopt numeric water quality criteria for:

- 1) Those pollutants on approved or proposed 304(1) lists.
- 2) Those pollutants where there exists water quality based limits in NPDES permit or where NPDES permit screening shows that the Federal 304(a) criteria may be exceeded.
- 3) Those pollutants where ambient monitoring or site specific studies show that 304(a) criteria in the water column or in fish tissue may be exceeded.
- 4) Those pollutants where there is data in the Toxic Release Inventory under Section 313 of SARA which show that the 304(a) criteria in the water column or fish tissue could reasonably be expected to be exceeded.

SL 105868

-2-

- 5) Those pollutants for which data collected as part of the National Bioaccumulation Study show that the Federal 304(a) criteria in fish tissue could reasonably be expected to be exceeded.
- 6) Those pollutants for which there is reasonable expectation that the 304(a) criteria in the water column or fish tissue may be exceeded due to release from Superfund or RCRA sites.

I complement you on your ongoing efforts to improve Louisiana's water quality standards and encourage you to proceed with the adoption of the proposed standards. I believe the proposed standards will bring the State into general compliance with Section 303(c)(2)(B) of the Clean Water Act. As outlined in Robert B. Elliott's letter of August 4, 1989 to Barbara Romanowsky, there remains a few areas which may need improvement. Specifically the State must review the priority pollutants for which you have not adopted criteria to ensure that they are not causing a problem, I am particularly concerned about dioxin and lead. If you have any questions, please feel free to call me at (214) 655-7100 or David Neleigh at (214) 655-7145.

Sincerely,

Myron O. Knudson

Myron O. Knudson, P.E.
Director
Water Management Division (6W)

Enclosures

*Does not square with what
Myron told PPB re
6/1 — "Limitations have
to be challenged
in court"*

SL 105869

7

TOTAL P.03



State of Louisiana

Department of Environmental Quality



BUDDY ROEMER
Governor

August 25, 1989

PAUL TEMPLET
Secretary

Response to Major Comments on the 1989 Proposed Revision to the Louisiana Water Quality Standards

The following is a response to the major comments on the proposed Water Quality Standards revision received by the Department orally at the August 4 public hearing or in writing by the comment period deadline. A verbal response to some of these comments has been made previously to commenters on the phone or in meetings.

The Department feels that adequate time for review and comment has been given for the Water Quality Standards (WQS) revision. As noted in the attached chronological list of activities for the WQS revision, the process has been ongoing since January of 1988 and has included a public meeting held in June of last year to present information and receive comments. Comments received as a result of that meeting were incorporated in the present proposal. Progress in the WQS revision and an opportunity to ask questions and give comment was given at three professional society meetings with the Louisiana Water Pollution Control Association and Environmental Health Association, the most recent in June of this year. Other key dates in the WQS revision process included a notice of availability and of the public hearing on June 20, 1989 in six state newspapers, 45 days in advance of the public hearing. We have satisfactorily met all EPA requirements for public participation and exceeded all requirements of the State Administrative Procedures Act (APA). Copies of the proposed WQS revision were sent to over 20 industry, environmental, and government groups over a month in advance of the hearing and a day earlier in the case of the Louisiana Chemical Association. This effort is well beyond requirements of the APA. In addition, we have shown a willingness to discuss, at any time, the proposed revision and have made all documents used to develop the revision available for review in our office. Indeed some commenters reviewed these documents before initiation of rulemaking. We believe the fact that over 75 people attended the public hearing (19 making presentations) and that over 30 written comments were received is testimony that there was ample time for review.

The development of the fiscal and economic impact statement followed approved procedures of the APA and the Legislative Fiscal Office. It was not possible to provide extensive quantifications of all possible impacts or benefits from the proposed WQS revision but equal consideration was given to both costs to the regulated community and benefits to municipalities and the public. Indeed it is probable that for every cost for treatment to remove a toxic substance from a wastewater discharge, there will be an equal benefit in reduced costs

OFFICE OF WATER RESOURCES P.O. BOX 44091 BATON ROUGE, LOUISIANA 70804

AN EQUAL OPPORTUNITY EMPLOYER

8

SL 105870

to municipalities who must remove pollutants from a drinking water source to fisheries to protect from toxic contamination and the public in the form of health related benefits. We considered the existence of newly required EPA technology limits for toxic substances in estimating costs to industry since all discharges must meet these limits regardless of the WQS. Therefore, a significant amount of the costs to meet new limits required by the proposed WQS are already required by EPA to meet new technology limits. On one issue regarding nontoxic substances such as sulfates, we have already agreed to the request of industry commenters to remove Monte Sano Bayou and there is no new requirement in the proposed WQS that goes beyond what is already in place. Also, the proposed WQS revision does not give any competitive economic edge to neighboring states because of new, more stringent, requirements for Louisiana. EPA is requiring all states to revise their WQS to control toxic substance discharges to the basic level of protection we are proposing for Louisiana. We just happen to be ahead in doing so and have received commendation from Region VI EPA for our effort.

There are no instances in the WQS revision where the State is proposing something not consistent with EPA policy or guidance. There are instances where we are proposing to be stricter than the minimum EPA allowable level but this is not only allowed but encouraged by EPA where the state feels that its local situation requires a stricter limit. We have worked very close with Region VI EPA in developing the proposed revision and in some instances directly with EPA officials in Washington, D.C., and the Cincinnati Health Effects Laboratory. We can provide the necessary EPA documentation to show that they are in agreement with all assumptions in the proposed revision that go beyond EPA minimum requirements. In some cases, we were urged by EPA to develop more protective WQS where the EPA guidance limits were out of date or under review. As a result of these proposed WQS, there are no waterbodies in the State that will not be able to meet their designated uses if the water quality is acceptable. Where the proposed WQS are not met, we can reasonably be assured that a pollution problem exists and state corrective action is required to protect water uses.

The statement by some commenters that the proposed WQS "depart" in significant ways from EPA methodology is not supported by fact. As mentioned previously, we have carefully coordinated the development of the WQS with EPA and used only the acceptable and necessary methodology. The Department had no intention to use and has not used any method that is not scientifically valid or approved by EPA. Because there are several EPA guidance documents available, it is possible that many commenters have been confused by the procedures and methodology used. We have made several attempts to further explain our methods to commenters and feel most of this confusion can be cleared up. EPA has concurred with all of the assumptions we have made in developing the WQS and we have, therefore, not used any method or procedure that is not an EPA accepted approach to developing a water quality standard. Indeed the proposed standards will enable us to be more certain than ever before that our waterbodies are safe to swim and fish in and that the water can be safely and economically treated for human consumption.

N.S. 111-1
EPA method
ology, & the
not include
2 factors for
water
concentration
which
is not
correct

There has been some confusion over the use of EPA drinking water standards when developing instream Water Quality Standards. We have spent considerable time since the public hearing explaining this issue and feel that most commenters now understand the difference. EPA expects that the state will set standards on a raw drinking water source such as the Mississippi River that will be more stringent than finished drinking water standards. This is because the Mississippi River, in addition to being a drinking water source, must also be protected for fishing (and consumption of fish and other aquatic life) as well as swimming and diversion into sensitive estuaries. To protect all these uses requires a stricter standard. The drinking water standard is developed for finished drinking water only and takes into consideration the ability of the municipality to pay for expensive removal of toxic pollutants. The proposed WQS revision then will reduce cost to municipalities for treatment of drinking water and provide consumers with an added sense of security. We have provided commenters with the citations for appropriate EPA documents that explain this situation in greater detail.

The statement that some proposed numerical criteria are not "listed" by EPA due to insufficient data and should be deleted or revised is not warranted. EPA has elaborate "national" criteria guidelines and when they are not fulfilled recommends that the states develop their own using approved methodology. The 25 compounds referred to by commenters had their criteria developed in just such a way and have been approved by EPA as acceptable in lieu of national criteria.

The repeated statements that proposed criteria are below detection limits and are therefore an unreasonable standard is also not warranted. EPA has for years established below detection limit standards for certain very toxic compounds that can build up in sediments and fish tissue at very low water concentrations. This has been a well established practice by EPA and we have followed it in our proposed WQS. The standard for instream water must be set at whatever concentration is required by accepted scientific calculations to prevent the buildup of toxic substances such as hexachlorobenzene in sediment and fish. This level may be below the detection limit in the waterbody but can be calculated at an above detection limit in effluent for adequate control. Therefore, EPA expects the State to provide a below detection limit standard if it is required to protect water uses or they will not approve the proposed WQS revision. The limit of detection is not to be considered when developing a limit for a very toxic compound that threatens human health and EPA routinely expects it to be ten to fifty times below any level that shows an unacceptable observed effect.

The development of a new mixing zone policy does not depart from EPA methodology. It was developed to help clear up confusion expressed by EPA and industry with the old policy. EPA recommends a standard flow level to be used (7Q10) but encourages the states to use lower levels if the states feel it is necessary to protect unique local

Page Four

water uses. The use of the more restrictive historical low flow was chosen because of the use of the Mississippi River as a drinking water source for over a million people and it's eventual use as diversion water to our sensitive estuaries. The historical low flow only applies to the large Mississippi and Atchafalaya Rivers and not to smaller streams as alleged by some commenters. The WQS revision also allows for ample consideration of local site-specific conditions and can be considered on a case-by-case basis under a variance procedure. The comment that the zone of initial dilution is too restrictive and provides a "ten-fold" safety factor is not accurate. The allowance of a zone of initial dilution is new to the WQS and gives dischargers a benefit not previously allowed. EPA required the "safety" factor and would not have approved the zone of initial dilution otherwise.

There have been several comments about the EPA guidance documents and that the Department has made improper or unjustified use of them and other EPA documents. We prepared a documentation package and distributed it before the public hearing that adequately explains our use of EPA guidance documents. Apparently many commenters have failed to read the documentation so we have made every attempt to explain it in phone conversations and at meetings. We feel the documentation package adequately answers the majority of the concerns about the use of EPA documents. We have also been assured by EPA Region VI that we have made proper use of them and they are satisfied with every standard developed in addition to a stated EPA minimum value number. There seems to be some confusion among commenters as indicated when one commenter challenges us for using an EPA proposed limit while another complains that we should have used the EPA limit instead of developing a more state specific one. We have stated repeatedly that the proposed WQS contain only those limits that were required to protect state waters and that in their development we used only established EPA approved and scientifically defensible methodology. We have also stated names and telephone numbers of appropriate EPA personnel who will discuss this concern with any commenter. In short, comments that we have gone "drastically" lower than EPA or "depart" from EPA methodology or make incorrect or unscientific application of EPA data or use insufficient data to derive standards are not justified.

There appears to be some confusion about the water quality-based limits that are proposed in the water quality standards and technology-based limits developed and published separately by EPA. The water quality-based limits as proposed in the WQS are designed to protect human health, fish and wildlife, and other sensitive water uses. Concerns for technical achievability, cost/benefit analysis, limits of detection, and other such factors are accommodated in the technology-based limits which are derived separately. The two are developed to complement each other and when developing a permit, the most stringent will be applied. In effect, the WQS are a safety net to be sure that we are not endangering human health by setting limits for technology only. Once again, EPA could be contacted for concurrence of this and many commenters have been urged to check with their EPA permit writers. In many cases, a check of discharger permit limits on the

Mississippi River shows that, for most dischargers, EPA technology limits are more restrictive than the proposed WQS limits. The Mississippi River has also been noted to be substantially in compliance with the proposed WQS and therefore concerns about "realistic" or "economically unachievable" limitations are largely unfounded.

There seems to be a serious misunderstanding by some commenters pertaining to designated water uses. The Clean Water Act requires all states to protect their waterbodies for "fishable-swimmable" goals. Therefore, all state waters must be protected for those uses unless documentation is provided that natural conditions such as intermittent water flow preclude recreation or propagation of fish and wildlife. There are no "theoretical uses". The Clean Water Act goal is that the opportunity for recreation should not be limited by unsafe water quality. The fact that navigation or high current flows such as occur on the Mississippi River make swimming unsafe at certain times of the year does not mean that less restrictive water quality standards and, therefore, larger pollutant loads can be allowed. There is heavy recreational boating use along the entire length of the Mississippi and swimming and fishing are common at low water stages. Also, we must consider that the lack of recreational use on a stream today may be due to perceived unsafe water quality and that if that fear were removed, increased recreational use would occur. Whatever the uses of a waterbody - industrial, commercial, transportation, drainage, or swimming - the most sensitive use must be protected. If a use such as swimming, which is a goal of the Clean Water Act, is to be removed from a waterbody, then EPA will require ample documentation that it cannot be attained and why. At present, all waterbodies in Louisiana except certain intermittent streams are designated for fishable-swimmable water uses to meet requirements of the Clean Water Act.

The use of 20 grams ^{per day} 10^{-6} for fish consumption, an incidental ingestion rate and a 10^{-6} risk level for carcinogens are all justifiable and do not exceed any EPA requirement. The fish consumption level is conservative for a state like Louisiana where sport fishing and home consumption of catch is a cultural tradition. The 20 grams per day equates to a mere 4.9 ounces or 1 small fish fillet per week and only 16 pounds per year. It is derived from a more current (1984) national fish consumption estimate by the U. S. Department of Agriculture and updates the very low number first derived by EPA in 1979. It is likely that a number calculated strictly for Louisiana would be greater than 20 grams. The incidental ingestion factor is conservative in that it does not consider skin absorption of a toxic which may be as significant a route of pollutant uptake as oral ingestion. Its development and application is within EPA guidelines. The use of a 10^{-6} (1 in 1 million) risk level for a carcinogen is a justifiable level to protect for human health and the concentrations calculated based on it are achievable in most Louisiana waterbodies except the Calcasieu River where severe toxic contamination is already known to exist. A 10^{-5} risk level as recommended by some commenters if calculated into WQS limits would allow pollutant levels ten times

higher than what are already being achieved in most waterbodies. The accumulative conservatism and compounding of safety factors as mentioned by many commenters is nothing more than standard EPA methodology. The State has not added any safety factors that EPA has not approved or that are not needed to adequately protect human health. We have added only the amount necessary to assure the citizens of the State that the water is safe to use.

The use of taste and odor and fish tainting properties of some pollutants such as chlorinated phenols in setting standards is justified for drinking water sources such as the Mississippi River. EPA does consider this a human health issue and develops limits based on them. The numbers in the WQS now are those from the existing WQS and have not been revised. Because of the occurrence of the many taste and odor incidents in Lower Mississippi River drinking water, we feel these limits are more than justified and can be achieved with existing treatment.

The Department is not proposing to apply the water quality standards directly to sediments. Instead a simple statement has been added to the General Toxic Substance Section that states the policy that water quality standards for water will be set to protect from buildup of toxic substances in sediment and fish. No limits are proposed for sediments themselves. EPA concurs that Louisiana should protect for levels in the water that will not cause buildup of sediment or fish. Had such limits been in effect in the Calcasieu, the contamination problem we are seeing now could have been prevented.

The new section on variances allows for a change in WQS based on the presentation of scientifically justified site-specific factors where limited water quality data is used to set a statewide standard. The limitation of the variance to three years as proposed is the limit of time allowed by EPA. We are not allowed to exceed this period as EPA must approve all variances. The language proposed in the WQS is that required by EPA and allows complete flexibility for a discharger to present evidence that a standard is not appropriate. We have been discussing this issue extensively with commenters and feel much of the concern has now been resolved.

In summary, the Department feels that the proposed WQS revision is realistic, achievable, and economically acceptable. It does not require anything that is not necessary to protect, enhance, and maintain acceptable water quality in State waters. Indeed, as EPA has pointed out to us, there are many areas that the proposed revision did not go into that it could or perhaps should have. We decided to concentrate on a few especially weak areas such as toxic substances and even there could have been justified in proposing more limits on more compounds. We were considerate of the needs of the regulated community and their ability to comply with the proposed limits. In our meetings and phone conversations with them, we have made this concern known. Therefore, we believe it is prudent and necessary to move forward and adopt the proposed revision and indeed EPA is requiring that it be in place as quickly as possible to meet requirements of the Clean Water Act.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF WATER RESOURCES
WATER POLLUTION CONTROL DIVISION

Chronological List of Activities for 1989
Louisiana Water Quality Standards Triennial Revision

- January, 1988 - DEQ initiates formal triennial review/revision process through evaluation of State and Federal (EPA) needs and requirements.
- May, 1988 - First Public Draft of proposed revision developed and distributed to industrial, environmental, and government groups for review with notice of a Public meeting to present information and review comments.
- June 10, 1988 - Public meeting held in Baton Rouge to present information on the revision process and receive comments and recommendations on previously submitted draft. Region VI EPA invited speaker. (9 written comments from industry subsequently received.)
- August 25-26, 1988 - Human Health Workshop sponsored in Baton Rouge with EPA representatives from Washington, Cincinnati Office of Research and Development, and Region VI Dallas. Water Quality Standards revision was discussed and guidance received.
- November 17, 1988 - Presentation on Water Quality Standards Revision to 1988 Annual Technical Conference of Louisiana Water Pollution Control Association, Baton Rouge.
- December 12 and 13, 1989 - Participation in EPA National Conference on Revision of Technical Support Document for Water Quality-Based Toxics Control, Williamsburg, Virginia. Development of Water Quality Criteria discussed with national audience from industry, states, environmental groups, and EPA.
- January 26, 1989 - Presentation on "Development of Human Health Criteria for Water Quality Standards" to Annual Educational Conference of Louisiana Environmental Health Association, Lafayette.
- March 1 - 3, 1989 - Presentation on "Louisiana's Approach to Setting Human Health Standards" at EPA's National Conference on Water Quality Standards for the 21st Century held in Dallas. Audience included industry, states, environmental groups, and EPA.
- June 8, 1989 - Presentation on "Revision of Water Quality Standards" to Spring Technical Conference of Louisiana Water Pollution Control Association, Baton Rouge.

- June 20, 1989 - Notice of Availability of Proposed Water Quality Standards Revision and Public hearing placed in 6 State newspapers including Official State Journal, Baton Rouge State-Times. Secretary initiates Rulemaking Hearing scheduled for last possible day under Administrative Procedures Act (APA).
- June 29, 1989 - Proposed Revision sent to Recorder of Documents for distribution to State Library Depositories state wide.
- June 30, 1989 - Proposed Revision distributed gratis to over 20 industrial, environmental, and governmental groups. Deadline for comments set for August 11, 1989.
- July 10, 1989 - Notice of Intent (includes hearing) and approved Fiscal and Economic Impact Statement sent to members of House and Senate Natural Resources Committee and 4500 individuals on DEQ mailing list.
- July 20, 1989 - Notice of Intent, Notice of Hearing, Fiscal and Economic Impact Statement published in State Register as required under APA.
- July 24, 1989 - Water Quality Standards Documentation package developed and distributed gratis to industry, environmental and government groups. Documentation package developed at request of reviewers of water quality standards revision.
- July 31, 1989 - Meeting with Louisiana Chemical Association on Water Quality Standards Revision. Meeting held with LCA Environmental Quality Committee. 18 people in attendance.
- August 4, 1989 - Public Hearing held; 2:30 p.m., Baton Rouge, 75 total attendees, 19 registered speakers.
- August 11, 1989 - Deadline for comments.
- August 22, 1989 - Meeting with Louisiana Association of Business and Industry on Water Quality Standards revision - 20 people in attendance.

**WRITTEN COMMENTS SUBMITTED ON THE 1989 LOUISIANA
WATER QUALITY STANDARDS REVISIONS**

COMMENTS AND EXHIBITS SUBMITTED AT THE HEARING, AUGUST 4, 1989:

Organization:

- (1) Baton Rouge Audubon Society, Inc.
- (2) RESTORE
- (3) LA Assoc. of Business & Industry
- (4) Exxon Chemical Co, B.R. Chemical Plnt
- (5) Copolymer

Representative:

Doris Falkenheiner
Mike Tritico
Emily Stich
Bruce Barbre
M. Harbourt and
S. Edwards

COMMENTS RECEIVED BY AUGUST 11, 1989:

- | | |
|--|-------------------------|
| (1) Halogenated Solvents Industry Alli. | Paul Cammer (8/4) |
| (2) PPG ✓ | Bill Peard (8/8) |
| (3) Jeanerette Sugar Coop., Inc. | Robert DeKeyzer (8/9) |
| (4) Kaiser Aluminum & Chemical Corp. | J.H. Lashover (8/10) |
| (5) Environmental Defense Fund | James Tripp (8/10) |
| (6) South Coast Sugars, Inc. | Daniel Martinez (8/10) |
| (7) AWARE | Elizabeth Avants (8/11) |
| (8) LA Assoc. of Business & Industry | Emily Stich (8/11) |
| (9) Exxon/Chemical Co, B.R. Chemical Plnt | Bruce Barbre (8/11) |
| (10) PPG ✓ | Bill Peard (8/11) |
| (11) LA Chemical Association (LCA) | Henry Graham (8/11) |
| (12) James River Corporation | D.D. Hulit (8/11) |
| (13) Schuylkill Metals Corporation | Glen Hasse (8/11) |
| (14) Boise Southern | H.L. Newman (8/11) |
| (15) Copolymer | Lloyd Tabary (8/11) |
| (16) Freeport-McMoRan | Wayne Forman (8/11) |
| (17) Citgo | Roland Bodin (8/11) |
| (18) New Orleans Audubon Soc. and
Tulane Environmental Law Soc. | Itzhak Kornfel (8/11) |
| (19) Schwab & Walter | Gerald Walter (8/11) |
| (20) Georgia-Pacific Corp. | Jerry Kincaid (8/11) |
| (21) Mid-Continent Oil and Gas Assoc. | R. Michael Lyons (8/11) |
| (22) Occidental Chemical Corp. | John K. Young (8/11) |
| (23) Simon, Peragine, Smith & Redfearn | James A. Burton (8/11) |
| (24) LEAN | Ramona Stevens (8/11) |

COMMENTS RECEIVED AFTER AUGUST 11, 1989:

- | | |
|--|--------------------------|
| (1) DOW Chemical U.S.A. | Thesia Krajewski (8/14) |
| (2) Stone Container Corp. | Marion Burn (8/14) |
| (3) Boise Southern | H.L. Newman (8/14) |
| (4) Sewerage & Water Board of New Orleans | Fred Swan (8/14) |
| (5) CertainTeed Corp. | Bruce Brocka (8/15) |
| (6) PPG ✓ | W.J. Peard (8/15) |
| (7) Citgo | Roland Bodin (8/15) |
| (8) PPG ✓ | W.J. Peard (8/15, FAXED) |
| (9) LaRoche Chemicals | Richard Turner (8/16) |
| (10) Citizen | Angela Carpenter (8/16) |
| (11) LA Municipal Association | L. Gordon King (8/16) |
| (12) Exxon Chemical Co, B.R. Chemical Plnt | Bruce Barbre (8/16) |
| (13) Halogenated Solvents Industry Alli. | Paul Cammer (8/18) |
| (14) PPG ✓ | W.J. P ard (8/18) |

LOUISIANA WATER QUALITY STANDARDS PUBLIC HEARING

AUGUST 4, 1989

REGISTERED SPEAKERS

- (1) Copolymer Rubber and Chemical
- (2) Louisiana Association of Business and Industry
- (3) Baton Rouge Audubon Society
- (4) Ascension Parish Residents Against Toxics
- (5) Delta Chapter Sierra Club
- (6) Lorraine Aime - Citizen
- (7) Calcasieu League for Environmental Action Now
- (8) Mildred Fossier - Citizen
- (9) League of Women Voters
- (10) League of Women Voters
- (11) Orleans Audubon Society/Tulane Environmental Law Society
- (12) Calcasieu League for Environmental Action Now
- (13) Exxon Chemicals
- (14) Friends of Little River
- (15) Save Ourselves Inc.
- (16) Louisiana Chemical Association
- (17) Mike Tritico - Restore
- (18) Louisiana Environmental Action Network
- (19) Oil, Chemical, and Atomic Workers Union

SL 105879



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII

999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405

JAN 17 1989

Ref: SWM-SP

MEMORANDUM

SUBJECT: Risk Level for Carcinogens in Adopted/Proposed WQS
FROM: Bill Wuertele, SWM-SP
TO: David Moon, WH-585

As you may recall, several weeks ago I called to ask if we had information on the risk levels for carcinogens to go along with the data in the HQ document entitled "State Adoption/Proposal of Numeric Criteria for Priority Pollutants as of August, 1988". Unfortunately, as it turns out, that information was not solicited when your document was being prepared; so after talking with you, I decided to call the Regional Coordinators to get some sense of what States had adopted, proposed or were considering in the way of human health criteria for carcinogens. I thought you might be interested in the results of that telephone survey.

Recent testimony, presented at a Colorado hearing on proposed WQS for organic toxicants, sharpened interest in what other States were doing about selecting appropriate risk levels. At that hearing, an expert witness for an industry group testified that risk levels were inappropriate as the basis for ambient WQS and that no State in the country was using or proposing a 10⁻⁶ risk level (the level proposed by Colorado) as the basis for a WQS. The information listed below indicates otherwise.

This summary is based on response to the following question: "(o)f the States in your Region that have adopted or proposed ambient health-based WQS for carcinogens, what risk level was used in selecting adopted/proposed criteria?".

Region 1.

To date, none of the States in Region 1 has officially selected a specific risk level for health-based standards. For those States for which the Region writes permits, the Region has been using 10⁻⁶ in evaluating discharge limitations for carcinogens.

Region 2.

To date, New York is the only State in Region 2 to adopt health-based standards which include risk-based values for carcinogens. New York used a 10-6 risk factor as the basis for its criteria. Other States are beginning to review the issue in response to the requirements of Section 303(c)(2)(B).

Region 3.

Washington D.C., Pennsylvania, and West Virginia have adopted or proposed health-based standards which include risk-based values for carcinogens. Each has used a 10-6 risk level as the basis for its criteria.

Region 4.

Currently, none of the States has risk-based standards for human health. Florida's current human health protection function is embodied in a mixing zone approach to limiting discharges of toxicants. Georgia uses an FDA fish tissue level approach as the basis for its ambient health-based criteria. Although there are currently no risk-based criteria on the books, a number of the Region 4 States are preparing risk-based criteria recommendations for their upcoming triennial reviews. Alabama is proposing an option 1 approach (adopt standards for all 307a pollutants for which EPA has developed criteria) with a 10-6 risk level for carcinogens. Mississippi has proposed criteria for the pollutants for which EPA has aquatic life values with the provision that, for those pollutants which also have risk-based health values, the 10-6 risk level will be used. Mississippi has also proposed language for its "translator" guidance that specifies a 10-6 risk level for carcinogens. North Carolina is considering 20 health-based standards with 10-6 as the risk level for carcinogens. North Carolina will also propose 10-6 as the risk level for implementing its narrative "free from toxics" standard. The Regional staff has recommended 10-6 as a preferred risk level in developing standards, with a provision that a higher risk level would be considered if there were a scientifically defensible justification.

Region 5.

Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin have all proposed health-based standards which include risk-based standards for carcinogens. In each case, these States have selected 10-5 as the maximum acceptable risk. It appears the choice of 10-5 was based on one State selecting that level, and then the others followed that lead.

Region 6.

To date, only Louisiana has adopted health-based standards which include risk-based values for carcinogens. The existing standards include 19 health-based criteria of which 9 are carcinogens. For those carcinogens, Louisiana currently uses 10-5 risk-based values. Recently, the State proposed an additional 28 health-based standards, which would increase the total number of specific numeric standards to 47. In the new proposal, all criteria for carcinogens (including those carcinogens covered in the existing standards) will use a 10-6 risk-based factor. The proposed standards include two criteria categories: those needed to protect public water supplies, and those need to protect waters classified for fish and wildlife (where the exposure pathway for health-based values is consumption of contaminated aquatic organisms). In Louisiana, all waters are classified for fish and wildlife uses, and therefore, the new health-based values for that use category will apply statewide. Where no appropriate EPA-derived value was available, the State calculated values based the most recent information in IRIS (IRIS - 12/88). In addition, the State added a supplementary exposure pathway, an incidental ingestion factor (or "gulp factor"), in calculating proposed values for both use categories. In an earlier proposal, the State had briefly considered linking the acceptable risk level to the status of the pollutant in EPA's ranking of carcinogens (i.e., group A, known carcinogens, would have one risk level; and group B, probable carcinogens, would have another risk level). That proposal, however, was dropped.

Region 7.

A number of the States are beginning to look at the health-based standards issue in response to Section 303(c)(2)(B) requirements, but to date, only Missouri has adopted health-based criteria which include risk-based values for carcinogens. Missouri used a 10-6 risk level as the basis for those standards.

Region 8.

Colorado and Wyoming have proposed specific numeric, health-based criteria which include risk-based values for carcinogens. In each case the proposal uses 10-6 as the acceptable risk level. Montana and South Dakota have adopted the Gold Book, including health-based criteria for carcinogens, by reference in their standards. In neither case, however, has the State specified a risk level in the standards (since the Gold Book displays three risk levels for carcinogens, these States will have to specify a level in either the standards or the "translator procedure"). Verbally, the States' staff have explained that 10-6 will be used

in implementing the standards. Utah and North Dakota have used EPA's ambient criteria documents as the basis for their aquatic life protection criteria, but to date, they have relied on drinking water values as the basis for their human health protection function. Utah and North Dakota will address ambient health-based criteria in the upcoming triennial review.

Region 9.

Arizona, American Samoa, California, Hawaii, and Nevada have proposed health-based standards which include risk-based standards for carcinogens. In each case, the proposal specified a 10⁻⁶ risk level as the basis for the proposed standards. Guam has adopted health-based standards by reference to the Gold Book criteria, but they did not specify a risk level. This will be clarified either in the standards or the "translator procedure".

Region 10.

To date, Alaska and Oregon have adopted health-based criteria which include risk-based standards for carcinogens. Alaska adopted the Gold Book by reference, and did not specify a risk level. In the language accompanying that portion of the standards, however, the State specifies that the more stringent of the two categories of values listed, aquatic life or human health criteria, will be applied. It could be argued that a literal interpretation of this provision would mean that Alaska had adopted 10⁻⁷ as its acceptable risk level. Oregon used 10⁻⁶ as the basis for its risk-based standards.

cc Water Quality Standards Coordinators

OUR VIEWS

New regulations should be OK'd

Members of the Louisiana Legislature's Joint Committee on Natural Resources face a tough decision later today. Will they approve strong water pollution control regulations to keep toxic chemicals out of our streams or will they bow to the pressures of the politically powerful?

The Department of Environmental Quality has proposed long-needed new standards for water quality, but the joint committee has final say on whether those standards become effective.

Today's action by the Legislative committee is a good chance to see how much individual legislators care about their state and not just pleasing lobbyists and potential campaign contributors. How the members of the committee vote bears watching.

Some companies in the chemical industry oppose the standards as overly restrictive. "DEQ appears to have . . . gone beyond what is necessary to adequately protect human health and the environment in establishing some of the proposed standards," claims Henry Graham, an official of the Louisiana Chemical Association. And Dan Borne of the LCA promised that the group would "have some substantive comments" at the hearing.

But Maureen O'Neill, head of DEQ's water program, described the regulations as "incredibly needed, highly defensible" and "based on good scientific and legal principles."

O'Neill pointed out that the seafood industry is also important to the state. "Having uncontaminated seafood is also important to the state's restaurants and tourism industry as well as its national image."

Those in the industry who are opposed to the new regulations complain that they set too high a standard. They want the discharge standard for each toxic compound reduced from a cancer risk of one in 1 million down to a level of one in 100,000.

But such a reduction would mean exposing the public to the risk of 10 additional cancer deaths per million for each toxic compound. Such an increase is totally unacceptable.

Graham says that some of the proposed standards are anywhere from 10 to 50 times more strict than the "lowest observed effect levels" set by the EPA, which are levels at which physical changes in test subjects have been documented. But even at the levels proposed by DEQ, the regulations do not come anywhere near the safety factor advocated by EPA.

It should be noted that opposition to the regulations is not monolithic in the chemical industry. Many companies are staying out of the fight because they have already invested in improving their pollution control technology and will be able to meet the new standards. The LCA won't reveal how many of its members are opposed to the new regulations, saying instead that the rules will affect different companies in different ways.

Graham complains that "the designated uses given to some of the streams appear to focus more on theoretical uses (swimming, recreation) rather than on actual uses (industrial, commercial, transportation and drainage) of the stream. He complains that this may have resulted in more restrictive standards than is necessary "to protect the actual and foreseeable uses of the stream."

But we feel that O'Neill is closer to the point when she says the state should clean up the waterways and not just write them off as point sources for industrial pollution.

The fact is that a large percentage of the state's waterbodies are polluted to unacceptable levels and the state has had to issue advisories against swimming in or eating fish from a number of rivers and streams. For a state that prides itself so much on its water sports and seafood, that's bad news. It's bad news economically for the commercial fishing industry, seafood wholesalers and restaurants. It's bad news for the already tarnished image of Louisiana.

The proposed regulations are tough, especially considering the rather lax attitude the state has taken toward pollution in the past. But given the threat to our health and the environment posed by toxic discharge, the new rules are reasonable and should be accepted.