THE LOUISIANA ENVIRONMENTAL LAWYER

Volume 7, Number 2 - Fall 2001

Louisiana State Bar Association Section on Environmental Law Legislative Update - The 2001 Regular Session

by: Jim Marchand

Along with other lesser lights, the 2001 Regular Session of the Louisiana Legislation passed one major piece of environmental legislation. This was the enactment of laws for the management of the groundwater and aquifers of the state. Some of the other changes in environmental legislation for the 2001 Regular Session included underground storage tanks, waste tires, infectious wastes, and beneficial environmental projects. In addition, procedural statutes on lien priorities and certain notice requirements were amended. Though these might not be considered major changes to the whole of Louisiana's environmental law, many greatly impacted their areas of law. There were also quite a few bills that failed to pass and their controversial nature livened up some of the more mundane matters.

I. Legislation that Passed

A. Act 550 (HB 1483 - Damico)

Motor Fuels Underground Storage Tank Trust Fund

Amends R.S. 30:2194, 2195.2, 2195.3, 2195.8, 2195.9

Purpose: To change definitions, tighten the requirements for participation in the trust fund, clarify the financial responsibility of tank owners, and redefine "contractor" for trust fund purposes.

This act does several things;

1) Defines the "date of release" from an underground tank as a specific date on which evidence indicates that a leak is occurring or has occurred, and if taken out of service, the last date of operation.

2) Sets two different criteria for "eligible participant" based on whether the release occurs before August 1, 2001 or after. If before, an eligible participant is an owner of a tank who has registered a newly installed or operating tank with the Department of Environmental Quality prior to a release, is up to date on annual fees, and meets the financial responsibility requirements of the chapter. For releases after Aug. 1, 2001, the owner must also be in "substantial compliance". Substantial compliance is defined in the statute.

3) Adds surface water as an area in which a "response action" can take place.

4) Requires that a "response action contractor" be approved by the department and excludes specialized subcontractors of the response action contractor.

5) Provides that the Motor Fuels Underground Storage Tank Trust Fund shall only be used to pay the response action contractor who performs a department approved remediation.

Published by the Section on Environmental Law, Louisiana State Bar Association, as a service to its members.

Features

Newsletter Editor: ***James G. Wilkins*** *-- Associate Editor:* ***Anne Crochet*** *-- Design/Layout:* ***Pamela Fuentes***

6) Also changes the financial responsibility requirements of tank owners, the membership of the advisory board and the method of determining the Trust Fund balance.

B. Act 252 (HB 1029 - Damico) Beneficial Environmental Projects

Amends R.S. 30:2050.7

Purpose: To require the Attorney General's (AG's) office to move more quickly on the approval of the Beneficial Environmental Projects (BEPs). Some members of the regulated community complained that the AG's Office was not acting quickly enough on the BEPs. At the same time, environmental groups object to BEPs as ways to get around violations and penalties and supported the AG's review process.

1) Requires and sets up a process of submittal by DEQ of all proposed BEPs, their associated enforcement action, and justification to the Attorney General's office.

2) Provides for approval of the BEP if the AG doesn't object in writing within 90 days.

3) Special amendment was added to require DEQ to consider giving preference to a port's BEP if the underlying action occurs at that port facility.

C. Act 1047 (HB 659 - Pinac) Lien Priority for Remediation Cost

Amends R.S. 30:2281

Purpose: To clarify the ranking of privileges on property on which DEQ expends funds in the cleanup of that property. Requested by banking interest to provide stability and protection in commercial transactions. Purpose was not to substantively change the law as understood by DEQ, regulated community or banks, but to clear up language that may have been interpreted otherwise. This bill became controversial and actually failed to pass the first time it was heard on the floor.

This legislation requires the state to include the name of the current record owner and the legal description of the property in the notice of lien.

Current law provides that the lien of the state shall have priority over all other privileges, liens, etc. Any security interests that are filed or perfected before the state's notice of lien shall extend only to the fair market value of the property prior to the remedial action by the state.

The changes restated current law by saying that the prior recorded security interest shall have priority over the state lien, but only to the extent of the fair market value of the property prior to the remedial action. Also added that prior security interest shall be subordinate to the state lien for any amount in excess of such preremediation fair market value.

An attempt was made on the House floor to completely take away the state's right to recover any money that DEQ had expended for the cleanup of private property. This move was defeated because of the constitutional prohibition against alienating state property. They later found a vehicle that allowed them to partially accomplish their end.

D. Act 596 (HB 873 - Holden) Notice of Transfer of Hazardous Waste Permits/Shipping of Sulphur

Amends R.S. 30:2014; enacts R.S. 30:2014.4

Purpose: As originally introduced this legislation was to prevent the transfer of all types of waste permits within 5 years of their issuance. As amended it reduced the requirement to disclosure of the identity of the transferee of a commercial hazardous waste disposal facility license or permit so that DEQ can obtain information required in R.S. 30:2014.2. It also requires that the notice be given to the legislator in whose district the facility is located as required by RS 30:2181.

This bill was amended in the Senate to delete an existing prohibition against a facility shipping sulfur in a solid state in bulk quantities and from which sulphur particulate matter can be emitted. It was alleged that this was needed because of an unintended outcome of the Clean Air Act which requires refineries to remove sulphur from gasoline. They then have to find something to do with it and this change allows them to ship it off.

The law still prohibits facilities from receiving such sulphur, but not shipping it from an such facility. This may mean that a company cannot ship such sulphur to another of its facilities in the state because those facilities cannot receive it.

E. Act 820 (HB 598 - Crowe) Clean Up of Infectious Waste Spills

Amends R.S. 30:2080; R.S. 40:4(i)

Purpose: To clear up a conflict between the DEQ and the Department of Health and Hospitals (DHH) as to who is responsible for the cleanup of an infectious medical waste spill. Such a spill happened in St.

Tammany Parish and both agencies were reluctant to act.

This act provides that DEQ shall be responsible for this cleanup and can recover the cost of the cleanup from the transporter or any other responsible party. The generator of the waste shall be liable for any costs if he ships it with a transporter not licensed by DHH.

It also provides that DHH shall require that a generator of infectious medical waste transport such waste with a licensed transporter.

F. Act 1121 (HB 2046 - Damico) Abandoned Underground Storage Tanks

Enacts R.S. 30:2195(F)

Purpose: To allow the legislature to assist private parties to clean up property contaminated by motor fuel from underground storage tanks. This legislation provides a procedure to clean up abandoned underground storage tanks.

The definitions in this act provide enough leeway to promulgate rules that will allow the clean up of "mom and pop" service stations with the interest earned on the Motor Fuels Underground Storage Tank Trust Fund. The money in the fund is provided by oil and gas distributors, manufacturers, jobbers, or stations that own motor fuel underground storage tanks.

RS 30:2195(F)(3)(d) and (e) provide that interest money can be used to clean up those abandoned underground storage tanks if there is nofinancially responsible owner or operator who can be located, or such person has failed or refused to undertake action ordered DEQ and the release at the site is not eligible for the Motor Fuels Underground Storage Tank Trust Fund.

It should be noted that the same lien provisions that were attacked and shot down initially in Act 1047 above, sailed through the house on this bill prior to the approval of that bill.

G. Act 1197 (HB 1897 - Perkins) Lists of Enforcement Actions/Adjudicatory Hearing - Dispute Resolution Discussions

Amends R.S. 30:2050.1 and 2050.4

Purpose: This act deals with two separate areas of enforcement actions. The first area deals with the problems DEQ has maintaining the notices of enforcement actions and the second deals with the time restrictions for requests for hearings and appeals that occur when DEQ and a respondent informally discuss penalties and compliance orders.

Initially, this legislation reduced the time from 12 months to 3 months for DEQ to maintain a list of notices of violations, compliance orders, and penalty assessments which the department issues. It also provides that a copy of such notices shall be mailed, either separately or as part of a department publication, to anyone that requests to be placed on the mailing list.

The first amendment to this legislation required the secretary to publish a list on the departments website containing any beneficial environmental projects that have been agreed upon during the last year.

The major change to this legislation provides for informal discussions concerning penalties and compliance orders when the secretary hasn't denied or approved a request for an adjudicatory hearing. It allows the secretary and a respondent to agree to enter into dispute resolution discussions concerning a compliance order or penalty assessment, which would suspend the 30 day time period for requesting an adjudicatory hearing as long as the resolution discussions were ongoing.

To make this change work, the process for requesting an adjudicatory hearing was also changed. If the secretary grants a hearing, the action proceeds according to the departments rules and the APA. If a hearing is timely denied, then the respondent may then file a request for de novo review with the 19th JDC.

If within 30 days the secretary has not granted or denied the hearing or a dispute resolution discussion has not been agreed upon, this is deemed a denial and the respondent seeking de novo review shall do so within 30 days after the expiration of that initial 30 days.

If they decide to enter into resolution discussions, this act allows the secretary and the respondent to set a time period for the resolution discussions as long as it isn't more than one year. The resolved disputes must be in writing and either party can withdraw. If they can't resolve the dispute via discussion, then within 30 days from the end of the discussion the secretary shall notify the parties of the approval or denial of the request and the respondent may take action to appeal.

II. Other Legislation

Other legislation that passed, but had limited overall substantive

effect on environmental law included:

A. Act 549 (HB 1482 - Damico) Recreates the DEQ. Amends R.S. 49:191(3); Repeals 49:191(11)(h)

B. Act 618 (HB 1502 - Waddell) Allows transportation of hazardous materials on certain roadways in Caddo and Bossier Parishes. Amends R.S. 32:1521

C. Act 623 (HB 1579 - Damico) Reduces and simplifies the number of categories of tires for purposes of collection of Waste Tire Fund fees. Amends R.S. 30:2412 and 2418

D. Act 821 (HB 602 - Daniel) Requires additional treatment for individual sewage treatment system effluent. Amends R.S. 40:1154

E. Act 1087 (HB 1556 - Kennard) Decreases the fees paid under La. Right to Know Law by fifteen percent. Also adds term "person" as a possible violator of reporting requirements. Amends R.S. 30:2373 and 2374.

III. Legislation that Failed

A. Litter - HBs 115 (Lucas), 578 (G. Smith), 615 (Faucheux), 642, 643 (Strain), 1016 (Quezaire), SBs 192 (Michot), 1003 (Johnson), and 1016 (Lentini)

An awareness of the litter problems in the state is evident by the number of bills introduced on that subject. These bills were generally to increase penalties provided for in state law or to increase the jurisdictional amounts of local courts to impose higherfines for littering. They were primarily opposed by waste haulers as revenue enhancement opportunities for those local governments. The debate dealing with litter usually centers on whether local governments are enforcing current laws. A study resolution did come out of this debate and meetings are planned on this issue to review current legislation and explore future legislation that might be effective.

B. Waste Facility Permits - HB 1158 (McVea and R. Carter)

This bill prohibited DEQ from permitting solid, hazardous or infectious waste facilities within East and West Feliciana Parish. The bill was prompted by activities indicating the possible permitting of a new solid waste facility in one of those parishes, primarily to handle the garbage from neighboring East Baton Rouge Parish. This bill died in committee after an extensive and spirited debate centering on the effects of local zoning on siting of solid waste facilities.

C. Classification of Commercial Waste Facilities/Waste Facility Permits- HB 1925 (Damico)

Originally this bill provided that DEQ would classify commercial solid waste disposal facilities and set the number of operators needed at such facilities. It moved those decisions from the Board of Solid Waste Operator Certification and Training to DEQ, because that board had no expertise to perform these tasks. It was non- controversial and all parties were in agreement.

However, even though the authors of HB 1158 (See above) had lost their bid to restrict solid waste facilities in the Felicianas in the Environment Committee, they were able to amend this bill on the house floor, by a vote of 55 to 37, to prohibit all waste facilities in East and West Feliciana.

Those floor amendments were then stripped off by the Senate Environmental Quality Committee and passed by the senate without the Feliciana restrictions. The house, supporting the local rights advocates, then rejected the bill as amended by the senate (by a vote of 54 to 46) and sent this into a conference committee. The conference committees elected to keep the Feliciana amendments off, but the house again voted with the local legislators to reject the conference report and recommit it back to the conference committee (by a vote of 52 to 49). Eventually, the Feliciana delegation backed off the bill, seeing that it would fail from inaction, allowing the conference report to be approved by the house. However, by that time it was too late and it died on the calendar in the senate.

D. Annual Inspections of Permitted Facilities - HB 1578 (Damico)

Current law provides that DEQ shall inspect all permitted facilities at least once a year. DEQ testified that this was not possible and originally wanted to inspect only as funds and personnel allowed. This was amended in committee to provide that DEQ inspect all permitted facilities once every committee. There was much opposition to this idea on the floor of the house and it was tabled after
three years and voted out of a heated and argumentative discussion.

E. Publication of Releases - HB

.

1310 (Murray)

Required owners of facilities to publish announcements of any chemical releases from their facilities in the official state journals and local newspapers. This legislation also required publication of the short and long term effects of the released chemical and the symptoms associated with it. This legislation faced extensive opposition and died in committee.

F. Posting of Environmental Violators on Web - HB 1311 (Murray)

Required DEQ to post the names of all environmental violators on its website. This failed in committee because DEQ already posts and publishes the names of persons who have received notice of violations, compliance orders, and penalty assessments. The DEQ publishes a hard copy of the violators as is required by law and the posting is done by DEQ even though not required. This would have put the web posting into law.

G. Environmental Assessment Hearings - SB 206 (Gautreaux)

Originally changed the discretion of DEQ to hold public hearings on environmental assessment statements to a requirement that they do so. It also required DEQ to publish notice of those public hearings in the community newspaper nearest the facility.

This legislation became very controversial when it was amended to provide that the environmental assessments and the public hearing provided in this section could be used by DEQ or a permit applicant to satisfy the public trustee requirements as set out in Save Ourselves. The environment community testified that this was an attempt to gut those public trustee requirements, while the regulated community claimed that current law was duplicative and burdensome as it had been improperly applied to many more activities other than the hazardous waste disposal permit applications of Save Ourselves. After a very controversial hearing, the author chose not to move this legislation until the different interpretations could be resolved.

H. Increase in DEQ Fees - HB 1861 (Damico)

This legislation was to raise the fees paid for permit applications and for various services performed by DEQ. This proposed legislation did not go very far. It was not even heard in committee. DEQ Secretary Dale Givens stated that if the department does not get more money that they will curtail certain services. One underlying issue discussed is whether DEQ can satisfy the requirements of the different federal programs and maintain its authorization by the EPA to administer those programs.

IV. Major Statewide Legislation

The only major statewide legislation was the enactment of a state water policy. There were several pieces of legislation filed on this subject. Some were local in nature and some contained very restrictive provisions. The legislature chose the least restrictive plan that provided for a gradual implementation of a water policy and a development of a long term plan.

Act No. 446 (SB 965 by Hoyt, Rep. Daniel)

Established the Ground Water Management Commission, consisting of 15 members, to regulate the withdrawal of groundwater from "critical areas". Also, requires that all water wells be registered to allow the commission to gather sufficient data on the health of the aquifers for its permitting process. The commission shall promulgate rules to preserve and manage the ground water in critical areas, including limitations on withdrawal and restrictions on spacing and depth.

Local input is encouraged in an advisory capacity and any decisions having local impact may only be made with the advice and consultation of local or regional bodies. Groundwater for public consumption is the highest priority, with all other uses having lesser priority. The commission shall cease to exist on July 1, 2003.

In order to develop a long term comprehensive groundwater management system, SB 956 establishes a Ground Water Management Advisory Task Force, consisting of forty-nine members. The Task Force, the Commission, the commissioner of conservation, and any designated local advisory entities shall develop and present such comprehensive plan to the environment and natural resources committees of the legislature. This long term plan will include an evaluation of the ground water resources, present and future demands, data necessary for management, alternatives to ground water use, critical areas, incentives, and designation of the appropriate state entity structure to manage and protect the state's water resources.

This comprehensive plan will be presented to the legislative oversight committees for review prior to January 3, 2003, and introduced for legislative consideration during the 2003 Regular Session of the Legislature.

The Conservation Commission is the agency appointed to administer the groundwater law and to staff the Groundwater Commission. The new Office of Groundwater is promulgating rules for the procedure for requesting the designation of an area as "critical" and the information required for the commission to act. In addition, the commission has issued a request for proposals from firms interested in bidding to develop the long term comprehensive plan for the management of the state's groundwater.

Outline of Amendments to Right-to-Know Rules

By: Bob Hayes and Paul Schexnayder

The Louisiana State Police Right-to-Know unit has enforced Louisiana Administrative Code Title 33, Part V, Subpart 2, Chapter 101 (The Hazardous Material Information Development, Preparedness and Response Act) for ten years without effecting any alteration to said regulations. As a result of certain statutory revisions as well as having identified some necessary modifications, the Right-to-Know unit promulgated a substantial number of amendments to this chapter finalized as of June 20, 2001. This article will outline the changes effected by those amendments.

Section 10101 (Declaration of Authority, Background, Policy and Purpose) was amended to remove unnecessary language therein but no substantive changes were effected.

Section 10103 (Scope) was completely rewritten to expand the scope of these rules to specifically include all modes of hazardous materials transportation.

Section 10105 (Definitions) was amended by adding definitions of the following terms:
"escape beyond facility", "extremely hazardous substance", "immediately", "incident", "local repository", "reportable release", "retail gas station", "state repository", and "transportation related operation".

Section 10107 (Alternate Means of Compliance-Inventory Reporting) remains basically the same. The only substantive change was the addition of paragraph C. 4.b. which exempts from inventory reporting all facilities licensed pursuant to and in full compliance with the Louisiana State Police Explosives Code if no hazardous materials other than explosives are present on the facility.

Section 10109 (Inventory Reporting) was amended to clarify reporting of chemical mixtures. Paragraph D was completely rewritten to provide guidance in this area.

Section 10111 (Release and Incident Reporting) was completely rewritten. Major changes and additions which were made to this section are as follows:

Paragraphs A and C specifically designate the lists and categories of hazardous materials for purposes of release and incident reporting.

Paragraphs B outlines the criteria (in the context of releases and incidents) which require an immediate telephonic report to the Hazardous Materials hot line.

Paragraph D establishes the reportable quantities for the above-mentioned hazardous materials. The only change brought about by this paragraph is the reportable quantity for all non flammable liquids (other than those previously listed in parts 1, 2, and 3 of this paragraph) requiring maintenance of an MSDS has been raised from 500 pounds to 1000 pounds.

Paragraph E is new and delineates specific exceptions to the reportable quantity amounts.
It indicates how industries can qualify to utilize a 1000 pound RQ for compressed or refrigerated flammable gas.

Paragraph F designates the local emergency planning committee and the Office of State Police as the entities to be notified in the event of a reportable release or incident. It

specifies that proper notification to the State Police's Hotline constitutes legal and proper notification to the Department of Environmental Quality, Louisiana Petroleum Gas Commission, and the Louisiana Oil Spill Coordinator. This paragraph also recommends use of the Uniform Hazardous Materials Reporting Form and specifies the circumstances which would require an update notification.

Paragraph G outlines the information which must be provided in the event of a reportable release or incident, and describes three new classifications of events which may be reported in the absence of quantity data for the hazardous material(s) released.

Paragraph H continues the requirement of a follow-up written report within five days for all reportable release and incidents, and clarifies that this is five business days.

Section 10112 (Response, Command and Coordination) is all new. It establishes the Office of State Police as coordinator of emergency response activities arising from any hazardous material release or incident and sets minimum requirements for responding entities. Response contractors are also now required to register with the Office of State Police.

Section 10113 (Exemptions) was amended to exempt owner or operators of retail gasoline service stations from inventory reporting requirements.

Section 10115 (Hazard Communication) remains unchanged.

Section 10117 (Failure to Report; Penalties) was amended to include statutory provisions concerning: careless handling of a hazardous material, reckless handling of a hazardous material, and intentional failure to report a hazardous material release or incident.

Section 10119 (Inventory Form) now requires "E-filing" of the Tier Two chemical inventory form.

Section 10121 (Fees) was amended to reflect the fees assessed to owners or operators with hazardous materials present at their facilities. (Please note that these fees were reduced in the 2001 legislative session and this section is being amended again to reflect this change).

Section 10123 (Trade Secret Claims, Procedures, Resolution) was not amended.

Inside DEQ

by: Christopher A. Ratcliffe

RULE-MAKING UPDATE

Air Quality

AQ213 - Capture Efficiency Test Procedures; Incorporation by Reference, 40 CFR Part 51, Appendix M (LAC 33:III.2156, 2157, 2158, 2159, and 2160) (*La. Register,* v.27, #8, 8/20/01).

Adopts by reference 40 CFR Part 51, Appendix M to alleviate word processing/printing problems that have occurred as a result of the numerous graphics that appear in the text of the regulations. Adopting the federal regulations by reference will are identical to the federal regulations and have not been corrupted by computer problems. These federal regulations currently exist in theensure that Louisiana's regulations are identical to the federal regulations and have not been corrupted by computer problems. These federal regulations curently exist in the Air Quality regulations. This proposed rule will simply remove the federal language from LAC 33:III.Chapter 21, Subchapter N and replace it with a reference to the federal regulations in 40 CFR Part 51, Appendix M. Any existing non-federal language has been retained and renumbered. Additional sections of Chapter 21 have been amended in the final rule to correct citations that reference text that was deleted and incorporated by reference.

AQ216 - Asbestos-Containing Materials in Schools and State Buildings (LAC 33:III.2707 and 2721) (*La. Register,* v.27, #8, 8/20/01). LAC 33:III.2707.B.1 requires local education agencies and state governments to conduct reinspections of all friable and nonfriable known or assumed asbestos-containing building material in each building that they lease, own, or otherwise use at least every three years after a

management plan is in effect. The federal rule, which forms the basis for this rule, only requires management plans and reinspections in primary and secondary schools. The revision to the rule removes that requirement of reinspection in state buildings, which is expected to save the state 6-7.5 million dollars every three years. The rule will continue to require initial inspections by accredited inspectors, 6-month surveillance inspections by properly trained personnel, and management plans in state buildings.

Proposed Rule: AQ215 - Control of Nitrogen Oxides Emissions (LAC 33:III.Chapter 22) (*La. Register,* v.27, #8, 8/20/01).

0110POT1 - Withdrawal of Proposed Rule AQ219, Control of Emission of Organic Compounds - Calcasieu Parish Area (*La. Register,* v.27, #10, 10/20/01).

0110POT2 - Notice of Public Hearing - Proposed Revisions to the State Implementation Plan (SIP) for Baton Rouge (*La. Register,* v.27, #10, 10/20/01).

Hazardous Waste

HW077 - RCRA X - Accumulation Time (LAC 33:V.1109 and 2231) (La. Register vol. 27, #7, 7/20/01). Adoption of rules in the RCRA X package for authorization for portions of the RCRA C program. The specific topic includes the following title: 180-day Accumulation for Waste Water Treatment Sludges from Metal Finishing. The rule also includes changes to organizational citations for federal equivalency.

Radiation Protection

RP027 - NRC Radiography Requirements & Minor Corrections (LAC 33:XV.Chapters 1, 3, 4, 5, 6, 7, 13, and 15) (*La. Register,* v.27, #8, 8/20/01). Amendments affecting licenses for industrial radiography and radiation safety requirements for industrial radiographic operations. Added language includes procedures for exposure devices containing depleted uranium (DU) shielding, personnel monitoring control language to include electronic personal dosimeters, and new definitions to comply with current federal language. Amendments to various recordkeeping policies include the addition of records at temporary job sites and applicable field stations, the addition of records pertaining to the safety and training of radiographers and radiographer trainees, and changing some recordkeeping requirements from two years to three years. Also included in multiple chapters are additions of safety provisions and minor corrections to citations. The Appendices in Chapter 3 have been renamed. The overall impact of this rule will be a streamlining of industrial radiographic operations through the addition and modification of various safety and recordkeeping requirements. As a Nuclear Regulatory Commission Agreement State, in accordance with the NRC Agreement signed on May 1, 1967, Louisiana has accepted the responsibility for promulgating regulations that satisfy the compatibility requirement of Section 274 of the Atomic Energy Act of 1954, as amended. In certain areas defined by the NRC, state regulations must be the same as NRC regulations. The extent to which the regulation must be identical, whether in content or in effect, is determined by the NRC. All amendments in this package are consequently mandated by the NRC, to comply with recent NRC regulation changes.

Solid Waste

SW030 - Waste Tire Clarifications (LAC 33:VII.Chapter 105) (La. Register vol. 27, #6, 6/20/01). Clarifies the notification and submittal processes for the waste tire regulations. Prior to this rule, all submittal notices and notifications were required to be addressed to DEQ or to the Solid Waste Division, which has been reorganized through departmental reengineering. This rule will give specific instructions as to where the general public should submit all documents pertinent to the waste tire chapter of the solid waste regulations, making the submittal process easier for both the general public and the department. This rule also eliminates obsolete wording that was mistakenly left in the waste tire regulations. Departmental reengineering has necessitated the clarification of all submittal and notification processes for all regulations promulgated by the department.

Proposed Rules: SW032 - Waste Tire Fee Collection Methodology (LAC 33:VII.10505, 10507, 10519, 10525, 10533, and 10535) (*La. Register* v. 27, #9, 9/20/01)

Environmental Contamination Notification

Governor Mike Foster has issued an executive order to several state agencies, including DEQ, that requires those agencies to give, or cause to be given, "reasonable notice" to individuals within an "area of contamination" in which a contaminant exceeds the applicable

federal or state health and safety standards and poses a risk of adverse health effects. Executive Order No. MJF 2001-46, issued October 1, 2001. "Notice" is defined as "communicating information of environmental contamination by a method or methods which are reasonably calculated to make the people who may be exposed to such contamination aware of the contamination."

The order states that the type of notice required will vary depending on the nature and severity of the contamination, its geographic location, the number of people in the contaminated area, and other factors.

The order's notice requirements are effective upon issuance, but the agencies are also required to issue emergency rules and begin the process to adopt permanent rules to further implement the order. The agencies also are ordered to immediately begin searches of their existing records and give notice of any existing conditions.

DEQ has assembled a multi-disciplinary team that is working on the rule-making required by the order, and expects to have issued the required emergency rule by the time this newsletter is published.

LAPA News

by: Timothy J. Poche

Agency's ability to appeal ALJ's adverse ruling

Brown v. State Farm Ins. and Casualty Co., 2001 WL 700385, No. 2000-0539, La. App. 1st Cir. 6/22/01 (Opinion not yet released for publication in the permanent law reports).

The issue presented on appeal was whether an administrative agency possessed standing to seek judicial review of an adverse ruling by an Administrative Law Judge (ALJ). Specifically, the Louisiana Commissioner of Insurance sought judicial review from the 19th Judicial District Court of an ALJ decision ordering the Department of Insurance to approve an insurance policy form submitted by State Farm. State Farm filed a peremptory exception of no right of action based in part, upon the provisions of La. R.S. 49:964(A)(2) and 49:992(B)(3) which expressly state that, "No agency or official thereof, or other person acting on behalf of an agency or official thereof, shall be entitled to judicial review" of a decision made pursuant to either the Louisiana Administrative Procedure Act (LAPA) or the Division of Administrative Law (DAL). Finding that the ALJ's decision was made pursuant to the LAPA and DAL, the District Court granted the exception and the Commissioner appealed to the Louisiana First Circuit.

On appeal, the Commissioner argued that despite the above cited statutes, the Department has a constitutional right to seek judicial review of an adverse ALJ decision pursuant to Art. I, Section 22 of the Louisiana Constitution which provides that, "All courts shall be open, and every person shall have an adequate remedy by due process of law and justice, administered without denial, partiality, or unreasonable delay, for injury to him in his person, property, reputation, or other rights." The First Circuit rejected the Commissioner's argument and affirmed the Trial Court's ruling.

In its opinion, the First Circuit concluded that the constitutional right to an adequate remedy by due process did extend to the Department as a "juridical" person. The Court opined however, that because a juridical person was a creature of law, having "no more legal capacity than the law allows", the constitutional right to due process afforded a juridical person was less extensive than that afforded a natural person and subject to limitation by the legislature. The Court, after noting that the LAPA allows the Department an opportunity to argue its position before the ALJ, concluded that by expressly limiting the Department's right to seek judicial review under the LAPA, the legislature, "apparently concluded that the Commissioner's remedy before the ALJ is adequate to protect the interests entrusted to him by law." As the Legislature manifested a clear intent to limit the Department of Insurance's right to seek judicial review under the Louisiana Administrative Procedure Act, the Court refused to conclude that the Department was vested with a right to judicial review in excess of that expressly provided for in the law.

Science for Lawyers: A Summary Comparison of Technical Approaches for Mercury TMDL Development in EPA Regions 4 and 6

Michael H. Schurtz and Patrick A. Guelfo
Providence Engineering and Environmental Group, LLC
Baton Rouge, Louisiana

Abstract

Many state environmental regulatory agencies and the United States Environmental Protection Agency (EPA) Regions are actively developing total maximum daily loads (TMDLs) for impaired water bodies within their respective jurisdictions. A heightened priority has been placed on development of TMDLs for toxic pollutants. A widespread toxic pollutant of concern requiring TMDL development is mercury. This paper presents a comparative analysis of different technical approaches being used within EPA Regions 4 and 6, in the States of Georgia and Louisiana, respectively. The technical approaches, assumptions, and calculations/modeling for mercury TMDL development are discussed.

Introduction and Background

The Federal Clean Water Act (CWA) establishes a number of broad-ranging programs and strategies for maintaining appropriate levels of water quality in the surface waters of the United States (U.S.) and for controlling and minimizing pollution of those waters. This paper discusses the interaction of two of the more important programs that managers of facilities with permitted wastewater discharges should understand. The best known of these programs is the National Pollutant Discharge Elimination System [administered in many individual states as State Pollutant Discharge Elimination Systems (SPDES)]. The NPDES program directly regulates the types and amounts of pollutants that can be permitted for discharge from a given source by establishing effluent limitations derived in accordance with national categorical effluent guidelines and standards. National effluent guidelines and standards are based on various levels of wastewater treatment technology achievable for different types of pollutants. Permitting wastewaters using treatment technology standards is termed "technology-based permitting." Under the NPDES program, all permitted wastewater discharges must, as a minimum, meet and comply with the technology-based effluent limitations applicable to the types of pollutants authorized for discharge.

NPDES discharge permit program

The second program is the water quality standards (WQS) program, which is a water pollution control program that has been in place as long as the NPDES program, but has not been as well known or understood by the regulated point-source sector. However, beginning during the late 1980s to early 1990s, the WQS program has become increasingly important in the development of wastewater permit limitations and controls through what is known as "water quality-based permitting". Water quality-based permitting is that regulatory process through which wastewater permit limitations are established based on the amount of pollutant loading that can be handled or assimilated by the ambient water body receiving the discharge(s) and still maintain acceptable ambient water quality. Therefore, effluent limitations established through water quality-based permitting are derived based on the assimilative capacity of the intended receiving water body rather than being based only on the level of wastewater treatment technology that is conventionally available, or even economically available, for treating a given pollutant. In the sense of what can be assimilated by the ambient environment and still result in achieving the goal of the CWA for "fishable and swimmable" waters of the U.S., water quality-based permitting "trumps" or supersedes technology-based permitting. When promulgated treatment technology-based standards are not adequate to maintain appropriate ambient water quality, water quality-based effluent limitations (WQBELs) that are more stringent than technology-based effluent limitations (TBELs) must be established. As necessary, water quality-based permitting drives wastewater treatment technology development.

Establishing what is "acceptable" ambient water quality is where the WQS program comes into play. The CWA WQS program requires that

EPA develop scientifically-based water quality criteria (WQC) as goals for achieving, maintaining, and protecting the ambient water quality of waters of the U.S. Based on the best scientific information and ecological and human health risk assessment methodology currently available, EPA establishes WQC as either numerical or narrative expressions of the ecologically and toxicologically acceptable levels of pollutants and naturally-occurring surface water constituents. The CWA further requires that individual states promulgate WQS regulations using the EPA national WQC as scientific guidance. In summary, WQS are enforceable regulations promulgated at the state level and authorized by state laws pursuant to the CWA that establish (1) the appropriate beneficial or "designated" uses that must be achieved and maintained in "waters of the state/ waters of the U.S." and (2) the narrative and numerical criteria that must necessarily be met to achieve, maintain, and protect the designated uses.

Designated uses are promulgated for different water bodies depending upon actual uses that currently exist and perhaps even for historical uses that may now be absent but previously existed. Designated uses typically include, but may not be limited to (1) protection and propagation of fish and wildlife; (2) drinking water supply; (3) primary contact recreation (*e.g.*, swimming, wading, and other direct water contact activities); (4) secondary contact recreation (*e.g.*, fishing and boating); (5) agricultural supply; (6) industrial supply; and (7) outstanding natural resource water bodies (*e.g.*, waters with special aesthetic attributes or that exhibit unique or rare ecological features).

Therefore, the CWA WQS program regulations and the states' WQS regulations define "acceptable ambient water quality." The WQS program is dynamic in that EPA is required to continually evaluate its water quality criteria guidance to periodically update existing criteria and develop new criteria for additional pollutant parameters as advances in scientific information about natural constituents and pollutants become available. States are required by the CWA to periodically review and revise their WQS numerical and narrative criteria and add additional criteria as EPA guidance and other scientific information becomes available.

Total Maximum Daily Loads

The CWA requires individual states to develop and periodically review and update lists of water bodies within their respective jurisdictions that are evaluated as being "impaired" with respect to achieving ambient WQS. The lists of impaired water bodies are termed "303(d) lists" [per CWA Section 303(d)] and include all of the water bodies within a given state that are considered impaired or "water quality limited."

Water quality limited water bodies are those for which "…it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of the technology-based effluent limitations required by Sections 301(b) and 306 of the Act" (CWA). "Not meeting applicable water quality standards" means existing ambient conditions (1) exceed or otherwise do not meet one or more of the applicable WQS numerical criteria; (2) do not comply with one or more of the applicable narrative criteria; and/ or (3) do not achieve one or more designated uses for a given water body.

The CWA and its regulations require that states prioritize their 303(d) lists and establish schedules for the development and implementation of total maximum daily loads (TMDLs) for all water bodies listed as impaired for each separate WQS parameter for which each water body is listed. The states have the primary responsibility for developing and implementing TMDLs for the water bodies within their respective boundaries. However, whenever a state does not or cannot develop TMDLs (*e.g.*, because of resource availability), the responsibility then falls upon the EPA regional office.

Simply defined, a TMDL is the maximum amount of a given pollutant or water quality constituent that can be assimilated into a water body from all natural and anthropogenic sources, including point sources and non-point sources, and not result in ambient violations of WQS narrative or numerical criteria or impairment of designated uses. TMDLs are typically expressed in terms of mass loading per unit time (*e.g.*, mass/day, mass/ year). Once finalized, a TMDL is allocated to the various sources contributing the pollutant or constituent to the water body/watershed being addressed. These sources include point source dischargers, nonpoint sources, and, depending upon the pollutant or water quality constituent, natural or existing background conditions.

The portion of the TMDL allocated to point sources is divided into sepa-

rate wasteload allocations (WLAs) assigned to the permitted dischargers known to be contributing the pollutant of concern. The remaining portion of the TMDL is assigned as load allocations (LAs) to known non-point sources, such as agricultural, silvicultural, and urban runoff, atmospheric dispersion, and as apto background conditions. The WLAs are implemented as NPDES effluent limitations and other permit conditions as necessary. The LAs are implemented as best management practices, structural controls, other source controls, and even as additional air emission controls to reduce pollutant loadings entering and draining from a watershed.

Because of uncertainty in quantitatively accounting for all of the existing mass and sources of a pollutant from within a watershed and incomplete knowledge about pollutant transformation, transport, and fate in the environment, the TMDL program regulations require that a margin of safety (MOS) be applied either explicitly or implicitly in the development of each individual TMDL.

Although the TMDL program has been in existence for over 25 years and many states have been developing and implementing TMDLs over that span of time, a backlog of TMDLs has accumulated in many states. The backlog has accumulated because water bodies have been placed on the 303(d) lists at a rate greater than the states have been able to develop TMDLs and the EPA regional offices have been able to officially approve them. In 1997, the EPA Office of Water issued a nationwide policy that required EPA regional offices to secure written agreement with each state to establish expeditious schedules extending from eight to thirteen years to reduce the TMDL backlog as soon as possible in each jurisdiction. The schedules were to be established to address each state's backlog beginning with the 1998 updates to each state's 303(d) list.

Notwithstanding the efforts by the states and EPA, certain environmental advocacy groups have taken the view that many states and some of the EPA regional offices were not implementing TMDLs in a timely enough manner. Because of this view, lawsuits were filed against some of the EPA regional offices in federal courts during the 1990s to force the EPA to require the states or require the agency regional offices, as necessary, to develop and implement TMDLs under mandated schedules and timeframes. The litigation has resulted in court orders and consent decrees that effectively set the TMDL development schedules in the affected states, in some cases within timeframes even more expeditious than the 1997 EPA nationwide policy required.

Both EPA Regions 4 and 6 are under consent decrees that require TMDLs to be developed and implemented in a number of states on specified schedules within mandated timeframes. Georgia (Region 4) and Louisiana (Region 6) are among the affected states. Because of the expedited schedules mandated by the consent decrees, EPA and the respective state agencies, Georgia Department of Natural Resources (GDNR) and Louisiana Department of Environmental Quality (LDEQ), have agreed to share the technical responsibilities of developing the TMDLs. The EPA region/state agreements provide for the EPA regional offices to take the lead for developing the TMDLs for certain specified pollutants while the state agencies take the lead for other pollutants. To date, the development of TMDLs for mercury in Georgia and Louisiana have been undertaken by the EPA regional offices.

TMDLs for Mercury

During 2000, EPA Region 4 developed and proposed six mercury TMDLs for Georgia, one of which was made final in February 2001. Finalization of the other five mercury TMDLs for Georgia is still pending. EPA Region 6 developed and proposed a single mercury TMDL to apply collectively to six listed water body subsegments in Louisiana, and the TMDL for all six water bodies became final in January 2001.

In both Georgia and Louisiana, the water bodies for which mercury TMDLs have been developed to date were listed as water quality limited on the basis of direct impairment of the designated use of "protection and propagation of fish" that supports the CWA goal of maintaining ''fishable" waters of the U.S. In both states, the water bodies addressed are subject to fish consumption advisories due to unacceptably elevated mercury levels in edible tissue samples of certain fish species. The unacceptably elevated tissue levels were determined to exist based upon comparisons of fish tissue monitoring results with risk-based "action levels'' established by the respective states for the protection of human health from dietary exposure in edible portions of fish.

Further, in listing the affected water bodies, both the GDNR and the LDEQ determined that their respective state WQS narrative criteria for toxic pollutants were being violated

because of impairment of the protection and propagation of fish designated use as a result of unacceptable levels of mercury in fish tissue. Paraphrased, the states' narrative criteria require that there should be "no toxics in toxic amounts." Conditions that warrant fish consumption advisories to prevent exposure of humans to toxic amounts of mercury are considered to be in violation of the WQS narrative criteria.

Even though the subject water bodies were determined to be in violation of the narrative WQS criteria, in both states it was determined that the applicable WQS numerical criterion for protection of aquatic life against ambient aquatic toxicity [0.012 nanograms per liter (mg/L) or parts per billion (ppb) for both states] is not being exceeded in the subject water bodies. Although considered protective of aquatic life in the subject water bodies, the WQS numerical criterion for aquatic life of 0.012 mg/L is not considered by the agencies to also be protective of human health, at least with respect to the subject water bodies, as indicated by the unacceptably elevated fish tissue levels. Neither Georgia nor Louisiana has promulgated mercury WQS numerical criteria for human health protection based on bioaccumulation in fish or other seafood.

The EPA and the states determined that atmospheric deposition of mercury accounts for between 98.5 and 99 percent of the total mass loading within the watersheds of the subject water bodies addressed by these TMDLs. The mercury transported via atmospheric dispersion into the subject watersheds in both states is considered to be from local (*i.e.* from within a given watershed), regional, national, and global sources. The mercury loading from atmospheric deposition enters the water bodies by direct deposition on surface waters and storm water runoff from the watersheds. The EPA, GDNR, and LDEQ determined that from less than one percent to no more than 1.5 percent of the mass loading of mercury into the subject water bodies in the two states is from point source discharges of wastewater and storm water.

Although there are close similarities between the predominant sources of mercury loading (atmospheric deposition) and the cause of the impairment (bioaccumulation of unacceptable levels in edible fish tissue) resulting in the need for TMDL development for the subject water bodies in Georgia and Louisiana, the EPA Region 4 and 6 staffs utilized quite different technical approaches for the TMDL development. However, within each region the same technical approach was used for all of the mercury TMDLs in their respective state.

EPA Region 4 and Georgia TMDLs

The EPA Region 4 developed separate mercury TMDLs for each of the six water bodies. Five of the watersheds (Ochlockonee, Withlacoochie, Suwanee, Satilla, and St. Mary's Rivers) are located together in southeastern Georgia, and the sixth (Savannah River watershed) forms the eastern boundary between Georgia and South Carolina. As noted, the same technical approach was used for all six TMDLs. For the purpose of this discussion, the lower Savannah River mercury TMDL is discussed as representative of the EPA Region 4 technical approach because it is the only one that, to date, has been finalized for implementation. EPA has noted that the Savannah River mercury TMDL finalized in February 2001 is considered to be a "Phase 1" TMDL because the agency recognizes that additional data and information are needed to validate the assumptions used to meet the TMDL development deadline imposed by the consent decree and refine the allocations of the TMDL to the pollution sources. In addition, EPA Region 4 expects Georgia to develop and promulgate an applicable mercury WQS numerical criterion for protection of human health for use as the regulatory endpoint for the TMDL. EPA has stated that the Phase 1 mercury TMDL will be reevaluated in 2004 and, as appropriate, revised as a Phase 2 TMDL.

Because no mercury WQS numerical criterion for protection of human health had been promulgated by the State of Georgia, EPA Region 4 calculated a watershed-specific, numerical ambient water concentration target for the Savannah River to quantitatively interpret the Georgia WQS narrative criterion for toxic pollutants with respect to mercury. Region 4 calculated the watershed-specific ambient water concentration target (hereinafter referred to as WCT) to be the maximum water column concentration in the Savannah River that will not result in bioaccumulation of mercury in upper trophic level fish species to unacceptable concentrations in edible tissue (*i.e.* fillets consisting of muscle tissue). The EPA Region 4 WCT is used functionally as a surrogate state WQS numerical criterion for the protection of human health from dietary exposure to mercury through bioaccumulation in fish tissue.

Therefore, the objective of the

TMDL was to determine the maximum mass of total mercury on an annual basis that can enter the middle and lower reaches of the Savannah River under the appropriate river flow rate critical condition and not result in ambient river water column concentrations of total mercury that exceed the WCT. In accordance with the Georgia Rules and Regulations for Water Quality Control, EPA determined that the annual average flow rate for the Savannah River represents the appropriate critical condition flow rate for protection of human health against adverse effects from long-term exposure to toxic pollutants. Expressing the TMDL in terms of annual mass loading, rather than daily mass loading, was also determined to be the appropriate critical condition for loading because (1) human health effects due to environmental exposure to mercury occur as a result of long-term, multi-year exposure through consumption of fish tissue and (2) bioaccumulation of methylmercury in fish tissue is a long-term, multi-year process. Because of the long-term nature of mercury bioaccumulation and dietary exposure through fish consumption, the EPA Region 4 TMDLs for mercury do not address seasonal variation in atmospheric loading and stream loading.

Using the 2000 revision of EPA's national guidance methodology for deriving water quality criteria for the protection of human health, Region 4 determined that the threshold concentration for unacceptable mercury levels in edible fish tissue is 0.4 milligrams per kilogram (mg/kg or parts per million – ppm). EPA Region 4 considers a tissue concentration of 0.4 mg/kg to be protective of the general population from adverse health effects from mercury (*i.e.* no adverse human health effects will result through long-term dietary exposure to edible tissue concentrations that are below the threshold concentration). The WCT is calculated as the maximum ambient water column concentration of total mercury that will not result in bioaccumulation of mercury to levels greater than 0.4 mg/kg (measured as total mercury) in edible tissue of an upper trophic level fish species (largemouth bass is the species used to represent the upper trophic level).

The WCT for total mercury was also calculated in accordance with EPA's national guidance for deriving water quality criteria for the protection of human health. The WCT calculated by EPA Region 4 is 0.002.8 mg/L [0.0028 ppb or 2.8 parts per trillion (pptr)] for the middle and lower Savannah River. The WCT was calculated using recommended national values and site-specific data obtained through sampling and analysis for total mercury and methylmercury in the water column and total mercury in fish tissue conducted during the late summer of 2000 in the middle to lower reaches of the Savannah River.

With the WCT having been calculated as the end point for the TMDL to achieve, EPA Region 4 then employed computer modeling to determine (1) the existing loading of mercury into the water column of the Savannah River and its tributaries within the middle and lower reaches of the river and (2) the fate and transport of the mercury load in the water column under steady state conditions at the critical condition (annual average) flow rate. EPA simulated the loading of mercury from the watershed into the river using the Watershed Characterization System (WCS) model previously developed by Region 4. The WCS model simulates storm water and sediment delivery to estimate pollutant delivery into a water body from the watershed. EPA also used the instream water quality model, WASP5/TOXI5, which is a general dynamic, mass balance system for simulating the fate and transport of mercury in the river. Watershed-specific data obtained during the summer of 2000were used in the computer modeling.

To determine the existing loading of mercury into the Savannah River watershed from atmospheric deposition, EPA Region 4 utilized results from the Regional Lagrangian Model of Air Pollution (RELMAP) modeling that was undertaken by EPA and presented in the *Mercury Study Report to Congress* (EPA Office of Air Quality Planning and Standards, 1997, EPA publication number EPA-452/R-97-003). Using those data in conjunction with the WCS model, EPA estimated that the current loading of mercury to the middle and lower Savannah River from the watershed and tributaries is 58.8 kilograms per year (kg/yr). EPA attributed 99 percent of the total existing load to atmospheric deposition.

The EPA Region 4 and GDNR identified 80 NPDES permittees within the portion of the middle and lower Savannah River watershed located in Georgia. EPA assumed that all of the point sources discharge at least trace levels of mercury (if at least only from atmospheric deposition and storm water runoff). EPA determined that 51 of the permittees are either minor sanitary wastewater sources discharging less than one million gallons per day (1 MGD) or are classified under the NPDES pro-

gram as minor industrial dischargers and, as such, are considered to be *de minimis* dischargers of mercury (*i.e.* discharge concentrations less than 2.8 ng/L). Based on their assessment of the types of facilities and other site-specific considerations, EPA determined that the other 29 permitees account for approximately one percent (or less) of the total mass loading to the middle and lower Savannah River system (< 0.588 kg/yr).

Using the existing loads of mercury to the watershed and the WCT endpoint, EPA Region 4 calculated the TMDL for the lower and middle Savannah River and its tributaries to be 32.8 kg/yr (56 percent of the existing loading); therefore, requiring a 44 percent reduction in loading to be accomplished. EPA Region 4, in their February 2001 TMDL report stated that an implicit MOS for the TMDL was implemented with the application of several conservative and "worst-case" assumptions and model input values throughout development of the TMDL.

To implement the TMDL, EPA Region 4 established a load allocation of 32.5 kg/yr (99 percent of the TMDL) applicable to non-point sources collectively (predominantly air emissions point sources resulting in atmospheric deposition) and a wasteload allocation of 0.3 kg/yr applicable to all of the point-source wastewater dischargers collectively.

EPA Region 4 states that it expects the required 44 percent reduction (26 kg/yr) to be accomplished by full implementation of provisions and requirements of the federal Clean Air Act (CAA) through regulations that either have recently been promulgated, have been proposed (awaiting final rulemaking), or for which the agency has announced upcoming rulemaking in the near future to control air emissions sources. These include regulations pursuant to (1) Section 112(d) that establish and require application of maximum achievable control technology (MACT) for various manufacturing sectors; (2) Section 129 that establish requirements for waste combustion; and (3) Section 111 that establish and require controls for new stationary sources. In addition, the 29 NPDES facilities that EPA Region 4 determined to be contributing approximately one percent of the existing load will be required to monitor for mercury in their influent and effluent streams using the more sensitive analytical method recently approved by EPA (Method 1631). Based on the monitoring, confirmed NPDES sources will be required to implement mercury minimization plans.

EPA Region 4 further states that specific actions to be undertaken during implementation of the Phase 1 TMDL will provide additional knowledge and data for development of the Phase 2 mercury TMDL in 2004. The EPA, State of Georgia, and the regulated community will (1) improve capabilities for the inventory of mercury air emissions and (2) refine and revise air dispersion modeling of mercury to better characterize atmospheric sources. EPA and the state will collect additional data on mercury concentrations in water, sediments and fish. EPA Region 4 expects the GDNR to promulgate a state WQS numerical criterion for the protection of human health from exposure to unacceptably high levels of mercury through bioaccumulation in fish tissue that will replace the interim WCT calculated by Region 4 and used as the endpoint for the Phase 1 TMDL.

EPA Region 6 and Louisiana TMDLs

The EPA Region 6 made the decision that a single mercury TMDL would be developed to address all six of the listed water body subsegments in the Mermentau River and Vermilion River-Bayou Teche water quality management basins in southwestern Louisiana. The listed subsegments are addressed collectively rather than individually. The Region 6 decision to develop a collective TMDL was based on EPA's and LDEQ's assessment that (1) atmospheric deposition of mercury is the predominant source in the subject watersheds; (2) atmospheric transport of mercury occurs over great distances irrespective of watershed boundaries and requires a broader approach for implementation of controls than can be accomplished in each separate subsegment; (3) point-source discharges of mercury within the affected watersheds are negligible in causing the impairment (*i.e.* without the predominance of atmospheric deposition, the total point source mass loading would not result in the water quality impairment); and (4) there are similarities within the subject water bodies with respect to the fish species exhibiting unacceptable tissue levels and the mode and degree of bioaccumulation.

EPA Region 6 undertook a quite different and simpler approach for mercury TMDL development than Region 4. The Region 6 technical rationale for mercury TMDL development in the subject water bodies in Louisiana assumes a linear relationship between mass loading of mercury to the watershed and the

levels of mercury in edible fish tissue resulting from bioaccumulation. Given that assumption, EPA concluded that if the watershed mass loading is reduced by a given fractional amount, then it follows that fish tissue levels will decrease by the same fractional or proportional amount. The EPA conclusion assumes that, for example, if the watershed mass loading is decreased by one-half then, in response, the fish tissue levels for the local fish community will also decrease by one-half, supposedly as the reduced mass loading rate and the bioaccumulation rate and fish tissue levels eventually reach equilibrium over time.

As previously stated, the primary source of mercury loading to the subject Louisiana water bodies is atmospheric deposition. As identified by EPA Region 6, the pathway for atmospheric pollutants to enter water bodies is transport of dissolved and particulate forms via storm water runoff from the watersheds and direct deposition onto the water surface. EPA Region 6 classified the sources of atmospheric deposition of mercury to the watersheds as (1) local sources within 50 miles of a given water body; (2) regional and national sources located greater than 50 miles from the water body; and (3) global sources, which result in background atmospheric concentrations that are transported great distances.

EPA Region 6 used the national Mercury Deposition Network Program (MDNP) and the National Atmospheric Deposition Program to evaluate atmospheric deposition of mercury in the subject watersheds from the three atmospheric source classifications. MDNP wet deposition data are available for three monitoring stations located within Louisiana. Using data for the wet deposition rate for the three MDNP stations in the state and appropriate factors for determining dry deposition rates, EPA Region 6 calculated the existing basin-wide annual average atmospheric mercury loading rates to be 166.1 kg/yr for the Mermentau River basin and 173.7 kg/yr for the Vermilion River-Bayou Teche basin.

The Region 6 staff determined the existing the wastewater point-source contribution of mercury to the listed waters by obtaining information from the agency's Permit Compliance System (PCS). The PCS database indicates that there are 94 facilities that discharge to waters within the Mermentau River and Vermilion River-Bayou Teche River basins. Using the respective discharge rates and an assumed effluent mercury concentration of 0.015 mg/L (based on ultra-trace level analytical techniques), the annual average mass loading of mercury was calculated by EPA to be less than 0.7 kg/yr for the Mermentau River basin and 2.7 kg/yr for the Vermilion River-Bayou Teche River basin. Based upon this assessment approach, EPA Region 6 reported that wastewater point-source contributions represent approximately 0.6 percent of the total load in the Mermentau River basin and 1.5 percent of the total load in the Vermilion River-Bayou Teche River Basin.

The LDEQ and Louisiana Department of Health and Hospitals have established a tissue concentration of 0.5 mg/kg (wet weight basis) for total mercury as the state's "action" level for issuing fish consumption advisories. For the development of the collective TMDL, EPA Region 6 applied a 20 percent MOS by adjusting Louisiana's edible fish tissue "advisory" level to a target endpoint of 0.4 mg/kg. The MOS is intended to conservatively account for any unidentified or unknown variables with respect to the relationships between existing pollutant loading, ambient water quality, and fish tissue bioaccumulation. The MOS used is considered an explicit MOS because it was used as a quantitative adjustment in determining the TMDL.

EPA Region 6 evaluated the appropriateness of the MOS-adjusted Louisiana's consumption advisory level (0.4 mg/kg TMDL target endpoint) by separately calculating a maximum acceptable level using the most recent EPA national guidance and State of Louisiana required assumptions and input values to the national model and determined that the TMDL target endpoint of 0.4 mg/kg is consistent with national guidance.

Using 0.4 mg/kg as the safe level target endpoint for fish concentrations, EPA Region 6 calculated the factor by which the existing fish tissue levels assumed for the local fish community must be reduced in order to conclude that there would no longer be an impairment of the protection and propagation of fish designated use. As an additional conservative assumption, Region 6 considered the highest observed average mercury concentration in edible tissue of all species from any of the subject water bodies to be the existing tissue concentration representative of all of the water bodies collectively (a "worst case" condition because the actual overall average tissue concentration for all of the monitored species to which persons are actually exposed in the long-term is lower). The "worst case

" condition edible tissue concentration of 1.19 mg/kg was established as the level that is representative of the local fish community and from which the reduction to 0.4 mg/kg must be achieved. The highest average existing tissue level of 1.19 mg/kg was divided by the maximum safe tissue concentration of 0.4 mg/kg to obtain a reduction factor of 2.97.

Based on the assumption of linearity between watershed/water body mass loading rate for mercury and the observed fish tissue mercury levels, EPA Region 6 simply calculated the collective mercury TMDL by applying the reduction factor of 2.97 to the existing annual average mass loading (343.2 kg/yr) for the Mermentau River and Vermilion River-Bayou Teche basins to calculate a collective TMDL of 115.6 kg/yr (343.2 kg/yr divided by 2.97) for the basins. The TMDL is 34 percent of the existing loading rate; therefore, requiring a 66 percent reduction in loading.

EPA Region 6 allocated the majority portion of the TMDL to atmospheric sources. However, because the existing load is nearly three times (2.97 times) greater than the TMDL, essentially all of the reduction (66 percent or 227.6 kg/yr) in loading necessary to achieve compliance with the TMDL must be accomplished through control of the sources contributing mercury to the atmosphere. To implement the TMDL, EPA Region 6 states that reduction in atmospheric contributions will be accomplished over time through existing and proposed CAA regulatory controls that will ensure significant reductions in mercury loading on a nationwide basis by reducing atmospheric emissions.

EPA Region 6 notes that, according to the agency's national Toxics Release Inventory (1990 data), the largest sources of atmospheric emissions of mercury are (1) coal-fired electric power generation stations (no supporting data provided as to proportional contribution), (2) municipal waste combustors (20%), (3) medical waste incinerators (24%), (4) chlor-alkali plants (no supporting data provided as to proportional contribution), and (5) hazardous waste combustors (2.5%). EPA estimates that recent CAA Section 112 regulations, when fully implemented, will reduce emissions from municipal waste combustors, medical waste incinerators, and hazardous waste combustors by 90 percent, 94 percent, and more than 50 percent, respectively, from 1990 emission levels.

The EPA considers coal-fired steam electric power generating plants to be the largest anthropogenic source of mercury emissions in the country. In late 2000, EPA announced that the agency is developing a regulation under authority of the CAA to limit mercury emissions from coal-fired electric power plants. A proposed regulation is expected to be published in late 2003 and a final regulation should be published at the end of 2004. Pending direct control of mercury emissions by this regulation, EPA expects some indirect reduction of mercury emissions from the coal-fired electric power industry during an interim period as other CAA regulations are implemented to control sulfur dioxide (SO_2) and nitrous oxides (NO_x) because some of the control technologies for those pollutants will also reduce mercury emissions to some degree. EPA expects to propose CAA regulations in 2001 to limit mercury emissions from chlor-alkali plants.

Because these additional controls of atmospheric emissions of mercury will be implemented in phases, EPA anticipates that noticeable mercury reductions will take approximately two to three decades to accomplish. Currently, EPA Region 6 plans to evaluate the success of these controls by monitoring wet deposition rates and mercury concentrations in fish tissue. As national guidance and additional TMDLs throughout the country are developed, the mechanisms and controls utilized to manage and assess mercury loads may be supplemented or replaced entirely.

In evaluating contribution of mercury from wastewater point-source discharges to the water bodies in the Mermentau River and Vermilion River-Bayou Teche basins (0.6 percent and 1.5 percent, respectively), EPA Region 6 has stated that the identified point sources have a relatively small effect on a watershed scale. However, it was further noted that certain point sources (*e.g.,* large volume dischargers to small volume flow rate water bodies) could represent local site-specific loads that could result in localized impairment and unacceptable bioaccumulation. Therefore, the EPA Region 6 and LDEQ mercury TMDL implementation plan requires identification of point dischargers that, individually or collectively, could result in localized impairment. The agencies require that facilities identified as having "reasonable potential" for exceeding narrative and/or numeric standards for the protection of human health will be required to monitor mercury concentrations in their effluent. Determination of "reasonable potential" will be made through application of the LDEQ WQS

screening procedures in accordance with Louisiana's policy and guidelines (LDEQ 1995) for implementing the state's WQS water quality-based permitting and the NPDES and LPDES requirements as set forth in the Code of Federal Regulations (CFR) at 40 CFR 122.44 (d)(1)(iii) and the Louisiana Administrative Code (LAC) at LAC 33 IX.2361.D.1.c. A determination of "reasonable potential" must be based on (1) background ambient water concentrations, (2) discharge concentrations, and (3) application of a state WQS numerical criterion, federal or other water quality con centration target protective of human health. For those point sources for which "reasonable potential" is determined, control of mercury load ing will be managed through permit WQBELS and mercury minimization plans.

References:

1. Code of Federal Regulations, Title 40, Chapter 1, Subchapter C, Part 122, EPA Administered Programs: The National Pollutant Discharge Elimination System.

2. Code of Federal Regulations, Title 40, Chapter 1, Subchapter C, Part 130, Water Quality Planning and Management.

3. Code of Federal Regulations, Title 40, Chapter 1, Subchapter C, Part 131, Water Quality Standards.

4. Georgia Department of Natural Resources, Environmental Protection Division, Rules and Regulations for Water Quality Control, Chapter 391-3-6, Revised June 2001.

5. Louisiana Administrative Code, Title 33, Part IX, Water Quality, Chapter 11, Surface Water Quality Standards, Revised, December 31, 2000.

6. Louisiana Administrative Code, Title 33, Part IX, Water Quality, Chapter 23, The Louisiana Pollutant Discharge Elimination System (LPDES) Program, Revised, December 31, 2000.

7. Louisiana Department of Environmental Quality, 1995. *Permitting Guidance Document for Implementing Louisiana Surface Water Standards*, Version 3, October 1995

8. U.S. Environmental Protection Agency, 1997. *Mercury Study Report to Congress*, Office of Air Quality Planning and Standards and Office of Research an Development, Washington, D.C., EPA Publication Number EPA-452/R-97-003, December 1997.

9. U.S. Environmental Protection Agency, 2000. *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health*, Office of Water, Office of Science and Technology, Washington, D.C., EPA publication number EPA-822-B-00-004, October 2000.

10. U.S. Environmental Protection Agency, 2000. *Total Maximum Daily Load (TMDL) Development for Total Mercury and Fish Consumption Guidelines in the Withlacoochee Watershed*, EPA Region 4, Atlanta, GA, August 30, 2000.

11. U.S. Environmental Protection Agency, 2000. *Total Maximum Daily Load (TMDL) Development for Total Mercury in the Suwanee Watershed*, EPA Region 4, Atlanta, GA, August 30, 2000.

12. U.S. Environmental Protection Agency, 2000. *Total Maximum Daily Load (TMDL) Development for Total Mercury in the Ochlockonee Watershed,* EPA Region 4, Atlanta, GA, August 30, 2000.

13. U.S. Environmental Protection Agency, 2000. *Total Maximum Daily Load (TMDL) Development for Total Mercury and Fish Consumption Guidelines in the Satilla Watershed*, EPA Region 4, Atlanta, GA, August 30, 2000.

14. U.S. Environmental Protection Agency, 2000. *Total Maximum Daily Load (TMDL) Development for Total Mercury in the St. Mary's Watershed*, EPA Region 4, Atlanta, GA, August 30, 2000.

15. U.S. Environmental Protection Agency, 2001. *Mercury TMDLs for Subsegments Within Mermentau and Vermilion-Teche River Basins*, EPA Region 6, Water Quality Protection Division, Watershed Management Section, Dallas TX, January 19, 2001.

16. U. S. Environmental Protection Agency, 2001. *Total Maximum Daily Load (TMDL) for Total Mercury in Fish Tissue Residue in the Middle & Lower Savannah River Watershed*, EPA Region 4, Atlanta, GA, February 28, 2001.

LOUISIANA STATE BAR ASSOCIATION
ENVIRONMENTAL LAW SECTION
ANNUAL-SEMINAR

HOTEL INTER-CONTINENTAL
Pontalba Room
444 St. Charles Avenue
New Orleans, Louisiana

November 16, 2001
8:30 a.m. - 12:55 p.m.

8:30 - 9:00 a.m. Registration
9:00 - 9:55 a.m. Competing Groundwater Uses, Policy Consideration and Legal Issues
Brad Hanson - USGS , Steve Levine - Phelps, Dunbar, Baton Rouge, LA
Anthony Duplechin - Chief of Staff - LA Ground Water Commission
9:55 - 10:55 a.m. Ethics in Environmental Litigation and Regulatory Disputes
Harry J. ASkip@ Phillips, Jr. - Taylor, Porter, Brooks & Phillips, LLP, Baton Rouge, LA
10:55 - 11:05 a.m. Break
11:05 - 12:00 p.m. Ozone Reclassification Issues Affecting Louisiana
Maureen Harbourt - Kean Miller, Baton Rouge, LA , Adam Babich - Tulane Environmental Law Clinic
12:00 - 12:55 p.m. Professionalism
Mickey P. Landry - Landry & Swarr, L.L.C. , New Orleans, LA

4.4 CLE Hours (includes 1 hour of Ethics and 1 hour of Professionalism)
Registration Fees: Section Members $75; Non-Members $100; Governmental Employee $50; Students $25

To register, please complete and mail the form below, with your check to:

Bobbie L. Theriault
c/o McComiskey & Diaz, L.L.P.
3801 N. Causeway Blvd., Suite 204
Metairie, LA 70002

Name of Registrant: _____

Address: _____

Telephone: _____ Amount Enclosed: _____

E-Mail Address: _____

_Make check payable to: LSBA Environmental Law Section