

ADOPTION OF EMERGENCY RULE
Department of Environmental Quality
Office of Water Resources
Extension of Time to Achieve Compliance with Prohibition Against
Produced Water Discharges in Freshwater Areas and in
Intermediate, Brackish, and Saline Water Areas Inland of the Territorial
Seas

(LAC 33:IX.708.C)
WP023E-B

In accordance with the emergency provisions of La. R. S. 49:953(B) of the Administrative Procedure Act, which allow the Department of Environmental Quality (DEQ or Department) to use emergency procedures to establish rules, and of La. R. S. 30:2011 and La. R. S. 30:2074, which allow the Department to establish standards, guidelines, and criteria, to promulgate rules and regulations, and to issue compliance schedules, the Secretary of the Department hereby finds that imminent peril to the public welfare exists. Accordingly the Department adopts the following emergency rule effective February 26, 1997, for one hundred twenty (120) days, or until promulgation of the final rule, whichever occurs first.

This Emergency Rule replaces WP023E and WP023E-A, published in the *Louisiana Register* on January 20, 1997. Accordingly, Emergency Rules WP023E and WP023E-A are repealed by the adoption of Emergency Rule WP023E-B.

Adopted this 26th day of February, 1997.

J. Dale Givens
Secretary

DECLARATION OF EMERGENCY
Department of Environmental Quality
Office of Water Resources
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Adoption of Emergency Rule WP023E-B repealed and replaced Emergency Rules WP023E and WP023E-A, published in the *Louisiana Register* on January 20, 1997.

This Declaration of Emergency provides the reasons for the Secretary's finding and includes specific reasons why the failure to adopt the rule on an emergency basis would result in imminent peril to the public welfare.

Regulatory History of Produced Water

The Secretary hereby finds the following to be the history of produced water and its regulation in the State of Louisiana:

1. Discharges of produced water have existed since the 1940's.
2. A 1953 rule allowed produced water discharges to any stream not used for drinking water purposes.
3. By 1968, discharge to most freshwater areas was banned.
4. Many LWDPS permits have prohibited discharges of produced water beginning in 1988.
5. In March of 1991, state regulations were promulgated concerning produced water. DEQ's 1991 regulations required a phase-out of coastal produced water discharges by 1997.

- a. Continued produced water discharges to major deltaic passes of the Mississippi and Atchafalaya Rivers could be authorized in a valid LWDPSP permit.
 - b. DEQ regulations provided for extensions of time to discharge produced water in coastal regions up to January 1, 1997.
 - c. All discharges of produced water (except for those to Mississippi and Atchafalaya River areas) had to cease by January 1, 1997.
6. EPA Region 6 issued NPDES general permits effective February 1995.
- a. The general permits prohibit discharge of produced water to Louisiana and Texas coastal waters.
 - b. Although the general permits absolutely prohibit any discharge of produced water of coastal origin, exceptions to that prohibition are found in an EPA administrative order effective February 1995. That order allowed extensions of time to comply with the prohibition until January 1997.
 - c. The general permit effective in Louisiana did not cover discharges of produced water from the offshore subcategory to the Mississippi River and the Atchafalaya River (below Morgan City).
7. EPA guidelines and standards for coastal waters were promulgated in December 1996 and effective on January 14, 1997 (the guidelines).
- a. The guidelines banned all discharges to the coastal area.
 - b. The guidelines required all remaining Mississippi and Atchafalaya River discharges to cease.
 - c. The federal guidelines note at page 66122-23 the following:
EPA received numerous comments from operators in the Gulf of Mexico coastal region claiming that they would need additional time to comply with the rule's zero discharge requirement for produced water. EPA recognizes that it may take some time for operators to determine the best and most cost effective mechanism of compliance and to implement that mechanism. EPA also recognizes that the NPDES permit issuing authority has discretion to use administrative orders to provide the requisite additional time to meet zero discharge.
 - d. The Department's Office of Water Resources became the NPDES permit issuing authority for the State of Louisiana on August 27, 1996.
 - e. Consistent with the guidelines, EPA has recognized the need to allow additional time for facilities to come into compliance with the ban.
 - f. EPA issued administrative orders in the State of Texas that document continued produced water discharges after the January 14, 1997, deadline and which set forth compliance schedules for the termination of such discharges over a period of two years.

8. On December 30, 1996, the Department issued Emergency Rule WP023E to prevent imminent peril to the public welfare, specifically to prevent the loss of employment, taxes, and royalties that would result if all remaining produced water discharges were eliminated on January 1, 1997.
 - a. The emergency rule allowed additional time for a limited number of facilities to cease produced water discharges.
 - b. Emergency Rule WP023E-A was issued on January 6, 1997, to correct an omission in the original emergency rule.
 - c. Emergency Rule WP023E-B repealed and replaced Emergency Rules WP023E and WP023E-A.

Additional Findings

The Secretary also finds the following:

1. Facilities were still discharging produced water on January 1, 1997.
2. Facilities still discharging produced water after January 1, 1997, are subject to enforcement action by both DEQ and EPA.
3. Produced water is a commonly produced byproduct of oil and gas production.
4. To continue operating, an oil and gas production facility for which produced water is a natural byproduct must either discharge the produced water or inject it into an injection well approved by the Department of Natural Resources.
5. For various reasons, certain facilities would not be able to cease all discharges by January 1, 1997:
 - a. The Department of Natural Resources experienced a personnel shortage, which prevented it from processing before January 1, 1997, all of the applications for injection wells on file in December 1996.
 - b. Some Mississippi and Atchafalaya River dischargers had valid state permits allowing continued discharge (in conflict with the December 1996 federal guidelines and standards).
 - c. Some bay dischargers had relied on Department of Energy study results to allow continued discharge by state permit.
6. The federal guidelines at page 66087 note the reliance of bay dischargers on the DOE study:

The United States Department of Energy (DOE) has provided the State of Louisiana with comments and analyses suggesting a change to the Louisiana state law requiring zero discharge of produced waters to open

bays by January 1997. Promulgation of [these December 16, 1996, federal guidelines] would generally preclude issuance of permits allowing discharges.

7. The Department accepted information that was part of the DOE study referenced in LAC 33:IX.708.C.2.b.iv.(e), as documented at 61 Fed. Reg. 66087.
8. The DOE study results focus on minimal water quality impact to urge discharges be allowed.
9. The EPA guidelines use Best Available Technology (BAT) to require all discharges to cease.

Findings and Considerations Regarding Environmental and Economic Costs and Benefits

The Secretary is the Primary Public Trustee of the environment. He has a duty to provide environmental protection insofar as possible and consistent with the health, safety, and welfare of the people of the State of Louisiana. In fulfillment of that duty, the Secretary finds that the adverse environmental impacts resulting from issuance of Emergency Rule WP023E-B have been minimized or avoided as much as possible consistent with the public welfare, as detailed below.

Environmental Costs and Benefits

Environmental costs and benefits were considered. During the 1953 to 1997 time frame, produced water discharges to areas of greatest environmental impact were limited or eliminated. Of the coastal area discharges which now remain, the majority of discharges are to major passes of the Mississippi River or to bay areas. These areas have less potential for environmental damage than locations such as dead end canals, due to greater water circulation.

As part of the development and consideration for the March 1991 regulations that prohibited produced water discharges, DEQ, in cooperation with the Louisiana State University Institute for Environmental Studies, performed a comprehensive study resulting in a report entitled "An Assessment of Produced Water Impacts To Low-Energy, Brackish Water Systems in Southeast Louisiana." This study details environmental impacts associated with the discharge of produced water in low energy systems.

Later studies conducted for the U.S. Department of Energy (DOE studies) also document environmental impact of produced water discharges, but show that areas impacted by the discharge of produced water in coastal waters can begin to show

recovery and can recover within six months of the termination of the discharge . Additionally, the DOE studies show minimal risk to human health from bay discharges.

It is found that discharges of produced water have occurred for over 50 years in various locations in the coastal zone in Louisiana. In its March 1991 rule, the Department allowed up to almost six additional years for such discharges to continue. That allowance was based upon the Department's earlier finding that there was no acute or imminent threat to the environment, and more specifically that there was no acute or imminent threat to water quality, from the continuation of produced water discharges for a limited period of time.

This emergency rule allows a maximum extension of time of only 24 to 36 months to discharge produced water. This additional time, compared to the total time produced water discharges have existed since the 1940's, represents an incremental increase of approximately four percent, and the number of discharges is now significantly lower than in previous years. A condition of any approval to extend the discharge period for a produced water discharge will be that water quality standards will not be violated.

Accordingly, it is found that any potential harm to the environment or to water quality from issuance of this emergency rule would be minimal.

Economic Costs and Benefits

Economic costs and benefits were considered. It was found in December 1996 that the economic costs resulting from a failure to issue the original emergency rule included the loss of jobs, taxes, revenues, and shut in of oil reserves. Specifically, losses for failure to adopt the original emergency rule were projected as follows:

- a. 309 jobs in the oil and gas production industry would be lost
- b. \$13 million in state and local taxes, revenues, and royalties would be lost
- c. \$178 million in oil and gas reserves would be lost

These losses were projected by the LSU Center for Energy Studies in July 1996.

Subsequent to issuance of the original emergency rule in December 1996, and based upon information supplied to the Department in accordance with the original emergency rule, the projections were adjusted as follows:

- a. 189 jobs in the oil and gas production industry would be lost
- b. \$7.5 million in state and local taxes, revenues, and royalties would be lost
- c. \$109 million in oil and gas reserves would be lost

Conversely, the economic benefits resulting from issuance of the emergency rule are the savings represented by averting the projected losses.

After consideration of the environmental and economic costs and benefits, it has been determined that the short-term and long-term economic benefits outweigh the minimal short-term environmental costs.

Consultations with the United States Environmental Protection Agency (EPA)

The Secretary conferred with the Director of the Water Quality Management Division, the Director of the Compliance Assurance Division, a staff attorney, and the State NPDES Program Coordinator, all at EPA Region 6, in December 1996 prior to the issuance of the original emergency rule.

In October 1996, the Secretary met with the Assistant Administrator for the Office of Water and the Director of the Effluent Guidelines Division, both with EPA headquarters in Washington, D.C.

Dialog and correspondence with EPA Region 6 subsequent to issuance of the original emergency rule resulted in changes incorporated in Emergency Rule WP023E-B; EPA's concerns were satisfied as of February 26, 1997.

Additional Information Considered Before Issuance of This Emergency Rule

The DEQ Secretary was present for the House and Senate committee hearings on the original emergency rule. He heard and considered the testimony of those in support and those in opposition to the rule prior to adoption of Emergency Rule WP023E-B.

Conclusion

Based on the findings recited herein, the Secretary hereby concludes that the failure to implement this emergency rule will result in economic losses which constitute an imminent peril to the public welfare. The loss of employment, taxes, and royalties that would otherwise result in imminent peril to the public welfare if this rule is not implemented, can be avoided by allowing, on a case-by-case basis, a limited amount of additional time for certain operators to arrange for the injection of their produced water. This extension of time shall not extend the produced water discharge beyond January 1, 1999, except that an additional one-year extension may be granted to those facilities that discharge produced water generated in outer continental shelf waters into a major deltaic pass of the Mississippi River or to the Atchafalaya River, including Wax Lake Outlet, below Morgan City. In no instance shall the Department approve a produced water discharge that would extend beyond January 1, 2000.

This Declaration of Emergency is issued this 28th day of February, 1997.

J. Dale Givens
Secretary

Title 33
ENVIRONMENTAL QUALITY
Part IX. Water Quality Regulations

Chapter 7. Effluent Standards

§708. Exploration for and Production of Oil and Natural Gas

* * *

[See Prior Text in A-C.2.a.iii]

iv. There shall be no discharge of produced water to freshwater swamp or freshwater marsh areas or to natural or manmade water bodies bounded by freshwater swamp or freshwater marsh vegetation unless the discharge has been specifically ~~authorized~~ identified in accordance with an approved schedule for discharge termination, or the discharge has been authorized by a valid LWDPSP permit reflecting a discharge directed to a major deltaic pass of the Mississippi River or to the Atchafalaya River, including Wax Lake Outlet, below Morgan City and the discharge complies with all applicable portions of Subsection C.2.e of this Section.

* * *

[See Prior Text in C.2.a.v]

b. Intermediate, Brackish, and Saline Water Areas Inland of the Territorial Seas

i. All produced water discharges must be specifically identified in a valid individual or general LWDPSP permit or order and must comply with all applicable portions of Subsection C.2.f of this Section.

* * *

[See Prior Text in C.2.b.ii-d]

e. Discharge of Produced Water Into Freshwater Areas After January 1, 1997

i. In light of LPDES general permit LAG290000 and the "Final Effluent Limitations Guidelines and Standards for the Coastal Subcategory of the Oil and Gas Extraction Point Source Category," published December 16, 1996, and

effective January 14, 1997 (the federal guidelines), facilities that discharge produced water as authorized in a valid LWDPs permit as of July 1, 1996, shall cease the discharge of produced water by July 1, 1997, unless the continued discharge is specifically identified in an order.

ii. Each facility desiring to continue to discharge produced water after July 1, 1997, shall submit to the department, no later than May 1, 1997, a schedule to:

(a). accomplish reinjection of the produced water as expeditiously as possible, or

(b). return their produced water which originated seaward of the coastal areas identified in Subsection C.2.e.iv.(a) of this Section to those areas of origin.

iii. In addition to the schedule required in Subsection C.2.e.ii of this Section, the submittal shall include, at a minimum, a certification by the facility operator of all of the following:

(a). surface discharge of produced water is the only immediately available alternative;

(b). the produced water discharge elimination schedule is limited in term to the period necessary to provide an alternate waste-handling method;

(c). the discharge of produced water has not been eliminated pending the installation of injection systems or returning it to its area of origin (seaward of the coastal areas identified in Subsection C.2.e.iv.(a) of this Section);

(d). the discharge will not cause a violation of water quality standards in the receiving waters; and

(e). the discharge was previously permitted.

iv. Discharges of produced water pursuant to this rule shall not extend beyond the date upon which the produced water discharge can reasonably be eliminated. In no event shall a discharge of produced water to a major deltaic pass

of the Mississippi River or to the Atchafalaya River, including Wax Lake Outlet, below Morgan City, continue:

(a). beyond January 1, 1999, for produced water generated in coastal areas as defined in 40 CFR part 435.41(e):

(b). beyond January 1, 2000, for produced water generated seaward of coastal areas identified in Subsection C.2.e.iv.(a) of this Section; or

(c). beyond January 1, 2000, for facilities that discharge produced water generated in any combination of areas described in Subsection C.2.e.iv.(a) and (b) of this Section.

v. There shall be no discharge of produced water to a major deltaic pass of the Mississippi River or to the Atchafalaya River, including Wax Lake Outlet, below Morgan City, after January 1, 2000.

f. Discharge of Produced Water Into Intermediate, Brackish, and Saline Water Areas Inland of the Territorial Seas After January 1, 1997

i. Notwithstanding the absolute deadline of Subsection C.2.b.v.(b) of this Section and in light of the federal guidelines, facilities previously authorized by valid LWDPs permits as of July 1, 1996, to discharge produced water under Subsection C.2.b.iv of this Section, pursuant to an approved compliance schedule shall:

(a). cease the discharge of produced water by February 14, 1997; or

(b). submit a revised schedule to accomplish injection of the produced water as expeditiously as possible. This schedule shall be received by the department on or before February 14, 1997. Submission of a schedule is not a defense to an enforcement action for a facility's failure to adhere to the terms and conditions of its permit or prior compliance schedule. In addition to the schedule submission, a certification must be submitted by the facility operator which includes the requirements of Subsection C.2.e.iii of this Section. No compliance schedules in an enforcement order shall extend beyond the minimum time demonstrated necessary for elimination of the discharge and in no case beyond January 1, 1999.

ii. All terms, conditions, limitations, and requirements of the most recent LPDES permit or compliance schedule or order identifying a produced water discharge shall continue in full force and effect unless the department provides otherwise in writing. A schedule to discharge produced water after July 1, 1997, is solely within the department's enforcement discretion and shall be granted only through a compliance order.

iii. There shall be no discharge of produced water to natural or man-made water bodies located in intermediate, brackish, or saline marsh areas after January 1, 1999.

[See Prior Text in C.3-5.f]

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular Section 2074(B).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Water Resources, LR 15:261 (April 1989), amended LR 17:263 (March 1991), LR