

PROPOSED REGULATORY CHANGES FOR COMMERCIAL E&P WASTE FACILITIES IN LOUISIANA

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ABSTRACT

The Office of Conservation (Conservation) of the Louisiana Department of Natural Resources recently initiated promulgation of rule changes regarding regulation of commercial exploration and production (E&P) waste treatment and disposal facilities in Louisiana.

The basis for the proposed regulatory changes began with implementation of a comprehensive E&P waste sampling and analytical testing program implemented statewide as a result of concerns voiced by residents living near a commercial E&P waste treatment and disposal facility in Grand Bois, Louisiana. Upon completion of the statewide testing program, sample results were then validated and statistically analyzed by Louisiana State University to characterize E&P waste received by Louisiana commercial facilities. Following the conclusion of E&P waste characterization, a comprehensive health risk analysis of existing commercial facility operations in Louisiana was finalized by a contract toxicologist and submitted to Conservation with health protective recommendations, thus establishing the impetus for promulgating the proposed regulatory changes.

Recommendations submitted to Conservation for implementing regulatory changes are discussed as relates to proposed revisions to LAC 43:XIX.Subpart 1.Chapter 5 which will be promulgated by Conservation for the regulation of Louisiana commercial E&P waste facilities.

INTRODUCTION

The Louisiana Department of Natural Resources (LDNR), Office of Conservation (Conservation) appreciates the opportunity to provide IPEC attendants an update on the current status of proposed regulatory revisions for Louisiana Commercial Oil and Gas Exploration and Production Waste Facilities.

The abstract provided to the IPEC committee earlier this year indicates the focus of this presentation would be on recommendations submitted to the Office of Conservation for rule promulgation. As Conservation is approaching final rule publication, it is appropriate to modify the scope of the presentation consistent with the present stage of rule development.

OBJECTIVE

Accordingly, the primary objective of this presentation is to provide a general overview of final revisions to Louisiana regulations specific to Commercial Oil and Gas E & P Waste Storage, Treatment and Disposal Facilities.

OUTLINE

To meet this objective, the presentation will proceed with discussions on 1) What prompted rule promulgation, 2) Which administrative steps are complete, 3) Where are we at now and 4) When will the final rule be published. The presentation will then proceed with identification of specific changes in the final rule with a final note on where additional information may be obtained.

HISTORICAL PERSPECTIVE

The basis for the proposed regulatory changes began with implementation of a comprehensive E&P Waste sampling and analytical testing program implemented statewide in May 1998 as a result of concerns voiced by residents living near a commercial E&P waste land treatment and disposal facility in Grand Bois, Louisiana. Upon completion of the statewide testing program, sample results were then validated and statistically analyzed by Louisiana State University to characterize E&P waste received by Louisiana commercial facilities. Following the conclusion of E&P waste characterization in March 1999, the results of a comprehensive health risk analysis of existing commercial facility operations in Louisiana was finalized by a contract toxicologist and a final report dated March 2001 was submitted to Conservation which included health protective recommendations, thus establishing the impetus for promulgating the proposed regulatory changes.

PROPOSED RULE PUBLICATION

On August 20, 2001, the Office of Conservation published a Notice of Intent in the Louisiana Register to adopt rules and regulations under the Louisiana Administrative Code, Title 43, Part 19, Subpart 1, Chapter 5, for the off-site storage, treatment and disposal of E&P Waste generated from the drilling and production of oil and gas wells. The proposed rule revisions published in the notice of intent were based on the reports and recommendations provided to the Office of Conservation by external professional consultants.

PUBLIC COMMENTS

The public hearing for the proposed revisions to LAC Title 43, Part 19, Subpart 1, Chapter 5 was held on September 27, 2001. The public comment period ended on October 11, 2001. During the comment period, the Office of Conservation received comments on the proposed rule from two oil and gas industry associations, two Louisiana permitted E&P Waste commercial facility operators and one environmental concern.

The Office of Conservation has completed review of all comments. The majority of the comments received were requests or recommendations for further clarification to new or existing rules. Comments were also provided which recommended revisions or additional regulatory provisions to certain sections of the original draft regulation.

FINAL RULE PREPARATION

In response to the comments received, the Office of Conservation has implemented changes to the proposed rule for those clarifications, recommendations and regulatory provisions determined to be consistent with established health risk and operational recommendations provided by external professional consultants. The target date for rule completion has been set for Friday, November 9, 2001. Upon completion, the final rule will be reported to the Louisiana Legislature and published in the Louisiana Register. The Office of Conservation anticipates implementation of the final rule on November 20, 2001.

REVISIONS TO LAC 43:XIX.SUBPART1. CHAPTER 5

The final version of Louisiana Commercial E&P Waste Facility regulations is near completion. As of November 6, 2001, the final rule consists, in part, of the following provisional changes:

1. Nonhazardous Oilfield Waste (NOW) has been changed to Exploration and Production Waste (E&P Waste).

2. Definitions are included for the following terms; Container, Drilling Waste, Residual, Sump, and Treatment.
3. E&P Waste descriptions:
 - A. Waste Type 01, Saltwater, Waste Type 06, Storage Tank Sludge, Waste Type 10, Washout Water, Waste Type 11, Washout Pit Water, Waste Type 12, Gas Plant Waste and Waste Type 15, Commercial Facility Waste, have been revised.
 - B. Waste Type 13, BS&W has been included in the definition of Waste Type 06, Storage Tank Sludge.
 - C. Waste Type 50, Salvageable hydrocarbons bound for permitted salvage oil operators has been included in the waste description table.
4. The rule includes provisions for generators to characterize E&P Waste.
5. Provisions have been included to allow generators the option to ship E&P Waste offsite to permitted Louisiana Department of Environmental Quality waste facilities which are authorized to receive such waste.
6. Waste Type 12, Gas Plant Waste Solids, will require testing and must meet acceptance criteria for benzene prior to shipment to permitted land treatment facilities. Placement of Waste Type 06, Storage Tank Sludge, into land treatment cells located less than 2000 feet from the nearest resident will be prohibited unless the material meets acceptance criteria for benzene.
7. Land treatment cells must be located a minimum distance of 1000 feet from the nearest resident.
8. All commercial facilities and transfer stations will be required to submit detailed Waste Management and Operations Plans.
9. All commercial facility and transfer station permits will be reviewed every five years to determine compliance with applicable permit requirements and conditions.
10. Definitions for major and minor permit modifications have been included in the final rule.
11. Provisions have been included for the Office of Conservation to refuse to issue, reissue or reinstate a commercial facility permit or authorization to any individual, partnership or other entity in violation of any provision of LAC 43:XIX.Subpart 1.
12. More than three Class II SWD injection wells will be allowed at commercial facilities.
13. Commercial facilities and transfer stations will no longer be required to submit E&P Waste Shipping Control Tickets (manifests) to the Office of Conservation.

14. Criteria has been established for analysis of benzene for facility monitor well water, under drain sump water, treated and reuse material for commercial facilities utilizing land treatment cells.

INTERNET WEB SITE LOCATION

The information presented during the presentation is intended to provide a brief overview of the current status of final rule promulgation. For additional information regarding existing Commercial E&P Waste Facility requirements, published proposed rule revisions, E&P Waste reports, recommendations and future publication of the final rule, visit the Louisiana Department of Natural Resources web site at www.dnr.state.la.us or contact the Injection and Mining Division at 225-342-5515.

On the web site, go to Web Central and access injection and mining under the Oil & Gas section. On the Injection and Mining Division screen, access the Exploration and Production Waste Management Section screen. Click on Proposed Changes to Statewide Order No. 29-B for Commercial E&P Waste Facilities.

OTHER DOCUMENTS OF INTEREST

Other documents of interest available for review include the Louisiana State University Air Emissions Report dated December 2000. Copies of this report may be obtained by contacting the Office of Conservation.

The objectives of the study were to identify and quantify emissions of hydrocarbons and hydrogen sulfide from the landfarm process at US Liquids, to identify operational activities associated with these emissions and to determine whether or not the extent of the emissions pose a threat to human health and the environment. Recommendations were to: 1) maintain the loading rates observed during the study period (low loading rates did not produce fluxes of concern), 2) further evaluate sulfide emissions from the sump system (only source of sulfides reported) and 3) implement a scientifically based cell management approach that would maintain benzene levels below levels of concern.

On August 14, 2001, the Agency for Toxic Substances and Disease Registry (ATSDR), Division of Health Assessment and Consultation completed their health consultation for the Grand Bois community. Copies of this document may be obtained by contacting the Office of Conservation or Peter Kowalski with ATSDR at 409-639-0658.

In this document, ATSDR recommended that the Louisiana Department of Environmental Quality (LDEQ) continue monitoring for total hydrocarbons, hydrogen sulfide and volatile organic compounds at the US Liquids air monitoring station. It was also recommended that LDEQ continue short-term sampling for volatile organic compounds at the Acadian Shipyard and US Liquids air monitoring stations.

ATSDR further recommended that the Office of Conservation and US Liquids should: 1) gain a better understanding of E&P waste activities which may result in short-term peak levels of benzene, toluene, xylene and hydrogen sulfide, 2) implement practical exposure reduction measures to prevent short-term volatile organic compound exposure to the community if a correlation is established between a specific activity and peak levels, 3) evaluate the potential impact of overall volatile organic compound emissions on the ambient air in the Grand Bois community prior to increasing waste loading at the US Liquids Grand Bois facility, 4) continue to restrict additional waste from entering the two cells closest to the Grand Bois community and 5) inform the residents of the conclusions and recommendations contained in the ATSDR Health Consultation.

Another document published by the USEPA Region 6 titled "US Liquids Corrective Action Evaluation" dated August 31, 2001 is also available. Copies of this document may be obtained by contacting Gary Miller at 214-665-8318.

Based on facility inspections and investigations, information from State and EPA files and communications with LDEQ, LDNR, Louisiana Office of Public Health and ATSDR, "the Hazardous Waste Enforcement Branch recommends that EPA take no corrective action under RCRA regarding US Liquids at this time".

CONCLUSION

Following comprehensive scientific evaluation and extensive participation from the public, academia, various state and federal agencies and industry, the Office of Conservation has completed proposed revisions to LAC 43:XIX.Subpart 1.Chapter 5 governing Louisiana Commercial Oil and Gas Exploration and Production Waste Facilities. Final rule promulgation is near completion with implementation set for November 20, 2001.