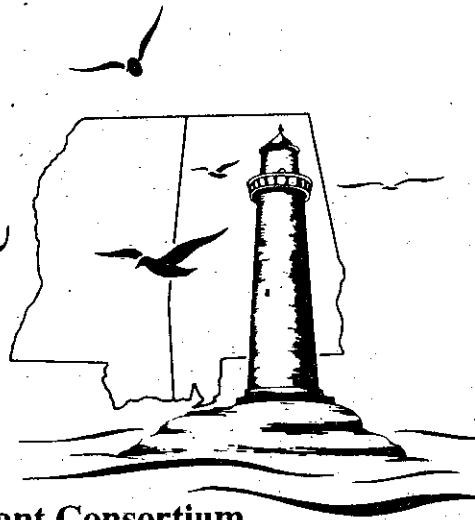


WATER LOG



**A Legal Reporter of the
Mississippi-Alabama Sea Grant Consortium**

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WATER LOG

WATER LOG is a quarterly publication reporting on legal issues affecting the Mississippi-Alabama coastal area. Its purpose is to increase public awareness and understanding of coastal problems and issues.

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An Update on the Issues of Seafood Safety and Inspection

Brian E. Perkins

INTRODUCTION

From 1988 through 1990, many consumers, consumer interest groups, and members of the seafood industry expressed concern about the safety and wholesomeness of seafood. Critics argued that existing seafood inspection efforts were insufficient to adequately protect consumers.

Seven bills which addressed the issues of seafood safety and inspection were drafted and introduced in 1989 during the first session of the 101st Congress. However, differing policy approaches precluded a consensus of opinion among the House and Senate on any of those bills. For a summary and analysis of the seven seafood inspection bills introduced during 1989, *See* 9 WATER LOG 4 (1990).¹

This article will provide an update of the seafood safety and inspection legislation in 1990. This will be followed by a discussion of the results of a 1991 survey of policymaker's views concerning seafood safety initiatives. Finally, the article will recommend steps that will be necessary in any future effort to develop and implement a federal seafood inspection program.

1990 LEGISLATIVE ACTIVITY

During the second session of the 101st Congress, several legislative initiatives which had been introduced during 1989 were either referred to committees or reintroduced. Many details presented in this section were derived from a Congressional Research Service report, *Seafood Inspection Issues*.² The balance of the information was obtained during conversations with legislative committee staffers.

Representative Studds' (D-Mass.) "Consumer Seafood Safety Act of 1989" (H.R. 2511) was referred to the Committee on Merchant Marine and Fisheries. H.R. 2511 was marked up in 1990 by both subcommittee and full committee. As modified, H.R. 2511 directed the Department of Commerce to develop a comprehensive seafood inspection program in two stages.

Representative Dingell's (D-Mich.) "Fish and Fish Products Safety Act of 1989" (H.R. 3155) was referred to the House Committee on Energy and Commerce. Both the

subcommittee and the full committee amended and approved the bill in 1990. As amended, H.R. 3155 required the Food and Drug Administration (FDA) to establish seafood inspection standards and to conduct inspections. Funds amounting to \$75 million annually were authorized.

Representative De La Garza (D-Tex.) reintroduced the "Federal Inspection for Seafood Healthfulness Act of 1989" (H.R. 3508) under the new title, the "Fish Safety Act of 1990." H.R. 3508 proposed establishment of a comprehensive seafood inspection program within the United States Department of Agriculture (USDA), and authorized such sums as are necessary to carry out the Act. The bill was referred to the Committees on Agriculture and on Merchant Marine and Fisheries. The Agriculture Committee marked up and approved the Act during 1990.

Senator Hollings (D-S.C.) introduced the "Consumer Seafood Safety and Quality Assurance Act of 1990" (S. 2228). The Act proposed the establishment of a comprehensive inspection program within the Department of Commerce, with FDA responsible for some activities. Funds totalling \$185 million were proposed for the first three years of operation. The bill was referred to and marked up by the Committee on Science, Commerce, and Transportation. The modified bill was reintroduced as Senate Floor Amendment No. 2431, and was rejected by the full Senate by a vote of 39 to 59 on September 12, 1990.

At approximately the same time, Senator Mitchell (D-Maine) reintroduced his 1989 "Federal Fish Inspection Act" (S. 1245) as Senate Bill 2924, and renamed it "The Fish Safety Act of 1990." A comprehensive document, (93 pages), S. 2924 took many features from the seven seafood inspection initiatives introduced during the first session and incorporated them into one bill. The Act proposed placing authority for seafood inspection within USDA, and authorized a total of \$334 million for the first five years of operation. S. 2924 (with modifications) passed the Senate by voice vote on September 12, 1990.

When a rewritten version of S. 2924 emerged on the floor of the House, it was pushed by a coalition of lawmakers from cattle and agricultural states led by Representative de la Garza. A group of House members from maritime and coastal states opposed the cattle and agricultural contingent, and pushed for FDA to control an expanded seafood program. The House leadership asked that the Agriculture, Commerce, and Merchant Marine and Fisheries Committees work together toward a compromise. They ultimately failed to reach a consensus.

Representatives Dingell and Studds then entered an amendment to S. 2924 (often referred to as the "Dingell Amendment"). The amendment proposed that authority

for seafood inspection be maintained within FDA in consultation with the Commerce Department. The bill's sponsors stated that FDA could implement the substitute program for \$15 million per year.

The amendment bill passed the House by a vote of 324 to 106 on October 24, 1990 after the House agreed to the substitute program. However, there was not sufficient time for a House/Senate Conference Committee to convene and iron out differences between the two versions. Both S. 2924 and the substitute "Dingell Amendment" died at the close of the second session of the 101st Congress.

Many important questions arose during consideration of the various bills aimed at addressing seafood safety and inspection. Among them were:

- Which agency will administer the program?
- How much will the program cost?
- What degree of protection should consumers be afforded?
- What level of inspection (i.e., continuous or less-than-continuous) will afford that degree of protection?
- What part will the states play in a new federally-mandated seafood inspection program?

1991 SURVEY OF POLICYMAKERS

The author participated in the four-week National Leadership Development Program conducted by Resources for the Future and the National Center for Food and Agricultural Policy in Washington, D.C. from January through March 1991. Funding for participation in the program was provided through a W.K. Kellogg Foundation Fellowship, with additional funds made available from the Mississippi-Alabama Sea Grant Consortium and the Auburn University Department of Fisheries and Allied Aquacultures.

The program's aim was to enhance Fellows' understanding of food and agricultural policy issues and the process by which policy is formed and implemented. In addition to participating in seminars, workshops, and policy discussions, each Fellow was required to undertake an independent policy investigation related to food or agriculture.

The author's self-directed activity (SDA) centered around the issues of seafood safety and inspection. The purpose of this SDA was to gain better insight into future efforts to develop seafood safety policy by enumerating policy-makers' current (January - March 1991) viewpoints con-

cerning seafood safety and inspection initiatives. As part of that process, a cross-section of individuals and groups having an impact on the seafood safety issue were interviewed. Interviewees were predominantly legislative committee staffers and agency personnel. Each individual or group was asked the same eight questions. The questions, summaries of responses, and discussion follow.

1. What are the specific weaknesses or gaps among existing seafood inspection initiatives?

The respondents identified seven specific weaknesses. The lack of effective controls over molluscan shellfish was mentioned most frequently. Of secondary importance were concerns about scombrototoxin (formed when spoilage bacteria convert the amino acid histidine into histamine) and ciguatoxin (a naturally occurring substance produced by one-celled marine plants called dinoflagellates). Concerns about manpower shortages within existing seafood inspection programs and negative consumer perceptions were noted as being of intermediate importance. Problems related to imported seafood, and domestic recreational and subsistence catches were identified least frequently.

The specificity of the three most frequently mentioned problems indicates that policymakers have based their opinions on recent scientific studies of seafood safety. Health problems related to raw molluscan shellfish, scombrototoxin, and ciguatoxin likewise received prominent mention in the National Academy of Sciences' (NAS) 1991 report, *Seafood Safety*,³ U.S.D.A.'s 1989 *Safe Seafood: An Analysis of FDA Strategy*,⁴ and the 1988 GAO report, *Seafood Safety: Seriousness of Problems and Efforts to Protect Consumers*.⁵

2. How might those gaps be filled?

The respondents offered a total of eight different suggestions. No single response stood out above all others. Therefore, each suggestion has been placed in one of three subdivisions according to the relative frequency of the response. The three most frequently mentioned suggestions were to:

- Address specific microbiological concerns;
- Establish a sturdier seafood inspection network; and,
- Combine the talents of several agencies.

The four suggestions which were mentioned with a moderate degree of frequency were to:

- Promulgate additional regulations and improve enforcement;
- Inspect seafood according to the Hazard Analysis of Critical Control Points (HACCP) concept;⁶
- Devote additional dollars and manpower to inspection; and,
- Institute consumer education programs.

Finally, a relatively small percentage of the respondents felt that imported seafood should be scrutinized more closely. A few interviewees stated that they had no recommendation. Overall, the policymakers demonstrated little unanimity in the solutions they suggested to rectify problems with existing seafood inspection programs. This divergence of opinion mirrors the myriad approaches proposed in the numerous legislative initiatives offered during the first and second sessions of the 101st Congress.

3. What are the specific strengths of existing seafood inspection initiatives?

A significant number of policymakers were unable to identify any specific strengths among existing seafood inspection programs. However, an equal number of respondents believe a program similar to the FDA/National Oceanic and Atmospheric Administration (NOAA) Joint Seafood Initiative (a less-than-continuous, HACCP-based seafood inspection program in the pilot stage) should provide the level of inspection necessary to adequately protect consumers. Conversely, a smaller percentage of the respondents believe that seafood-related health risks are minimal, and that changes to existing inspection programs are not warranted. Specifically, they feel that the current basic inspection structure is good, and that local (cooperating states' programs) expertise should be kept.

It is noteworthy, albeit in a negative way, that one of the two largest groups of respondents was unable to identify any strong points among existing seafood inspection programs. This seems to indicate that neither the FDA nor the seafood industry has successfully overcome negative public perceptions about the effectiveness of inspection and the safety of seafood. It is likewise important to note that an equal number of policymakers would favor a less-than-continuous, HACCP-based inspection program.

4. What level of concern do consumers express to you about seafood safety?

When formulating their responses to this question, the interviewees were asked to indicate both past (1988-1990)

and present (1991) levels of concern. Nearly all respondents stated that consumers expressed a great deal of concern during the period 1988-1990. However, all of the policy-makers said that they had heard few or no expressions of concern about seafood safety during 1991.

Several policymakers stated that much of the concern which consumers expressed about seafood safety during 1988-1990 was the result of special interests "fanning the fire." Others said that consumers had somehow arrived at the conclusion that the safety of seafood was in some way compromised by medical waste, which had been washing up on beaches along the northern and central Atlantic Coast during that period. Some respondents pointed out that the emphasis in seafood consumer protection now seems to be shifting from safety toward such purely economic matters as short-weights and species substitution.

5. How much more (if any) are consumers prepared to pay for additional seafood inspection programs?

Nearly one-half of the policymakers were unable to estimate what additional amount consumers might be willing to pay for additional seafood inspection. The remainder of the responses were spread among three smaller, but equally sized groups of interviewees. One group identified total inspection program "package" prices which they believed would "sell" to both Congress and the public. Those packages ranged from \$15 million (the proposed annual cost of the "Dingell Amendment") to over \$300 million (the proposed five-year cost of Senator Mitchell's "Fish Safety Act of 1990"). Another group of respondents thought consumers would be willing to pay some additional (unspecified) amount. The remaining group of policymakers stated that consumers would tolerate additional inspection-related costs which were no more than packaging costs (approximately one-half cent per pound).

Many of the policymakers elaborated on the reasons why they had "hedged" on their answers concerning consumers' willingness to pay more for additional seafood inspection. Based on prior experience with the organic fruit and vegetable issue, several respondents pointed out that consumers may initially indicate a willingness to pay extra, but they actually won't. Another group of policymakers clarified that assertion, stating that consumers' willingness to pay higher prices for additional seafood inspection would depend on the commodity. Two additional points of view countered that price was of little importance. One respondent stated that people who cur-

rently purchase seafood will continue to do so regardless of price. Another policymaker said that when it came to enhanced consumer confidence, price was not an object.

6. Which agency would be best suited to operate a federal seafood inspection program?

Nearly one-half of the legislative committee staffers and agency personnel believe that a cooperative FDA/NOAA less-than-continuous inspection program would be most appropriate. The next largest group (nearly one-fourth of the respondents) favored some other multi-agency coalition. Very little support was expressed for either FDA or USDA as sole operator of a federal seafood inspection program.

Once again, additional discussion served to clarify respondents' intentions concerning jurisdiction. Most seemed to envision NOAA providing the cadre of field inspectors, with FDA setting standards and providing overall administrative oversight. Some were careful to point out that states' rights should not be preempted. They envisioned FDA as being ultimately in charge, but with state personnel operating under contract to inspect processing plants, and NOAA inspecting vessels. Some policymakers indicated that given the vast quantities of seafood exported to the U.S. by foreign countries, FDA should require memoranda of understanding with government health agencies in all countries exporting seafood to the United States.

7. Would any of the proposed federal seafood inspection programs actually provide consumers with any additional degree of safety beyond that which currently exists?

Nearly one-half of the respondents believe that additional seafood inspection will provide consumers with an additional degree of safety. A somewhat smaller group of policymakers stated to the contrary that additional seafood inspection will have little or no effect on seafood safety. However, an equivalent number of legislative committee staffers and agency personnel were hesitant to predict an outcome. One respondent said it would simply bolster consumer confidence.

Several respondents qualified their positions on that point. One said, quite simply, "Yes, if we do it right." Another stated, "One would hope that expenditure equals increased safety." Finally, a third asked, "How much better protection for what price?" Most policymakers felt the

greatest improvements in seafood safety could be made with molluscan shellfish, expressing belief that better control of both foreign and domestic shellfish growing waters will increase the overall level of protection. The latter statement echoes one of the major recommendations made by NAS in its 1991 report, *Seafood Safety*.⁷

8. Were there any hidden agendas which served to fuel the call for a new federal seafood inspection program?

Over three-fourths of the policymakers interviewed said, "Yes." The remaining respondents stated that they either didn't know or did not care to comment. There was not a single negative response to the question.

The "turf battle" between Representative Dingell (Chairman of the House Committee on Energy and Commerce) and Representative de la Garza (Chairman of the House Committee on Agriculture) was well-known and widely reported. The respondents believed that neither of these two powerful committee chairs was willing to give an inch so far as jurisdiction over food was concerned. Likewise, the FDA/USDA "tug-of-war" received broad coverage. The policymakers contended that FDA felt that USDA's attempts to obtain control over seafood was a "jurisdiction grab." The respondents also maintained that USDA viewed FDA as an "easy target" following media field-days with such issues as generic drugs, alar on apples, and cyanide in imported grapes.

There were, however, some lesser known hidden agendas. Some of the policymakers believed that USDA had several reasons for wanting to secure a less-than-continuous, HACCP-based seafood inspection program. First, that type of seafood inspection program would provide a precedent for changing meat and poultry inspection programs from continuous to less-than-continuous efforts. Second, reducing inspection time in all flesh protein commodities would reduce the total number of dollars expended for inspectors' salaries. That would, in turn, make additional dollars available for USDA to undertake other food safety efforts besides inspections.

According to the legislative committee staffers and agency personnel, special interest groups also had stakes in the passage of a mandatory seafood inspection bill. The red meat and poultry lobbies wanted to see a less-than-continuous seafood inspection bill passed for many of the same reasons as USDA. A major seafood industry trade association lobbied for mandatory inspection because its board of

directors wanted seafood "legitimized." In addition, a very vocal consumer interest group simply wanted to chalk up a "win" in its corner.

The policymakers noted that some seafood workers' unions also became involved. The unions supported Senator Mitchell's "Fish Safety Act of 1990" in the beginning, because a whistle-blower clause would have afforded them some additional protection from management. However, they withdrew their support for S. 2924 after the whistle-blower clause was thrown out in committee.

CONCLUSION AND RECOMMENDATIONS

Based on the results of this survey, it appears that much of the momentum for a mandatory federal seafood inspection program has dissipated. Apparently, the long-awaited NAS report,⁸ through its data which mutually supported two previous analyses of seafood safety,⁹ defused this emotionally charged issue. While specific concerns about the safety of seafood still exist, many policymakers appear reluctant to revisit the issue. So long as the issue remains dormant in constituents' minds, Congress will probably not act. Meanwhile, FDA and NOAA are forging ahead with their pilot Joint Seafood Initiative.

If any future effort to develop and implement a federal seafood inspection program intends to garner a consensus of opinion among the policymakers whose viewpoints are presented in this paper, it will have to be:

- Capable of addressing specific microbiological problems;
- Coordinated among several agencies;
- Less-than-continuous;
- HACCP-based; and,
- Cost-effective. □

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6. National Research Council. 1985. *An Evaluation of the Role of Microbiological Criteria for Foods and Food Ingredients*. National Academy Press, Washington, D.C. 436 pp.

7. NAS *supra* at note 3.

8. *Id.*

9. FDA *supra* at note 4; GAO *supra* at Note 5.

Brian E. Perkins, Extension Seafood Technologist with the Auburn University Marine Extension and Research Center, has fourteen years experience assisting the seafood processing industry along the Gulf and South Atlantic coasts. The views expressed herein are those of the author and do not necessarily represent the opinions of the editors or the Mississippi-Alabama Sea Grant Legal Program.

The Impact of the Justice Department's New Gambling Ship Policy On Mississippi and the Other Gulf States

Richard McLaughlin

INTRODUCTION

In a move that has been under consideration for some time, United States Attorney General Richard Thornburgh recently issued a national policy directive that effectively prohibits gambling aboard most so-called "cruises to nowhere" in ocean areas beyond state waters. The new policy provides that all cruise ships that offer gambling must cruise for a minimum of 24 hours and have lodging for all passengers or risk being arrested as a "gambling ship" under the Federal Gambling Ship Act, 18 U.S.C. §§ 1081-1084 (1988). As a consequence of the Attorney General's

action, a number of cruise lines will likely be forced to significantly modify or curtail their cruise operations to avoid criminal prosecution.

The term "cruise to nowhere" refers to a cruiseship that sails from a U.S. port into international waters for a period of hours and then returns to the same port. Generally cruise lines offer daily or twice daily cruises that include meals, drinks, live entertainment, deck sports, and gambling in fully equipped casinos. During the past decade, a number of American-owned but foreign-registered cruise ships have begun to offer "cruises to nowhere" from several Gulf and Atlantic ports. Two of these vessels are currently based in Mississippi ports.

Since the Federal Gambling Ship Act was enacted in 1948, it has been a crime for any American vessel, American citizen or American resident to operate or own any interest in a gambling ship on the high seas or not within the jurisdiction of any state. The purpose of the Act is to assist states that might otherwise not be able to curtail certain gambling activities occurring off the coast. Nothing in the Act takes away or impairs the jurisdiction of coastal states to enforce laws within state waters (generally out to three miles).*

What is a Gambling Ship?

Although it would seem that American owners or operators of foreign-flag vessels engaging in "cruises to nowhere" were always in danger of violating the Federal Gambling Ship Act, the Justice Department has historically interpreted the statute to only apply to vessels whose "primary object" is gambling. According to Customs Service Legal Determination 3100-15, June 23, 1978:

The Custom Service has been advised by the Department of Justice that the Act would not prohibit incidental casino gambling on board a foreign vessel on the high seas which operates

**Before continuing discussion of "cruises to nowhere," it must be noted that President Reagan issued a Proclamation on December 27, 1988, extending the territorial sea of the United States from three to twelve nautical miles. The proclamation provides that the expanded territorial sea is intended for international and national security purposes only and does not extend or alter existing federal and state law. Therefore, for purposes of this article, the traditional three-mile territorial sea will be treated as the boundary between state waters and federal or international waters.*

out of a United States port. Nor is there any law administered by Customs which would prohibit a person subject to United States jurisdiction from having any interest in or from engaging in gambling activities on board a foreign vessel, provided that such gambling is *only incidental to the operation of the ship and not the primary object of the ship's operation.* (emphasis added)

The purpose of Attorney General Thornburgh's recent legal directive is to more specifically define what constitutes a gambling ship under the Act. The Attorney General has directed all United States Attorneys to take the following guidelines into consideration when making prosecutorial decisions:

...it will be presumed that a ship which operates one or more gambling establishments on board is a "gambling ship" unless it cruises for a minimum of 24 hours with meals and lodging provided for all passengers or unless it docks at a foreign port. The fact that the presumption applies or does not apply in a given situation, however, is not ultimately determinative of compliance with Section 1081 *et seq.*, but merely provides guidance to U.S. Attorneys in exercising their prosecutorial discretion under pertinent statutes.

(Quoted in letter from George Phillips, United States Attorney for the Southern District of Mississippi, dated April 25, 1991.)

As a practical matter, most cruise ships that engage in "cruises to nowhere" will have a very difficult time complying with the new criteria. Except for a few vessels in Florida that already offer 24-hour cruises to the Bahamas, most cruise lines will find it economically infeasible to stay at sea for such an extended period of time. Moreover, very few of the existing cruise ships have the physical capacity to offer lodging for all passengers.

Representatives of the two casino cruise ships based in Harrison County, Mississippi have claimed that the Gulf Coast economy would suffer an economic impact of 30 to 50 million dollars a year if the vessels are forced to close down operations. Cruise line owners and coastal business interests in Texas and Florida have also expressed their dissatisfaction with the new criteria and have vowed to fight for repeal of the Attorney General's ruling.

Mississippi's New Shipboard Gambling Law

Attorney General Thornburgh's policy directive applies only to those ocean areas beyond state jurisdiction. There is nothing that precludes individual states from legalizing gambling aboard vessels that operate within state waters.

In 1989, Mississippi became the first state to enact legislation that allowed gambling aboard cruise ships in state waters as long as they were in transit to or from international waters. (Senate Bills 3068 and 3069, Regular Session 1989). The following year the state repealed the 1989 statute and passed much more comprehensive legislation that created a state gaming commission and legalized gambling aboard approved vessels of a minimum size while underway or docked in state waters. Miss. Code Ann. § 97-33-1 (Supp. 1990). The new legislation authorized two existing cruise ships, the *LA Cruise* based in Biloxi, and the *Europa Jet* berthed in Gulfport, to continue gambling operations without a privilege license. Miss. Code Ann. § 27-109-9 (1990). Except for the two "grandfathered" vessels, county residents were given the authority by a majority vote to halt gambling in state waters on vessels that operate from county ports or are docked there. Miss. Code Ann. § 19-3-79 (Supp. 1990).

Voters in all three of Mississippi's coastal counties went to the polls in November 1990 to decide whether each county would allow cruise ship gambling. Harrison County and Jackson County rejected the measure, while Hancock County voted in its favor. Because both the *LA Cruise* and *Europa Jet* operate from Harrison County ports, the vessels may only open their casinos within state waters if they continue their longstanding practice of cruising to international waters.

To date, no vessels have been granted a state license to offer dockside gambling in Mississippi waters. Unless the two existing cruiseships move their operations to Hancock County and obtain a state dockside gaming license, they will have no choice but to abide by the Justice Department ruling and close all casino operations beyond state waters. In fact, both of the cruise ships have been notified by United States Attorney George Phillips that they have ninety days from April 29, 1991 to be in compliance with the new policy or risk prosecution.

Legal Consequences of Noncompliance

According to an attorney for *LA Cruise*, the company hopes to avert prosecution by closing its casino during its ten-minute turn-around in the waters beyond state control. The

company has proposed that during the shut-down period patrons can wait in the casino for the games to reopen or take advantage of other shipboard activities. *The Sun Herald*, May 2, 1991 at A-1.

Although it is too early to be certain, there are indications that the Justice Department will refuse to accept this strategy as a legitimate method of complying with the new interpretation of the Gambling Ship Act. Without Justice Department approval, the cruise ships will likely be forced to stop operations during the height of the summer tourist season.

If the cruise ships fail to travel beyond state waters for fear of being arrested by the federal government they will also be subject to prosecution under the the federal Coastwise Trading Act, 46 U.S.C. §§1171 *et seq.* (Supp. 1991) which prohibits the transportation of passengers between points in the United States on foreign-built or foreign-flag vessels. Foreign-flag cruise ships are prohibited from voyages that transport passengers from one U.S. port to another, but not from voyages that pick up passengers at a U.S. port, go beyond the three-mile territorial sea into international waters, and return to the same port. *U.S. Customs Service Opinion Letter VES-5-10-VES-3-02*, July 19, 1984.

In addition, the Mississippi Attorney General has given notice that if the cruise ships fail to leave state waters, they will be in violation of state law because any gambling in state waters by the two "grandfathered" cruise ships is limited to periods during transit to or from international waters. Official Attorney General's Opinion to Senator Thomas A. Gollott and Representative Jim Simpson, dated March 22, 1991.

What is the Future Outlook?

No other Gulf states have enacted legislation like Mississippi's that legalizes cruiseship gambling in state waters. Consequently, those cruise ships that offer "cruises to nowhere" from ports in Texas, Florida, and other coastal states are in even greater legal jeopardy than those in Mississippi.

The most likely outcome of the new Justice Department policy is to place additional pressure on state legislatures to legalize gambling aboard vessels in state waters. Already, affected states have requested that the Justice Department delay any prosecutions for a period of one year. Proponents of the cruise ships would then have an opportunity to try to persuade their legislatures to enact legislation that would allow them to continue operating in state waters.

However, even if gambling in state waters was legalized, any vessel engaged in the practice would have to be American-built and American-registered to avoid prosecution under the Federal Coastwise Trading Act. Since none of the cruiseships currently offering "cruises to nowhere" would qualify, new vessels built in the United States would have to be put into operation. In addition to the time delays and additional costs associated with the purchase of new vessels, operational expenses are generally significantly higher on American registered vessels than on those registered under so-called "flags of convenience."

Another option that cruise lines could consider in an effort to comply with the new federal policy would be to move their ship operations to U.S. coastal cities that are located a short distance from foreign ports. For example, San Diego, California; Brownsville, Texas; Miami, Florida; and Seattle, Washington are all suitably positioned. Of course, operating cruise ships from these cities may not be feasible due to a variety of other considerations such as market weaknesses, inadequate port facilities, intense competition, or local political opposition.

CONCLUSION

There is no doubt that cruise lines offering "cruises to nowhere" are in for some difficult times ahead. Most will have to cease operations by mid-summer if they are unsuccessful in their attempts to amend or repeal the new federal gambling ship policy by legal or political means.

Sadly, it is the affected coastal communities that will lose the most should the cruise ships depart. Many have come to depend on the vessels to serve as the primary catalyst to improve their sagging tourist economics. However, as any gambler can tell you, not every play pays off. □

Richard McLaughlin is the Director of the Mississippi-Alabama Sea Grant Legal Program and Editor of WATER LOG.

Fighting the Dioxin Battle

John Farrow Matlock

INTRODUCTION

Recent events in Mississippi, most notably the filing of lawsuits for billions of dollars in damages against two corporations that run paper mills in this state, have drawn new attention to the chemical dioxin. Dioxin was already known to the public as the toxic substance in Agent Orange, the herbicide used to strip foliage from jungles in Vietnam. It acquired further notoriety as the waste chemical that poisoned Times Beach, Missouri and Love Canal, New York to such an extent that those towns were abandoned. The odium attached to its name is probably equalled only by that called forth by the insecticide DDT, the use of which was severely restricted by the federal government in 1972.

EPA Report Brings Controversy to Mississippi

Mississippi's unhappy familiarity with dioxin began last July when the environmental group Greenpeace made public the findings of a report prepared by the Environmental Protection Agency. EPA had undertaken the study to determine the amount of dioxin in bleached pulp at 104 paper mills across the country. Three mills in Mississippi were mentioned in the report: Georgia Pacific's Leaf River Forest Products at New Augusta, where the bleached pulp contained 18.5 parts of dioxin per trillion; International Paper at Moss Point, with 10.9 parts per trillion; and International Paper at Natchez, with 5.1 parts per trillion. (International Paper's mill at Natchez does not figure in the ensuing events because its waste is discharged into the Mississippi River, the volume of which dilutes dioxin to levels deemed acceptable.) In September, EPA warned that persons eating fish caught downstream from 20 of the mills examined in the study, including the mills at Moss Point and New Augusta, faced a greatly aggravated risk of cancer. The state's Commission on Wildlife, Fisheries, and Parks took action in October, ordering commercial fishermen not to fish the Escatawpa, Leaf, or Pascagoula Rivers because of high levels of dioxin found in catfish caught in Leaf River below Georgia Pacific's mill. (On February 15 of this year a chancery court in Jackson ordered a stop to all fishing on those rivers, but lifted the ban on March 5.)

As might have been expected, a multitude of lawsuits followed the issuance of EPA's warning. By March, almost 2,800 plaintiffs who claimed to have been exposed to dioxin in the three rivers had brought suit against Georgia Pacific and International Paper; the aggregate amount of damages sought thus far is \$7 billion. In a separate lawsuit in federal court, a plaintiff who owns a camp house on the Leaf River has already won a \$1 million judgment against Georgia Pacific for damages and emotional distress. (Georgia Pacific has taken an appeal.) Eighty plaintiffs have also sued the Department of Environmental Quality and the Commission of Wildlife, Fisheries, and Parks, alleging that those agencies failed to protect the public from dioxin pollution and seeking to revoke the mills' licenses to discharge waste water into rivers.

Late in March, the Commission on Environmental Quality decided by a vote of 5-2 to adopt a standard of one part per quadrillion for the discharge of dioxin into state waters. This is a level of dioxin 77 times greater than the maximum tolerable amount of 0.013 parts per quadrillion recommended (but not required) by EPA. The smallest amount of dioxin detectable by present methods is somewhat below 10 parts per quadrillion; the maximum tolerable amount recommended by EPA cannot be measured directly.

The plaintiffs who have sued Georgia Pacific and International Paper sought to challenge the new standard, but on April 26 the Commission on Environmental Quality declined to hear their appeal. The Commission's refusal to adopt a more stringent standard led in May to the formation of the Mississippi Clean Rivers Association in Gautier. The group aims to collect 30,000 signatures on a petition requesting the state to set stricter limits on the discharge of dioxin.

Dioxin and Its Effects

Dioxin is a generic name for 75 chemical compounds. The most toxic of them, and the object of current controversy, is 2,3,7,8-tetrachlorodibenzo-p-dioxin, usually referred to simply as dioxin. It is a by-product of the manufacture of polyvinyl chloride (the PVC widely used in pipes) and some herbicides (including the commonly used weed-killer 2,4-D), and of burning leaded gasoline, coal, and wood. Dioxin is also produced in trace amounts when pulp is bleached with chlorine, although it is estimated that less than one percent of dioxin released into the environment in the United States comes from pulp mills. Dioxin is not, as some alarmists proclaim, "the most toxic substance known to man;" the toxins that cause botulism, tetanus, and diph-

theria, for instance, are all lethal in doses smaller than a fatal amount of dioxin by several orders of magnitude. And while no one doubts that dioxin is harmful to humans (EPA classifies dioxin as a "probable human carcinogen"), its ill effects in the amounts likely to be encountered by most people have been much exaggerated.

Dioxin's effects on people can be measured in three ways: indirectly by studying animals in the laboratory, and directly either by looking at people who are known to have been exposed to it or by looking at sick people to find out what they have in common. Results of studies using animals fed or otherwise exposed to dioxin are the least satisfactory in determining dioxin's effects on people. Research with animals has shown that dioxin can cause cancer, damage to liver and thymus, suppression of immune-system response, and birth defects. In sufficiently large doses it kills outright. The usefulness of these studies is diminished, however, by the wildly excessive doses of dioxin used (up to 30,000 times the amount humans may be exposed to in a lifetime) and by the wide variation in reactions between different species (it takes 3,000 times as much dioxin to kill a hamster as to kill a guinea pig) and even among members of the same species (female rats develop cancer when exposed to much lower amounts of dioxin than is necessary to cause cancer in male rats). Such results compound the usual difficulties in extrapolating results of animal studies to humans.

Studying groups of people who have been exposed to dioxin in the environment has yielded mixed results. Large numbers of people were exposed to dioxin in Vietnam, where it was a contaminant in the defoliant Agent Orange, at Times Beach, Missouri in 1971, and in an accident at an Italian factory in 1976. The subsequent experience of these groups has not borne out dire predictions of dioxin's effects on people.

Between 1965 and 1971, 11.3 million gallons of Agent Orange (containing altogether about 240 pounds of dioxin, or 2 parts per million) were sprayed over the jungles of Southeast Asia. American soldiers exposed to Agent Orange blamed the chemical for causing a host of illnesses, from cancer, heart disease, and birth defects in their children, to confusion, fatigue, and spotty tanning. Many of the ailments complained of did not manifest themselves until years after the veterans' return from Vietnam. Yet epidemiological studies of Vietnam veterans, including studies undertaken by the governments of the United States, Australia, and several of the states, found no greater incidence of diseases known to be caused by dioxin among veterans or their families than among the general public. For instance, the incidence of chloracne, an ugly but not

permanent rash, and of liver damage—both known to be caused by dioxin—was exceedingly rare. Similarly, there is almost no evidence, even in studies of animals, that exposure of males to dioxin causes birth defects in their offspring. Despite the wide public attention attracted by the class action suit against the United States and the manufacturers of Agent Orange, it is not always remembered that the court found the weight of scientific evidence failed to establish the plaintiffs' claims. At present the only diseases caused by dioxin for which Vietnam veterans can collect disability payments are chloracne, non-Hodgkins' lymphoma, and soft-tissue sarcoma. All are rare.

Likewise with the accident at a chemical factory in Seveso, Italy in 1976. A large amount of dioxin escaped through a broken valve and drifted, in the form of a foul-smelling cloud, over the town and across miles of the surrounding countryside. No one died at Seveso immediately after the leak, although many did suffer chloracne, and the gas killed thousands of animals within days. (Many studies indicate that people are less sensitive to dioxin than animals.) The much-feared havoc to human life never materialized. A study undertaken by the University of Milan of 1,500 children exposed to dioxin in the accident showed slight changes in liver function and immune system response, but these abnormalities disappeared with time. So far no long-term ill effects attributable to dioxin have yet appeared among the townspeople exposed.

The example of Times Beach, Missouri is also instructive. In 1971 when dogs, cats, and birds began dying near a horse track, it was discovered that the waste oil being sprayed to keep down dust came from a nearby Agent Orange factory. EPA bought the town and ordered it evacuated lest there be an "epidemic of birth defects," although contamination of soil there did not exceed 1.2 parts per million. Medical studies of former residents of Times Beach undertaken by the Center for Disease Control show no greater incidence of disease among them than among the public at large, only a slight suppression of the immune system and some evidence of liver damage.

If, however, the danger to the general public posed by exposure to dioxin is negligible, a recent study undertaken by the National Institute of Occupational Safety and Health (NIOSH), the results of which were published in *The New England Journal of Medicine* on 24 January, presents compelling evidence that prolonged exposure to high amounts of dioxin does cause cancer. The subjects were 5,172 workmen at 12 different chemical factories who had been exposed to dioxin on the job from 1942 to 1984; they made up "probably the most highly exposed population ever

studied." All had first been exposed to dioxin at least 20 years before the study began, thus allowing for a 20-year period of latency for cancers to develop. The group was divided into two cohorts: a "low-exposure" cohort comprising workers who had been exposed to an average of 90 times as much dioxin as the general public, and a "high-exposure" cohort comprising workers who had been exposed to at least 500 times more than the general public. Those in the high-exposure cohort were half again as likely as other Americans to die of cancer, with the greatest increases being in the incidence of soft-tissue sarcomas and cancers of the respiratory system. Among the low-exposure cohort—those exposed to 90 times as much dioxin as the rest of the public—there was no increase at all in the risk of cancer. This study has set off new debate among scientists and was no doubt part of the impetus behind EPA Administrator William Reilly's recent announcement that the agency will review its standards for emissions of dioxin.

Studying people afflicted with unusual diseases has been valuable in ascertaining what diseases dioxin causes. Two Swedish studies of persons with soft-tissue sarcomas showed that victims of the cancers were between four and five times as likely to have been exposed to dioxin in the form of phenoxyl herbicides, either by working as lumbermen or by using 2,4-D, as were healthy people. One of the studies also revealed a threefold increase in the incidence of malignant lymphoma among persons exposed to chemicals containing dioxin. Both cancers are likelier to appear in persons whose immune systems are depressed, which leads to the larger question of how dioxin causes disease in humans, and at what levels.

Dioxin does not act directly to cause cancer, but when present in sufficient quantities it may render a person more susceptible to developing cancer. While not causing cancer directly, dioxin does foster the growth of tumors after a carcinogen has been introduced into a cell. Molecules of dioxin bind to receptors inside cells, and the complex of the two then binds to DNA, stimulating the production of an enzyme that aids in the metabolism of fats. An excess of the enzyme can lead to harmful changes within the cell which may in turn induce the various diseases known to be caused by dioxin. What makes dioxin's action within cells so important is the fact that receptors have a tolerance for certain levels of the chemicals that trigger their responses and therefore a threshold level should exist under which dioxin would have no effect at all. "There is a dose of dioxin below which the receptor does not function, and if it is not activated, there can be no effect," says EPA scientist Linda Birnbaum. This theory was endorsed at a meeting of 38

American and European scientists and government officials at the Banbury Conference at New York's Cold Spring Harbor Laboratory in January, although there is still contention over the precise level of that threshold.

The Regulatory Morass

EPA's standards for dioxin emissions and its risk assessments have long been a source of controversy. At present EPA uses a "linear" model to assess the risk of harm from dioxin. This approach is also called the "no threshold" model because it is based on the assumption that there is no safe level of exposure to carcinogens. EPA's risk assessments begin with tests on animals. Laboratory animals are dosed with dioxin, often at amounts thousands times greater than what people are ever exposed to, and scientists wait for cancers to develop in the subject animals. Tumors in the subject animals are counted (benign as well as malignant, for the former may turn into the latter); scientists calculate an individual's risk of cancer at the much smaller amounts a person would encounter, and then multiply the individual's risk by the number of people likely to be exposed to come out with the risk to society.

The results obtained are skewed on the side of caution in several ways. The results are first adjusted so that there will be a 95 percent chance that the risk has been overstated. Where animals of different species are used in tests, EPA uses results from the species most vulnerable to the effects of the chemical, although it is well known that humans are less sensitive to dioxin than are animals. In addition, EPA assumes in its final figures that a person will be exposed to the chemical every hour of every day in a lifetime of 70 years. It is virtually inconceivable that the figures that emerge underestimate the risk.

One effect of EPA's cautious assessments has been the expenditure of vast sums of money to protect the public from ever-smaller traces of harmful chemicals. The average American is hundreds or thousands of times as likely to die from exposure to radon in his home, to be killed in an automobile accident, or to be murdered as he is to die from exposure to dioxin. Nevertheless EPA's current strict standards mean that each of the nation's 104 paper mills, which taken together are an insignificant source of dioxin, will each have to spend \$20 to \$100 million to comply.

EPA has always been chary of adopting "threshold" models in its risk assessments, even though threshold models are used in Canada and in most of western Europe. The governments of Canada and of most European countries dismiss as harmless levels of dioxin 170 to 1,700 times as high as those set by EPA. As recently as last year, EPA was planning to propose a more rigorous standard for

dioxin emissions. In a surprising volte-face following the Banbury Conference, on April 10 EPA Administrator William Reilly ordered the agency to review the risks to people and environment posed by dioxin with a view to relaxing current standards governing dioxin emissions.

CONCLUSION

New evidence about dioxin is bringing about a radical reappraisal of the threat posed by it. Much still depends upon what action will be taken by EPA in revising its risk assessment of the chemical. A relaxation of current standards, while it would hardly be favorable to plaintiffs in Mississippi and elsewhere who are seeking money as compensation for diseases attributed to dioxin, will be a large step towards an EPA where science, not outside influence, is the driving force behind policy. □

The present article has been compiled from a number of magazine and newspaper articles. The interested reader is referred especially to the April 1990 issue of the National Journal, the November 1990 issue of Scientific American, and the February 8, 1991 issue of Science. John Farrow Matlock is a third year student at the University of Mississippi School of Law.

Alabama Coastal Waters Initiative

Aden McDaniel

INTRODUCTION

In June 1990, Alabama's Governor Guy Hunt issued an executive order creating the Alabama Coastal Waters Initiative, a comprehensive scheme for the management of the state's coastal resources. A policy council of gubernatorial appointees was established to manage the program. The Initiative also provided for an "action team" made up of representatives from various state agencies, and created scientists' and citizens' advisory committees. All three of these groups are designed to assist the policy council in completing its mandate.

The policy council's first task under the Initiative was to identify problems affecting the Alabama coast and to make recommendations to the governor. Early in 1991, the council submitted to Governor Hunt a list of eight impor-

tant issues, along with recommendations for addressing them. A summary of the council's findings follows. Future developments in Alabama's Coastal Waters Initiative will be reported in WATER LOG.

Environmental and Water Quality

As with all coastal areas, Alabama's coastal community is physically and emotionally involved with the shore and the waters beyond. Because of rising population and new development, these waters are subjected to stress which threatens the water's quality. Population growth brings installation of more sewage tanks, often in unsuitable ground. Increases in boating and marina use often result in fuel spills and careless disposal of sewage and trash. Nonpoint source pollution brought about by increased land use also causes degradation of coastal waters.

The policy council suggested that the state take several steps to address water quality problems. Reassessing water quality criteria and use classifications would help determine whether changes to provide additional protection are warranted. The council also recommended that nonpoint source pollution be studied, evaluated, and controlled. Finally, the council suggested that the legislature produce a state policy for the management of coastal waters as an integrated ecosystem.

Living Resources

The future of Alabama's finfish, shrimp, and crab is a source of grave concern. Conflicts between commercial fishermen and sportsmen, competition between commercial interests, "bycatch" (discarding unwanted fish from a net catch), and degradation of habitat are problems common to all the fisheries. The council investigated these problems, as well as others peculiar to the various species.

■ Finfish

Conflicts between commercial and recreational fishermen, bycatch, and degradation of habitat, particularly of spawning and nursing grounds, are the chief problems affecting the finfish population. The council recommended the development of a finfish management plan to address these concerns. Such a plan should provide for continuing assessment of fishery stocks, give guidelines on optimal yields, and, if necessary, allocate quotas for maximum permissible catches.

■ Crab

The use of crab traps and the depletion of the crab fishery are the greatest problems in this area. Crab traps are often lost but continue to catch and kill crab. Increased crabbing, and the crabbers' preference for taking female crab, have led to a noticeable depletion of the crab stock. The council recommended that a crab management plan be developed with an eye to stabilizing fluctuations in the crab population.

■ Shrimp

The shrimp industry is suffering decline because of increased foreign competition, bycatch, and conflicts with other marine interests, including oil companies and other fishermen. The council recognized the need for further investigation and called for a management plan to be produced after consultation with the shrimpers, legislators, and other interested parties.

Degradation of Habitat

Alabama's coastal zone is comprised of two critical boundary areas: wetlands and dunelands. Wetlands, made up of areas ranging from bottomland hardwoods to submerged aquatic vegetation, have been the focus of increasing public awareness and are now protected by statute. The natural function of dunelands is not so well appreciated, and there are fewer restrictions on their use and development. Both kinds of coastal land have suffered from development. In the last several years 12,000 acres of sensitive Mobile Delta have been damaged by increased use, while about 10,000 acres of estuarine marshes and other low-lying areas have been lost to dredging. In the meantime, building on the waterfront continues to increase.

The council recommended several changes to existing policy. Some critical areas have yet to be brought under management agency control. A management plan is greatly needed to prevent further loss of coastal areas.

Public Health

The indiscriminate discharge of waste into coastal waters has become a matter of concern. Twenty-one municipal wastewater discharge plants are now located in the coastal counties. There have been many reports of ill effects arising from using polluted water, and 1,200 acres of oyster reefs have been closed on account of these discharges.

In order to protect public health, the council recommended certain changes in the regulation of coastal water use. The state should provide more funds for monitoring water quality, both in the field and in the laboratory. The council also expressed the hope that courts would impose harsher penalties on fishermen illegally harvesting shellfish in contaminated areas.

Coastal Erosion and Sedimentation

The twin processes of erosion and sedimentation are an ongoing concern. Freshwater and estuarine areas in Alabama have experienced serious declines because of physical erosion, while turbid water from excess sedimentation has caused significant losses of submerged grassbeds. Furthermore, clay sediment is instrumental in the transportation of pollutants to coastal waters.

The council recommended several steps to combat the effects of erosion and sedimentation on the coastal area. First, research should be undertaken to determine the coast's sediment budget (i.e., its net gain or loss of sediments). Second, an integrated computer model should be developed to study the erosion problem. Third, the role of clay minerals in the transportation of pollutants should be fully assessed. Finally, measures should be taken for evaluating the success of beach nourishment projects.

Marine Debris

As in other coastal areas, marine litter and debris is a major problem for the Alabama coast. During the 1990 coastal cleanup, 2,560 volunteers picked up over seven tons of trash from 62 miles of Alabama beaches. More than half the debris was plastic and came from a variety of sources, including commercial and recreational boaters and traditional beach users.

To halt the disposal of litter on Alabama beaches or in its marine waters, the council identified several goals. Establishing local participation and public education programs was a key recommendation. The council also recommended that more state funds be spent on enforcing existing laws and on preventive programs. Passing stricter legislation to control marine litter was suggested by the council, as was supporting the designation of the Gulf of Mexico as a "Special Area" under Annex V of the International Conference on Marine Pollution (MARPOL). Special Area designation should reduce the amount of trash thrown from shipping vessels. Finally, the council encouraged the use of reusable, recyclable, and non-persistent materials.

Groundwater Resources

Although there are vast amounts of water under the surface of Alabama's coast, rainfall cannot replenish aquifers drained at a steady rate by municipal, corporate, and individual users. More than 2,500 wells have been drilled in Mobile and Baldwin counties, and almost none of them have any restrictions on production rate. Excessive withdrawal of ground water from coastal areas leads to saltwater contamination of aquifers. The presence of minerals and dissolved solids in coastal groundwater is also a problem.

The council made several proposals to reduce the excessive withdrawal of groundwater. A water management plan should place limits on the construction, location, and production rates of wells in the area. Municipal and corporate users should be encouraged to take action to conserve groundwater. Research should be conducted and data compiled on the availability of groundwater and on conservation measures. The council also recommended a program to heighten public awareness of the groundwater problem.

Public Access

Overuse of the state's shoreline and coastal waters for recreational purposes, while not yet a pressing concern, could become a problem in years to come. The council recommended that coastal planners seek additional funding from federal, state, and local agencies to repair and improve existing public sites. The council also recommended that new access sites, boat ramps, and parking lots be built.

CONCLUSION

Alabama's Coastal Water Initiative Policy Council has put forth its first recommendations. It is now for the governor and the legislature to act to protect the state's coastal lands and waters. □

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Recent Legislation — Mississippi

by Amy Killen

INTRODUCTION

During 1991 the Mississippi Legislature passed many new bills and amendments to existing legislation concerning the environment. The new legislation focuses on waste disposal, in addition to several bills affecting marine policy and liability for environmental law violations.

Marine Policy

Senate bill 2844 amends several provisions of the Mississippi Code pertaining to the regulation of mussels. The bill bans dredging for mussels and increases license fees for both residents and non-residents. The penalties for violations of the law are likewise increased to not less than one hundred dollars and/or three months imprisonment along with the forfeiture of any license issued by the department. The bill becomes effective July 1, 1991.

Senate bill 2395 deletes the repealer on the Mississippi Marine Litter Act of 1989. Additionally, Miss. Code Ann. §51-2-3 (1972) is amended to mandate that certain substances such as fuel, oil, paints, and insecticides be kept in closed containers upon boats and other craft. The bill specifies that such containers be sufficient to prevent any spillage if the containers should be spilled into Mississippi waters. The amendment allows for nonliability for accidental spills, as long as specifications outlined in the bill for the event of an accident are followed. The possible penalties for violations of the Act are changed to include community service work as an alternative or addition to fines as punishment for first time violators. These amendments are now in effect.

Senate bill 2845 clarifies that Miss. Code Ann. §49-15-9 (1972) is applicable to any mariculture operations involving racks or any other structures. This was effective immediately.

Natural Resource Conservation

House bill 710, known as the Mississippi River Timberlands Control Act of 1991, establishes a mechanism to control transactions in the voting stock of corporations which have substantial holdings of river timberlands in this state, so that such corporations' use and management of river timberlands may be subject to public scrutiny. The Act requires that individuals who wish to acquire a certain percentage of voting stock in these corporations must file a statement with the Secretary of State. The Act specifies the content of these statements, and provides for a hearing to consider whether or not such an exchange will violate the public interest. A filing fee is set at five hundred dollars (\$500.00). The Act also provides for investigations by the Secretary in the event of reports of violations of the Act, with a penalty of imprisonment for one to five years and/or a fine of 25 thousand dollars (\$25,000.00) for any persons found to be violating the Act. The Act also provides for recourse by the citizen in a civil action. The Act was effective immediately.

Waste Disposal

Senate bill 2984, known as the Mississippi Solid Waste Management Authority Act, gives local governments the power to create regional authorities for municipal solid waste management. The Act includes provisions concerning the rights and powers to be given to such authorities and provides incentives for improvement and cost reduction in waste management. The Act became effective April 12, 1991.

Senate bill 2985 provides requirements for the disposal of waste tires, batteries, and household hazardous waste. The Act requires that existing waste tire collection and disposal sites obtain authorization or permits from the Permit Board of the Department of Environmental Quality. The Act states that the Commission on Environmental Quality will make rules and regulations for the disposal authorities by July 1, 1992 in accordance with specifications set out in the Act. A provision provides for collection and use of waste tire fees, which includes a fee for the purchase of new car tires and a penalty for violations of the Act of fifty dollars (\$50.00). Similar provisions are set out for the disposal of batteries and household hazardous waste. The Act becomes effective July 1, 1991.

Senate bill 2454 authorizes the Permit Board created by Miss. Code Ann. §49-17-28 (1972) to issue general permits as to air and water pollution standards, with provisions for public notice and hearing. The bill becomes effective July 1, 1991.

Senate bill 2989 requires that applicants for commercial hazardous or nonhazardous solid waste facility permits file a disclosure statement. This statement discloses certain criminal or environmental violations and proscribes the issuance of a permit for specified violations. The law became effective April 12, 1991.

Senate bill 3009, known as the Nonhazardous Waste Planning Act of 1991, creates a number of measures designed to minimize and control nonhazardous solid waste. The Act also creates a 14 member Recycling Market Development Council, which is charged with developing a comprehensive statewide recycling plan by January 1, 1993. The Act sets out rules and regulations concerning the manufacture and distribution of plastic containers, with a penalty of one hundred dollars (\$100.00) to one thousand dollars (\$1000.00) for each day of any violation of the Act, or an injunction. The Act also requires the Commission on Environmental Quality to set out rules and regulations concerning compost production by October 1, 1991. To help meet these goals, an Environmental Trust Fund is created. Finally, each county is also required to create a nonhazardous solid waste management plan. The Act became effective April 1, 1991.

House bill 1233 amends Miss. Code Ann. §45-14-11 (1972) to allow the State Board of Health to enforce the provisions of the Southeastern Interstate Low Level Radioactive Waste Management Compact. The amendment was effective immediately.

House bill 1269 amends Miss. Code Ann. §§17-17-42 and 53-1-17 (1972) to give the Commission on Environmental Quality sole authority over the regulation of commercial disposal of oil field waste products. The State Oil and Gas Board retains control over noncommercial disposal of such products. The amendment was effective immediately.

Costs, Penalties, and Liability

Senate bill 2580 amends Miss. Code Ann. §49-17-85 (1972) to allow the Commission on Environmental Quality

to collect a fee for loan recipients under the Water Pollution Control Revolving Fund to help pay for administrative costs of the fund. This fee will not exceed five percent of the loan. The amendment was effective immediately.

Senate bill 2937 amends §49-17-68 (1972) to clarify that the Pollution Emergency Fund created under the section is also to be used for technical investigations related to air pollution or hazardous waste. The amendment became effective March 18, 1991.

Senate bill 2987, known as the Mississippi Liability of Persons Responding to Oil Spills Act, limits the liability of people responding to oil spills under the National Contingency Plan and as directed by federal or state officials. The amendment became effective April 12, 1991.

House bill 812 amends Miss. Code Ann. §§17-17-29 and 49-17-43 (1972) to state that the Commission on Environmental Quality, when giving civil penalties, must consider at least the following factors: the willfulness of the violation; the damage to air, water, land, or other natural resources or uses; the cost of restoration or abatement; the economic benefit as a result of noncompliance; the seriousness of the violation (the harm to the environment or hazard to the health, safety, and welfare of the public); and the past performance history of the violator. The amendment becomes effective July 1, 1991.

CONCLUSION

The activity of the Mississippi Legislature in the first term of 1991 reflects its continuing concern with environmental issues. Several new bills and amendments were passed in order to advance Mississippi's marine policy, waste disposal, and the effectiveness of enforcement of environmental laws. □

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LAGNIAPPE

A Little Something Extra

The National Science Foundation recently awarded \$502,228.00 for a cooperative Sea Grant/Gulf Coast Research Laboratory middle school teacher-enhancement program on understanding global marine environmental issues. Matching funds of \$199,073.00 are being provided jointly by the Gulf Coast Research Laboratory, the Mississippi-Alabama Sea Grant Consortium, Louisiana Sea Grant, and Florida Sea Grant, with additional support from the Georgia, Maine-New Hampshire, and Oregon Sea Grant programs. The three-year program will involve 150 Gulf Coast teachers in five three-week summer workshops. The workshops will address a number of global environmental issues, including climatic change, marine and estuarine pollution, decline in biodiversity, and overpopulation.

On June 10, 1991, the United States Supreme Court refused to hear an appeal from the state of Alabama concerning the restriction of imports of hazardous waste to its waste facility at Emelle. *Alabama Department of Environmental Management v. National Solid Wastes Management Association*, U.S. Sup. Ct., No. 90-1718 (6/10/91). Alabama had disagreed with an August 1990 ruling by the U.S. Court of Appeals for the Eleventh Circuit, which held that the state could not close its borders to hazardous waste from other states. The Eleventh Circuit concluded that hazardous waste is an article in interstate commerce and that state restrictions were an unjustified barrier to interstate commerce. The court also found that federal environmental laws such as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) preempted state law and thus did not leave Alabama with any authority to impose restrictions. (For a discussion of the Eleventh Circuit ruling, see 10 WATER LOG 2 at 8 (1990)). The Supreme Court's agreement with the Eleventh Circuit means that Alabama will not be able to ban the importation of hazardous waste from other states.
