### RESPONSE TO COMMENTS

# Department of Natural Resources Office of Conservation

Title 43:XVII.Chapter 33

January 10, 2014

### Introduction:

The Commissioner of Conservation ("Commissioner") published a Notice of Intent in the October 20, 2013 edition of the Louisiana Register to amend existing rules LAC 43:XVII.Chapter 33 to carry out the provisions of Acts 368 and 369 of the 2013 Regular Session of the Legislature. A public hearing held November 26, 2013 afforded interested parties an opportunity to comment on the proposed rule amendment. Additionally, interested parties were able to submit written comments on the proposed rule amendment to the Office of Conservation throughout the public comment period, which closed December 6, 2013.

Having received written comments during the public comment period and after reviewing the transcript of the public hearing, the Commissioner's responses to those relevant comments received are provided hereafter.

1. Clarification is needed on the requirements for communication with public safety agencies on a local/parish level during emergencies.

This is addressed in LAC 43:XVII.3321.A, which requires applicants to provide a list of emergency contacts to be listed in an Emergency Action Plan. The required list will include local offices of homeland security and emergency preparedness and the Emergency Action Plan will require that these public safety officials shall be notified in the event of an emergency. Therefore, no change to the proposed rules is necessary.

**2.** The Office of Conservation should amend LAC 43:XVII.3303.F.1-2 to require a mandatory public hearing with public notice prior to granting any variance.

This is addressed in LAC 43:XVII.3303.F.2, which includes the requirements for a public hearing for variances. Therefore, the no change to the proposed rules is necessary.

**3.** There have been several comments regarding the insufficiency of LAC 43:XVII.3309.I.8 regarding public notice of an unauthorized escape or discharge from a solution-mining well.

LAC 43:XVII.3309.I.8 requires operators to notify the Office of Conservation within 24 hours of any unauthorized discharge resulting in noncompliance with these rules that may endanger the environment, or the health, safety and welfare of the public. Such discharge would also require notification of local public safety officials in conformance with an approved Emergency Action

Plan as required by LAC 43:XVII.3321.A. Therefore, no change to the proposed regulations is necessary.

**4.** There have been several comments regarding the insufficiency of the public's participation in the permitting process under LAC 43:XVII.3311.

The Office of Conservation has consistently provided public notice and an opportunity for public hearing in accordance with Office of Conservation Guidance Statement IMD-GS-08 which concerns public notice and public hearing requirements and is available on the Injection & Mining Division webpage. The proposed rules have been amended to be consistent with these current requirements. The applicant for a solution-mining cavern and well is required to publish a notice of intent to file an application in both the official state journal and the appropriate official parish journal at least 30 days, but no more than 180 days, before submitting an application to the Office of Conservation. Following submission and if and when the Office of Conservation deems an application to be complete then a notice of the application shall be published in the official state journal and the appropriate official parish journal. If requested, a public hearing is held to accept public comments. Interested parties are also allowed to submit any written comments on such an application within the public comment period. These opportunities for public participation exceed the requirements of the Louisiana Administrative Procedure Act and seem reasonably certain to provide notice and an opportunity for public participation in the permitting process. Therefore, no change to the proposed rules is necessary.

**5.** There are several comments regarding notice to property owners near a cavern in LAC 43:XVII.3311.D.1.a.

This is addressed in LAC 43:XVII.3311.D.2.a, which requires that public notice be published by the Office of Conservation in the legal advertisement section of the official state journal and the official journal of the parish of the proposed project location. Additionally, the location of solution-mining wells and caverns are required to be recorded in the parish's conveyance and mortgage offices under LAC 43:XVII.3309.N and LAC 43:XVII.3311.H.5. Therefore, no change to the proposed regulations is necessary.

**6.** The Office of Conservation should amend LAC 43:XVII.3311.D.2 to require notification of all property owners within 1320 feet of the facility's boundary and operators of existing projects located on or within the salt stock of a scheduled public hearing.

The Office of Conservation has consistently provided public notice and an opportunity for public hearing in accordance with Office of Conservation Guidance Statement IMD-GS-08 which concerns public notice and public hearing requirements and is available on the Injection & Mining Division webpage. The proposed rules have been amended to clarify these current requirements. The applicant for a solution-mining cavern and well is required to publish a notice of intent to file an application in both the official state journal and the appropriate official parish journal at least 30 days, but no more than 180 days, before submitting an application to the Office of Conservation. If and when the Office of Conservation deems an application to be complete then a notice of the application shall be published in the official state journal and the appropriate official parish journal. If requested, a public hearing is held to accept public

comments. Interested parties are also allowed to submit any written comments on such an application within the public comment period. These opportunities for public participation exceed the requirements of the Louisiana Administrative Procedure Act and seem reasonably certain to provide notice and an opportunity for public participation in the permitting process. Therefore, no change to the proposed rules is necessary.

7. The Office of Conservation should amend LAC 43:XVII.3303.F.2 by replacing "at a public hearing" with "to the Office of Conservation."

This comment is not accepted because LAC 43:XVII.3303.F.2 formally promulgates the current practice of the Office of Conservation, which requires a public hearing and has proven to be reasonable and appropriate.

8. The Office of Conservation should amend LAC 43:XVII.3309.I.2 and LAC 43:XVII.3319.C to recognize that activity that is non-invasive should not require notification and approval of the Office of Conservation prior to work.

This comment is not accepted as the Office of Conservation requires the opportunity to review and witness any work performed on the well, including non-invasive work and therefore notification and approval is necessary.

9. No public hearing should be required for minor permit changes, modifications, amendments, variances, or exceptions under LAC 43:XVII.3311.D.

This comment is not accepted because this requirement codifies current practices of the Office of Conservation for regulation of solution-mining wells, which has proven to be reasonable and appropriate.

10. The Office of Conservation should amend LAC 43:XVII.3311.H.5 so there is no requirement for the filing of the final permit in the parish mortgage and conveyance records.

This comment is not accepted because LAC 43:XVII.311.H.5 formally promulgates the current practices of the Office of Conservation that has proven reasonable and appropriate as a requirement for solution-mining wells.

11. The Office of Conservation should amend LAC 43:XVII.3309.F.2 by removing the term "and related facility," thus relieving the operator of the obligation to address escapes, discharges, or releases as it is covered under other state agency authority.

As found in these regulations, the definition of "facility" is limited to "include land or appurtenances thereto, that is subject to these regulations," therefore this comment is not accepted.

12. The Office of Conservation should amend LAC 43:XVII.3327.E.2 to extend the deadline

to sixty (60) days to obtain, compile, and submit mechanical integrity pressure and leak test results to the Office of Conservation.

This comment is accepted to ensure that operators have a reasonable time to obtain, compile and submit mechanical integrity pressure and leak tests and then submit written procedures for rehabilitation.

**13.** The Office of Conservation should amend LAC 43:XVII.3317.F to require the shutdown of solution-mining wells that do not have two hanging strings.

The proposed regulations do not allow solution-mining wells to have two hanging strings into the salt. However, the Commissioner of Conservation may approve a single hanging string into the salt for dual bore mining only, which is defined in LAC 43:XVII.3301. Therefore no change to LAC 43:XVII.3317.F was made.

**14.** The Office of Conservation should amend LAC 43:XVII.3317.C to recognize that no additional casing and cementing should be required for wells existing in caverns before the effective date of these rules and regulations and that are being used for solutionmining.

This is addressed in LAC 43:XVII.3303.B & F, which states that except where noted in specific provisions of these rules and regulations, the Office of Conservation may allow, on a case-by-case basis, exceptions or variances to these regulations. The granting of exceptions or variances to these rules and regulations shall only be considered upon proper showing by the applicant, owner, or operator at a public hearing that such exception or variance is reasonable, justified by the particular circumstances, and consistent with the intent of these rules and regulations regarding physical and environmental safety and the prevention of waste. Further, solution-mining wells in existence, as of the effective date of these rules, may operate in accordance with alternative means of compliance approved by the Commissioner of Conservation ensuring comparable or greater safety of personnel and property, protection of the environment and public, quality of operations and maintenance, and protection of the USDW. Therefore no change to the proposed rules is necessary.

**15.** The regulations should include a provision that subsidence surveys must be conducted once a year within a 2 mile radius area of the cavern and that a community meeting be held within 30 days of receiving the results of the subsidence survey.

The annual monitoring schedule for subsidence surveys is already required by the proposed regulations. The surveys submitted to the Office of Conservation are public records and therefore available for public inspection and copying in accordance with La. R.S. 44:1, et seq., and other applicable law. Therefore, the comments are not adopted.

**16.** The Office of Conservation should amend LAC 43:XVII.3301 to expand the definition of "Catastrophic Collapse" to include the collapse of the side strata.

The collapse of the side strata along the edge of a salt cavern and/or dome is already

incorporated in the proposed definition as the sudden or utter failure of the overlying strata caused by weakening of underlying sediment. Therefore, no change to the proposed regulations is necessary.

17. There have been several comments regarding the insufficiency of LAC 43:XVII.3309.F.3.a to provide criteria and details for assistance requirements by operators to residents, particularly the method and amount of the reimbursement to all parties deemed to be at immediate potential risk in the event of a sinkhole developing or other incidents that requires evacuation.

Act 368 of the 2013 Legislative Session provides in part that the Commissioner of Conservation shall adopt rules which require permits for solution-mining to include, "assistance to residents of areas deemed to be at immediate potential risk in the event of a sinkhole developing or other incident that requires evacuation." Evacuation assistance must be distinguished from other potential compensation or damages which residents may or may not be entitled to. These private reimbursement and damage claims arise from general laws and are under the authority of the courts to administer in the event of a dispute. Evacuation assistance as used in these proposed rules, on the other hand, contemplates assistance for evacuation related costs to those residents under an evacuation order precipitated by a sinkhole or other incident associated with operations of a solution-mining cavern and its related injection well. The evacuation assistance unlike private claims for damage are intended to provide help and support during the pendency of the evacuation only.

Some of the comments regarding evacuation assistance recommend establishing in these rules a set amount which evacuated residents will receive as assistance. After careful consideration, the Office of Conservation has determined it would not be appropriate to establish a specific evacuation assistance amount in these rules, as such amount may be unsuitable and fail to account for specific emergency situations in the future which are not easily foreseeable at this time and further cannot accurately account for changes in costs over time. The Office of Conservation does however recognize the need to clarify how it plans to establish the evacuation assistance amount. Therefore following an evacuation order by any appropriate state or local official associated with a sinkhole or other incident at a solution-mining facility, the Commissioner of Conservation will consult with local governmental officials to help establish an evacuation assistance amount based on anticipated evacuation expenses. If any interested party wishes to propose a different amount then, the Commissioner of Conservation may call a public hearing at which time he would take testimony. The original evacuation assistance amount will remain in effect until either he makes a final decision as to the amount following the public hearing or the evacuation order is lifted, whichever occurs first. To clarify this procedure, additional language has been added to the proposed regulations at LAC 43:XVII.3321.J.

**18.** There should be definitions of evacuation and relocation added to these proposed regulations.

The law governing evacuations and whether or not such evacuation would include forced evacuation is found at La. R.S. 29:721, et seq. These laws do not empower the Commissioner of Conservation to declare an evacuation. So as to avoid conflict with these statutes, the proposed

rules will not attempt to clarify or modify the definitions regarding evacuations.

**19.** The Office of Conservation should amend LAC 43:XVII.3315.C to prohibit the permitting or continued operation of new coalesced caverns or caverns that will coalesce.

Any newly permitted coalesced caverns requires public notice and public hearing upon request. The Office of Conservation will have to make site specific considerations regarding the potential impacts on public safety and the environment as well as any potential benefits associated with such a proposal prior to making a permit decision. There may be certain specific situations where allowing two wells to solution mine caverns intended to coalesce is as safe and more efficient than one well solution mining a single cavern. Therefore, to allow such site specific considerations, no change to this section of the proposed rules has been made.

**20.** The Office of Conservation should amend LAC 43:XVII.3315.C to allow the intentional connection of two caverns for U-Tube production.

This comment is already addressed in LAC 43:XVII.3315.C. Therefore, no change to the proposed rules is necessary.

**21.** There have been several comments that the regulations should require operators to have proof of adequate insurance and that it be available to the public.

LAC 43:XVII.3307.B.11 and LAC 43:XVII.3309.B require that the owner or operator of a solution-mining well shall maintain financial responsibility and the resources to close, plug and abandon and where necessary, post-closure care of the solution-mining well, cavern, and related facility as prescribed by the Office of Conservation. Further, the public does have the right to inspect, copy, and reproduce those records as provided for under the Public Records Law enacted by La. R.S. 44:1 et seq. Therefore, no change to the proposed regulations is necessary.

**22.** The Office of Conservation should LAC 43:XVII.3309.B.2 to allow sixty (60) days to secure financial security.

This comment is not accepted as the proposed rule is consistent with current requirements in Statewide Order No. 29-N-1, which has proven to be reasonable and appropriate.

**23.** The regulations should include language that states, "new caverns must use the latest technology to determine the edge of the salt and contours."

The proposed regulations mandate that edge of salt determinations be updated as new information becomes available and at a minimum at least once every five years. The specific language proposed in this comment causes concern because the term "latest technology" is unclear and may lead to confusion regarding the requirement. The latest technology is not always proven technology and more accurate information regarding the distance to edge of salt may often be gained from traditional technologies. Therefore, this change was not made to the proposed regulations.

**24.** *Permits should be reviewed every three years instead of every five years.* 

The five year permit review required by LAC 43:XVII.3309.K sets forth a maximum time period between permit reviews, though more frequent review is possible. The Commissioner of Conservation does not need to wait for the five year time-period to run prior to a review, as he is authorized to act on his own to modify permit conditions, terminate permits, or suspend a permit for cause pursuant to LAC 43:XVII.3311.K for cause. One of the primary areas under review every five years is the distance to edge of salt. In geological terms as well as technological, the Office of Conservation believes that review once every five years is a reasonable time frame, especially considering that a more frequent review is possible upon the discovery of any new information necessitating such a review. Therefore this aspect of the proposed rules was not amended or altered.

**25.** Permit applications should include detailed 3-D seismology, geological, and hydrological reports of any salt dome cavern near an aquifer.

This is addressed in LAC 43:XVII.3313.B, which requires the applicant, owner, or operator to do a thorough geological, geophysical, geomechanical, and geochemical evaluation of the salt stock. Therefore, no change to the proposed regulations is necessary.

**26.** The Office of Conservation should add a requirement that the applicant provide a list of specific information by applicant to document that due consideration has been given to alternative sources of water for leaching of cavities.

The section of the proposed regulations cited concerns a finding of fact which must be made by the Commissioner of Conservation upon review of and prior to determining that an application for a solution-mining well and cavern is complete. Therefore, the applicant will have to provide the specific information it deems supports that it has provided due consideration as to alternative sources of water for leaching activities. A determination of whether or not the applicant has supplied information sufficient to make this finding, it will be made following review of the specific application, which would ultimately be subject to public notice, public hearing, and public comment. This requirement has been added to LAC 43:XVII.3311.F.1.h.

**27.** To avoid confusion, Office of Conservation should amend LAC 43:XVII.3303.A to require documentation that due consideration has been given to alternative sources of water for leaching cavities.

This comment is accepted and is reflected in LAC 43:XVII.3311.F.1.h to correct a typographical error.

**28.** The Office of Conservation should amend LAC 43:XVII.3303.B.2 to establish a specific time frame for the Office of Conservation to render a final determination for variance requests or applicants of alternative means of compliance.

Due to site specific analysis and the possibility that additional information may be required, a set time period for the Office of Conservation to review variance requests or applications for

alternative means of compliance by owners or operators of solution-mining wells would hinder proper oversight by the Office of Conservation. In the interest of public safety, the orderly development of natural resources, and the environment, the Office of Conservation staff must have sufficient time to adequately and diligently review all requests. If any operator/applicant is not forthcoming with the information necessary for the Office of Conservation to make a timely decision, then the Office of Conservation will undertake appropriate enforcement actions against that operator/applicant. Therefore the proposed change was not adopted.

29. LAC 43:XVII.3311.H.4 and LAC 43:XVII.3311.I.2 should be amended to include information on how the public can appeal the granting of the permit and how the appeal of the granted permit impacts the effective date of the permit.

The public right for judicial review of any and all administrative actions of the Commissioner of Conservation, including any action involving solution-mining wells, is set forth in La. R.S. 30:12. Therefore, no change to the proposed regulations is necessary.

**30.** LAC 43:XVII.3337.A.3.a.i and LAC 43:XVII.3337.B.1.a.i should be amended by removing the requirement that operators get a detailed cost estimate from a qualified, independent third party.

The use of a qualified, independent third party is consistent with other programs within the Office of Conservation where cost estimates are required. The simple reason for requiring a qualified third party prepare the cost estimate is to ensure there is no bias in the cost estimate provided to the Office of Conservation. Therefore the comment was not accepted.

31. The Office of Conservation should amend LAC 43:XVII.3337.A.5.a.i by removing the words "no less than" before "five years."

The five year monitoring period is considered a minimum time frame to establish static equilibrium for a cavern. A longer period of time may be required if deemed necessary should site specific conditions and monitoring results warrant. Therefore the proposed change to LAC 43:XVII.3337.A.5.a.i has not been made.

**32.** The Office of Conservation should amend the regulations to explicitly incorporate the requirements for an Environmental Impact Analysis.

The Environmental Impact Analysis (EIA) is a federal requirement of the National Environmental Policy Act (NEPA), therefore beyond the authority of the Commissioner of Conservation to enforce. The Office of Conservation recognizes the duty of the impact analysis, often referred to as the "IT Analysis," under the Save Ourselves v. La. Envtl. Control Comm'n, 452 So. 2d 1152 (La. 1984) and requires submittal and consideration as part of the permitting process. Therefore, no change was made to the proposed regulations.

**33.** The Office of Conservation should amend the proposed regulations to maintain previous protections of Statewide Order No. 29-N-1 particularly changing "shall" to "may" in LAC 43:XVII.3309.O.

This comment has been accepted to maintain consistency with the current requirements that have proven reasonable and appropriate.

34. The Office of Conservation should amend LAC 43:XVII.3307.G by removing the provision granting confidentiality.

This comment is not accepted as this provision grants the Office of Conservation the ability to require and utilize technical information that is otherwise proprietary under applicable law as part of the permitting process. A topical list of what is held confidential is publically available but the document itself is not.

**35.** The Office of Conservation should amend LAC 43:XVII.3307.D to plainly require the applicant to identify all wells and other manmade structures that penetrate the salt stock in response to the area of review requirements.

This information is already required in the proposed LAC 43:XVII.3307.D. Therefore, no change to the proposed rules is necessary.

**36.** The Office of Conservation should amend LAC 43:XVII.3307.C.7 to require structure contour mapping of the salt stock only within the area of review.

This comment is not accepted as this regulation formally promulgates an existing requirement of the Commissioner's Directive on Salt Cavern Locations in Relation to the Periphery of Salt Stock issued on January 30, 2013, which has proven to be reasonable and appropriate. Limiting the structure map of the salt stock to the Area of Review may result in inadequate subsurface control to accurately map the salt stock and identify relevant structural features. Further, the Area of Review is an evaluation of man-made penetrations into the salt to ensure protection of the Underground Sources of Drinking Water from injection activities associated with the solution-mining well, while structure contour mapping is also concerned with natural formations.

37. The Office of Conservation should amend LAC 43:XVII.3309.I.1 to change the requirement that operators notify the Office of Conservation of any change in the principal officers, management, owner, or operator from ten (10) to thirty (30).

This comment is not accepted as pursuant to federal regulations there is a ten (10) day notice requirement. Additionally, this requirement is consistent with LAC 43:3109.H.1 from Statewide Order No. 29-M-2.

**38.** There are several comments recommending the Office of Conservation amend LAC 43:XVII.3311.H.6 particularly the term "extenuating circumstances" be revised to read "just cause" and therefore consistent with language used in LAC 43:XVII.3309.J.3.

This comment is accepted as the standard for requesting an extension in LAC 43:XVII.3309.J.3 and LAC 43:XVII.3311.H.6 is inconsistent. To correct the typographical error, LAC 43:XVII.3311.H.6 is modified for consistency.

**39.** The regulations should include a provision allowing the Commissioner of Conservation to issue a penalty of \$50,000 per day for an operator's failure to comply when failure is due to the operator's negligence.

The Commissioner's authority to issue civil penalties against operators of solution-mining caverns and associated injection wells is set forth in La. R.S. 30:18 as amended by Act 367 of the 2013 Legislative Session. Act 367 of 2013 authorizes the Commissioner of Conservation to issue civil penalties for violations of the proposed rules and orders issued in accordance with his authority. In a situation where an operator has violated an order issued by the Commissioner of Conservation, the Commissioner is authorized to issue a civil penalty of up to \$50,000 for each day of violation regardless of whether he can prove that the operator acted negligently. The Commissioner may issue a civil penalty in the amount of not more than \$32,500 for each day of violation of a provision of the applicable laws and regulations, with an additional penalty of not more than \$1,000,000 when such violation is done intentionally, willfully, or knowingly and either results in a discharge or disposal that causes irreparable or severe damage to the environment or involves the discharge of a substance which endangers human life or health. These penalty amounts are consistent with the amounts which may be levied by the Department of Environmental Quality for violations of its permits, orders, statutes and rules. The Commissioner of Conservation is limited to the amount established by this statute and therefore the proposed amendment cannot be made without statutory amendments.

**40.** Regarding the requirement of reimbursement to parish government of its emergency response costs and evacuation assistance for residents in the evacuation area, solutionmining should be considered an inherently hazardous activity.

As to the portion of this comment regarding the reimbursement of Parish costs and evacuation assistance addressed at LAC 43:XVII.3309.F.3, permits issued under the proposed rules will now require both. These new provisions ensure compliance with Act 368 of the 2013 Legislative Session by requiring that all permits for solution-mining caverns and wells mandate both evacuation assistance and reimbursement of parish and state response costs in case of emergency.

"Ultrahazardous activity" is governed by the provisions of Louisiana Civil Code Article 667, which is beyond the authority of the Commissioner of Conservation to alter. Furthermore, consideration of Civil Code Article 667 was not included in the notice of intent for these regulations. Therefore no change to these portions of the proposed rules has been made.

**41.** The Office of Conservation should amend LAC 43:XVII.3303.B.2.

This comment has been accepted and is reflected in LAC 43:XVII.3303.B.2 in order to provide further clarification.

**42.** The Office of Conservation should amend LAC 43:XVII.3303.B.3.

This comment has been accepted and is reflected in LAC 43:XVII.3303.B.3 in order to provide

further clarification.

**43.** The Office of Conservation should amend LAC 43:XVII.3309.F.3.b by replacing "this Subsection" with "R.S. 30:4(M)."

This comment is accepted in part and reflected in LAC 43:XVII.3309.F.3 by replacing "this Subsection" in order to identify the appropriate regulations.

**44.** The Office of Conservation should amend LAC 43:XVII.3315.B.1.a by replacing the word "for" for "of" in the phrase "100 feet to the property."

This comment is accepted and reflected in LAC 43:XVII.3315.B.1.a.

45. The Office of Conservation should correct the typographical errors in LAC 43:XVII.3327.B.1&2.

This comment is accepted and reflected in LAC 43:XVII.3327.B.1&2.

**46.** The Office of Conservation should correct a typographical error in LAC 43:XVII.3329.B.3.

This comment is not accepted because it is not a typographical error.

**47.** The proposed rules should be amended to require that every salt dome have a sign and on that sign it will say what is stored in that salt dome, who to call if there is a problem, how much money is paid to the Parish, what royalties are being paid to the State, and what are the political contributions from the companies that operate those salt domes and to whom those companies donate their political contributions.

All solution-mining wells are required to have a sign, which is required to include the operator of record of the well, the name of the well, the well serial number, and any additional information required by the Commissioner of Conservation (See proposed LAC 43:XVII.3321.D.2 and past permits). Requirements for the disclosure of political contributions are governed by La. R.S. 42:1124, et seq., and are beyond the authority of the Commissioner of Conservation. State royalty payment amounts change and are not fixed, making reporting them on a sign impracticable. Further information on royalties to the State is public record and can be accessed in accordance with Louisiana's Public Records Law (See La. R.S. 44:1, et seq.). In addition to this information being available through already existing avenues, there is a real concern that requiring the amount of information proposed (which again would need to change every time a political contribution, tax assessment or royalty payment is made) would so clutter the required signage so as to make the critical information currently required on the signs difficult to quickly find. For these reasons, the proposed changes to the regulations are not accepted.

**48.** We need adequate security on the salt domes. Look at the Strategic Petroleum Reserve, it has armed guards.

Provisions on site security are found at LAC 43:XVII.3321.B. Matters of homeland security are beyond the regulatory authority of the Commissioner of Conservation and therefore no change to the proposed rules has been made.

**49.** There have been several comments regarding LAC 43:XVII.3315.B.2&3 particularly the spacing requirements for caverns.

The three hundred (300) feet spacing from the edge of salt stock was determined by taking the two hundred (200) foot minimum cavern separation from the current Statewide Order No. 29-M-2 regulations and adding a fifty percent (50%) safety factor of one hundred (100) feet. The current versions of Statewide Orders 29-M and 29-M-2 require the deepest cemented casing seat to extend a minimum of three hundred (300) feet below the top of salt and this requirement is duplicated in the proposed regulations. The absolute one hundred (100) foot minimum spacing from the edge of salt for all existing caverns is established as a safety factor due to potential margins of error in fixing the precise location of the edge of salt, uncertainty regarding the consistency of the salt stock at the salt dome/sedimentary formation interface, and as a barrier between cavern walls and adjacent formations with different pressures. The two hundred (200) foot minimum spacing requirement between caverns (or to any manmade structure) is the closest distance whether horizontal, vertical, or some oblique angle. These minimum distance requirements establish, for the first time, regulatory limits on new and existing solution-mining caverns and will make Louisiana one of the strongest jurisdictions for cavern safety. These proposed regulations exceed the federal requirements and are matched by few, if any, other states. Finally, it must always be remembered that these set back requirements are just one of the new protective measures enacted by these regulations. Enhanced monitoring as well as permit modification or revocation are possible options for the Commissioner of Conservation to pursue, even for those caverns that do not violate these minimum distance requirements should site specific conditions and monitoring results warrant such action. For these reasons, the proposed changes have not been made.

**50.** The Office of Conservation should amend LAC 43:XVII.3315.B.2 to recognize that solution-mining caverns may be operated and maintained with spacing less than set forth in rule.

LAC 43:XVII.3315.B.2 allows for continued operation of existing solution-mining caverns upon a proper showing by owner or operators of continued safe operations with appropriate monitoring. Therefore, no change to the proposed rules is necessary.

**51.** The proposed regulations need to require safe buffer zones around the salt domes to protect the public from release and explosion.

EPA regulations at 40 CFR Part 68.25 require that the operator perform and submit a worst case release scenario for toxic substances and their potential offsite consequences. The proposed LAC 43:XVII.321.A requires applicants to list emergency contacts in an Emergency Action Plan, including local public safety officials, who will be notified in the event of an emergency. Additionally, the location of a hydrocarbon storage cavern is required to be recorded in the

parish's conveyance and mortgage offices under LAC 43:XVII.309.N and LAC 43:XVII.311.H.5. Therefore, no change to the proposed rules has been made.

**52.** The Office of Conservation should amend LAC 43:XVII.3327.E.1-2 regarding failed mechanical integrity tests and subsequent rehabilitation should be amended to include a requirement for the Office of Conservation to review and approve the rehabilitation procedures prior to implementation by the operator.

This is addressed in LAC 43:XVII.3319.C, which requires that no remedial work of any kind shall be done on the solution-mining well or cavern without prior authorization from the Office of Conservation. Therefore no change to the proposed rules is necessary.

**53.** There are several comments suggesting the Office of Conservation amend LAC 43:XVII.327.E.4 to recognize that a cavern being plugged and abandoned because of a failed mechanical integrity test (MIT) cannot be required to re-establish mechanical integrity before plugging.

This comment is accepted and reflected in LAC 43:XVII.3337.A.5.b as currently there is no known way to rehabilitate a failed cavern to restore mechanical integrity.

**54.** The Office of Conservation should amend LAC 43:XVII.3337.B.2.c to recognize that if the cavern is closed as prescribed under LAC 43:XVII.3337.A.2, an owner or operator can no longer measure the pressure in the cavern.

Again, what is proposed to be monitored in post-closure is necessarily dependent on site specifics and technological capabilities at the time of closure. For example, the cavern pressure may be inferred by external monitoring, testing or surveys. Therefore, what will be required in the way of monitoring will be considered at the time the post-closure plan, including any updates, is submitted to the Office of Conservation. Therefore, no change was made to the proposed regulations.

**55.** The Office of Conservation should remove the exemption for expansion of existing wells.

By their very nature, active solution-mining caverns expand. The expansion in their shape and size is monitored by sonar caliper surveys pursuant to LAC 43:XVII.3329. Therefore the comment is not accepted.

**56.** The Office of Conservation should amend the definition of an "Emergency Shutdown Valve" in LAC 43:XVII.3301.

This comment is accepted and reflected in LAC 43:XVII.3301 by deleting the word "automatic".

**57.** The Office of Conservation should amend the definition of a "Previously Closed Cavern Well" in LAC 43:XVII.3301 by adding, "Previously closed cavern wells are not subject to the closure and post-closure requirements of §3337."

This comment is not accepted because monitoring may be required by active operators or at active sites, which may include previously closed cavern wells in order to protect public safety. environment, and the natural resources of Louisiana.

**58.** The Office of Conservation should remove LAC 43:XVII.3321.G.1 because emergency shutdown valves will be actuated manually, not automatically.

This is addressed in definition of Emergency Shutdown Valves in LAC 43:XVII.3301. Therefore no change to the proposed rules is necessary.

**59.** The Office of Conservation should amend LAC 43:XVII.3321.H.1&2 to recognize that daily inspections of the entire solution-mining site should not be required in all cases.

This comment is accepted and reflected in LAC 43:XVII.3321.H.2 by removing the word "entire" prior to the term "solution-mining site." A specific inspection area may be set forth in the permit.

**60.** The Office of Conservation should amend the LAC 43:XVII.3323.A.1 to allow for transmitters to be used in lieu of pressure gauges.

Because this comment recognizes current technology and meets the intent of the proposed rules, the comment is accepted and reflected in LAC 43:XVII.3323.A.1 by adding the terms "pressure sensors and transmitters."

**61.** The Office of Conservation should remove LAC 43:XVII.3323.A.2&3.

This comment is not accepted because operators have the option of automatic emergency shutdown valves.

**62.** The Office of Conservation should amend LAC 43:XVII.3331.A.4 to recognize that inactive wells do not have to comply with mechanical integrity requirements of LAC 43:XVII.3327.

The federal UIC regulations require that a mechanical integrity test be run on both active and inactive wells and state regulations must be as stringent as federal regulations. Therefore no change to the proposed rules has been made.

63. The Office of Conservation should amend LAC 43:XVII.3337.A to recognize that additional mechanical integrity pressure and leak tests should not be required before closure.

This comment is accepted and reflected in LAC 43:XVII.3337.A.5.b by removing the mandatory requirement to correct mechanical integrity failure of a cavern prior to being plugged and abandoned, as plugging and abandoning may, in specific situations, be the appropriate corrective action in some cases.

### **RESPONSE TO COMMENTS**

# Department of Natural Resources Office of Conservation

Title 43:XVII.Chapter 3

January 10, 2013

### Introduction:

The Commissioner of Conservation ("Commissioner") published a Notice of Intent in the October 20, 2013 edition of the Louisiana Register to amend existing rules LAC 43:XVII.Chapter 3 to carry out the provisions of Acts 368 and 369 of the 2013 Regular Session of the Legislature. A public hearing held November 26, 2013 afforded interested parties an opportunity to comment on the proposed rule amendment. Additionally, interested parties were able to submit written comments on the proposed rule amendment to the Office of Conservation throughout the public comment period, which closed December 6, 2013.

Having received written comments during the public comment period and after reviewing the transcript of the public hearing, the Commissioner's responses to those relevant comments received are provided hereafter.

1. There have been several comments requesting that the 10 day notice for a public hearing at LAC 43:XVII.303 be changed to a 30 day notice for a public comment.

This comment has been accepted and reflected in LAC 43:XVII.303 and LAC 43:XVII.311.D.2.a, as this change makes the notice requirement consistent with the notice requirements for the original permit application.

2. There have been several comments regarding the insufficiency of the public's participation in the permitting process under LAC 43:XVII.311.

The Office of Conservation has consistently provided public notice and an opportunity for public hearing in accordance with Office of Conservation Guidance Statement IMD-GS-08 which concerns public notice and public hearing requirements and is available on the Injection & Mining Division webpage. The proposed rules have been amended consistent with these current requirements. The applicant for a hydrocarbon storage cavern and well is required to publish a notice of intent to file an application in both the official state journal and the appropriate official parish journal at least 30 days, but no more than 180 days, before submitting an application to the Office of Conservation. Following submission and if and when the Office of Conservation deems an application to be complete then a notice of the application and of a public hearing on the application shall be published in the official state journal and the appropriate official parish journal at least 30 days prior to the public hearing. In addition to the public hearing, interested parties are also allowed to submit any comments on such an application within the public comment period, which typically extends for at least one-week following adjournment of the

public hearing. These opportunities for public participation exceed the requirements of the Louisiana Administrative Procedure Act and seem reasonably certain to provide notice and an opportunity for public participation in the permitting process. Therefore, no change to the proposed rules is necessary.

3. Clarification is needed on the requirements for communication with public safety agencies on a local/parish level during emergencies.

This is addressed in LAC 43:XVII.321.A, which requires applicants to provide a list of emergency contacts to be notified in an Emergency Action Plan. The required list will include local offices of homeland security and emergency preparedness and the Emergency Action Plan will require that these public safety officials shall be notified in the event of an emergency. Therefore, no change to the proposed rules is necessary.

4. There have been several comments regarding the insufficiency of LAC 43:XVII.309.I.8 regarding public notice of an unauthorized escape or discharge from a hydrocarbon storage well.

LAC 43:XVII.309.I.8 requires operators to notify the Office of Conservation within 24 hours of any unauthorized discharge resulting in noncompliance with these rules that may endanger the environment, or the health, safety and welfare of the public. Such discharge would also require notification of local public safety officials in conformance with an approved Emergency Action Plan as required by LAC 43:XVII.321.A.

5. Any variance to a permit should be made available to the public and persons within a mile radius of the facility, and have an opportunity to be heard.

These regulations require that all variances be presented at a public hearing following public notice in the same manner as public notice for permit applications pursuant to LAC 43:XVII.303.B and F.2. Additionally, all variance requests will be available as part of the public record for that hearing.

6. There are several comments regarding the limitations on the mailing of notice to property owners within 1320 feet around a cavern in LAC 43:XVII.311.D.2.b.iii.

This is addressed in LAC 43:XVII.311.D.2.a, which requires that public notice be published by the Office of Conservation in the legal advertisement section of the official state journal and the official journal of the parish in which the project is located. Additionally, as far as notice in case of emergency, the appropriate emergency response agencies and organizations are required to be notified and be able to notify members of the public in the vicinity as the situation necessitates.

7. LAC 43:XVII.309.N should be amended to allow twelve (12), not six (6) months, to complete recordation of existing wells.

This reporting requirement provides equal or greater time than many current Office of Conservation requirements for recording plats, such as oil and gas unitization plats, which has

proven to be reasonable and appropriate. Based upon several years of regulatory experience involving plat recordation requirements and having not previously heard a complaint as to a shortage of surveyors or other consultants necessary for recording plats, the Office of Conservation sees no reason to provide additional time. This is especially true when considering that during certain periods of peak oil and gas unitization activity, no delays in plat recordation were identified. Therefore, the comment is not adopted.

8. LAC 43:XVII.311.C.2 should be amended to require notice of a site visit by Office of Conservation staff be provided to the operator in a reasonable amount of time in advance of the site visit specifically by phone or email.

Appropriate regulatory oversight requires the ability for the Office of Conservation to conduct unscheduled site inspections. Therefore this comment is not accepted.

9. The Office of Conservation should amend LAC 43:XVII.301.G (SIC) and LAC 43:XVII.303.F to require a mandatory public hearing with public notice prior to granting any variance.

All variance requests require public notice and a public hearing. The public notice requirements are addressed in LAC 43:XVII.311.G particularly in LAC 43:XVII.311.G.2, which requires that all public hearings shall be publicly noticed as required by these rules and regulations. The public hearing requirements for variances are addressed in LAC 43:XVII.303.F.2. Therefore, no change to the proposed rules is necessary.

10. LAC 43:XVII.303.E.2 should be amended to require a public hearing before exempting an aquifer from these regulations.

The proposed regulations set forth the procedure for a party to request that an aquifer be exempted. Upon public notice, any interested party may request a public hearing. The decision to exempt an aguifer from the UIC regulations, however, is ultimately made by the U.S. Environmental Protection Agency. Therefore, the comment is not adopted.

11. LAC 43:XVII.303.F.1-2 should be amended by removing the requirement that all exceptions and variance requests (even non-substantive or immaterial requests) require a public hearing.

The current regulations in Statewide Order 29-M require a public hearing for the specific variances listed in LAC 43:XVII.301.G and this requirement has been carried forward and placed into the proposed regulations. Therefore this comment is not accepted.

12. The Office of Conservation should amend LAC 43:XVII.333 to require inactive well reports be submitted annually.

Both active and inactive hydrocarbon storage caverns and wells need to be monitored and reported on regularly. Many of the risks associated with an active cavern still exist with an inactive one. Therefore, this comment is not accepted.

13. LAC 43:XVII.333.A should be amended to require data be collected monthly and submitted annually.

The collection and reporting requirements for monitoring pressures, volume, injection status, etc. are consistent with federal UIC requirements and balance the need for up to date information without imposing an undue burden. Therefore, the proposed change to the rules has not been adopted.

14. For clarification, the language of LAC 43:XVII.309.J.2 should be amended considering that a construction period of one year is not adequate for operators or owners who are solution-mining wells for conversion to a hydrocarbon storage cavern.

The one year period does not begin to run until a permit to convert is issued by the Office of Conservation. A permit to convert pursuant to proposed Statewide Order No. 29-M-3 is not issued until solution-mining has been completed and the Office of Conservation has confirmed that the cavern and well are properly constructed in accordance with that permit to construct. Therefore, the one year time limit is only for conversion of the well and not for solution-mining and conversion together. Additionally, this comment is addressed in LAC 43:XVII.309.J.3 or LAC 43:XVII.311.H.6, which allows an applicant to apply for an extension. Therefore the comment is not adopted.

15. The Office of Conservation should amend LAC 43:XVII.311.H.6 particularly the term "extenuating circumstances" should be revised to read "just cause" and therefore consistent with language used in LAC 43:XVII.309.J.3.

This comment is accepted as the standard for requesting an extension in that LAC 43:XVII.309.J.3 and LAC 43:XVII.311.H.6 are inconsistent. To correct the typographical error, LAC 43:XVII.311.H.6 has been modified.

16. The language of LAC 43:XVII.317.C.6 should be amended to recognize that existing caverns that have two casing seats cemented in the salt are sufficient, regardless of the depth into the salt.

The Office of Conservation cannot agree that existing caverns that have two casing seats cemented into the salt, regardless of depth, are sufficient in every situation. Rather, such a determination may only be made on a well by well basis. This is addressed in LAC 43:XVII.303.F, which states that except where noted in specific provisions of these rules and regulations, the Office of Conservation may allow, on a case-by-case basis, exceptions or variances to these regulations. The granting of exceptions or variances to these rules and regulations shall only be considered upon proper showing by the applicant, owner, or operator at a public hearing that such exception or variance is reasonable, justified by the particular circumstances, and consistent with the intent of these rules and regulations regarding physical and environmental safety and the prevention of waste. Further, hydrocarbon storage caverns in existence, as of the effective date of these rules, may operate in accordance with alternative

means of compliance approved by the Commissioner of Conservation ensuring comparable or greater safety of personnel and property, protection of the environment and public, quality of operations and maintenance, and protection of the USDW. Therefore, the proposed change has not been adopted.

17. The Office of Conservation should amend LAC 43:XVII.337.A.4.c to recognize that there may be caverns where the roof may develop a "pocket" that prevents product from fully being removed.

The proposed regulations are intended to address hydrocarbon storage wells and caverns generally and not every potential situation that may or may not exist. Therefore, the specific concern mentioned in this comment is addressed in LAC 43:XVII.303.F, which states that except where noted in specific provisions of these rules and regulations, the Office of Conservation may allow, on a case-by-case basis, exceptions or variances to these regulations. The granting of exceptions or variances to these rules and regulations shall only be considered upon proper showing by the applicant, owner, or operator at a public hearing that such exception or variance is reasonable, justified by the particular circumstances, and consistent with the intent of these rules and regulations regarding physical and environmental safety and the prevention of waste. Further, hydrocarbon storage caverns in existence, as of the effective date of these rules, may operate in accordance with alternative means of compliance approved by the Commissioner of Conservation ensuring comparable or greater safety of personnel and property, protection of the environment and public, quality of operations and maintenance, and protection of the USDW. Therefore, the proposed change to the rules has not been adopted.

18. The Office of Conservation should amend LAC 43:XVII.303.F.1.a by adding "design and spacing" to the list of additional requirements.

This is addressed by the use of the word "construction" in the language of the rule. Therefore, no change to the proposed rules is necessary.

19. The Office of Conservation should amend LAC 43:XVII.317.G to recognize that wellhead and related components, including flowlines, can be manufactured of materials other than steel that may be structurally sound.

This comment is not accepted as steel fittings establish a minimum level of protection but applicants may apply for alternate means of compliance under LAC 43:XVII.303.F.3.

20. The regulations should include a provision that subsidence surveys must be conducted once a year within a 2 mile radius area of the cavern and that a community meeting be held within 30 days of receiving the results of the subsidence survey.

The proposed regulations mandate that subsidence surveys be conducted once every six months for natural gas storage, or once a year for liquid hydrocarbon storage and submitted to the Office of Conservation. The surveys submitted to the Office of Conservation are public records and therefore available for public inspection and copying in accordance with La. R.S. 44:1, et seq., and other applicable law. This monitoring frequency recognizes differences between storage

cavern types. For these reasons, the comment is not adopted.

21. There are several comments recommending the Office of Conservation amend the language of LAC 43:XVII.323.E.1 regarding the frequency of monitoring to require it annually.

The six month subsidence monitoring frequency is reasonable and appropriately balances the need for up to date information without unduly burdening operators.

22. LAC 43:XVII.317.A.2.b should be modified to include a definitive number of monitoring wells to be installed as a result of subsidence or catastrophic collapse.

Setting forth a specific number of monitoring wells to be installed as a result of subsidence or catastrophic collapse in the proposed regulations may not be sufficient to properly monitor groundwater. Such determinations are necessarily fact specific to the situation involved and hydrogeologic conditions and will be determined on a case by case basis. Therefore, no change was made to the proposed regulations.

23. The Office of Conservation should amend LAC 43:XVII.301 to expand the definition of "Catastrophic Collapse" to include the collapse of the side strata.

The collapse of the side strata along the edge of a salt cavern and/or dome is already incorporated in the proposed definition as the sudden or utter failure of the overlying strata caused by weakening of underlying sediment. Therefore, no change to the proposed regulations is necessary.

24. The Office of Conservation should amend LAC 43:XVII.301 regarding the definition of "Improved Sinkhole" particularly because karst depression is a term not usually associated with volcanic terrain.

This definition is taken directly from the Code of Federal Regulations Title 40, Article 146.3. as DNR's Underground Injection Control (UIC) Program was granted primacy by the U.S. Environmental Protection Agency in order to properly regulate "injection well[s]" within Louisiana. A "well" is defined by the EPA to include an "improved sinkhole." Therefore in order to ensure maintenance of primacy it is important that definitions governing Louisiana's UIC authority not be changed lightly. Furthermore, the Office of Conservation does not see that the definition attempts to associate karst depressions and volcanic terrain. It appears from a straightforward reading of the definition that an "improved sinkhole" may either be a "karst depression *or* other natural crevice found in volcanic terrain and other geologic settings have been modified by man for the purpose of directing and emplacing fluids into the subsurface." (*emphasis added*) For these reasons no change to this definition is planned.

25. There have been several comments regarding the insufficiency of LAC 43:XVII.309.F.3.a to provide criteria and details for assistance requirements by operators to residents, particularly the method and amount of the reimbursement to all parties deemed to be at immediate potential risk in the event of a sinkhole developing

or other incidents that requires evacuation.

Act 368 of the 2013 Legislative Session provides in part that the Commissioner of Conservation shall adopt rules which require permits for hydrocarbon storage caverns to include, "assistance to residents of areas deemed to be at immediate potential risk in the event of a sinkhole developing or other incident that requires evacuation." Evacuation assistance must be distinguished from other potential compensation or damages which residents may or may not be entitled to. These private reimbursement and damage claims arise from general laws and are under the authority of the courts to administer in the event of a dispute. Evacuation assistance for evacuation related costs as used in these proposed rules, on the other hand, contemplates assistance to those residents under an evacuation order precipitated by a sinkhole or other incident associated with operations of a hydrocarbon storage cavern and its related injection well. The evacuation assistance unlike private claims for damage are intended to provide help and support during the pendency of the evacuation only.

Some of the comments regarding evacuation assistance recommend establishing in these rules a set amount which evacuated residents will receive as assistance. After careful consideration, the Office of Conservation has determined that the establishment of a specific evacuation assistance amount in these rules, as such amount may be unsuitable and fail to account for specific emergency situations in the future which are not easily foreseeable at this time and further cannot accurately account for changes in costs over time. The Office of Conservation does however recognize the need to clarify how it plans to establish the evacuation assistance amount. Therefore following an evacuation order by any appropriate state or local official associated with a sinkhole or other incident at a hydrocarbon storage cavern facility, the Commissioner of Conservation will consult with local governmental officials to help establish an evacuation assistance amount based on anticipated evacuation expenses. If any interested party wishes to propose a different amount then, the Commissioner of Conservation may call a public hearing at which time he would take testimony. The original evacuation assistance amount will remain in effect until either he makes a final decision as to the amount following the public hearing or the evacuation order is lifted, whichever occurs first. To clarify this procedure, additional language has been added to the proposed regulations at LAC 43:XVII.321.L.

26. There should be definitions of evacuation and relocation added to these proposed regulations.

The law governing evacuations and whether or not such evacuation would include forced evacuation is found at La. R.S. 29:721, et seq. These laws do not empower the Commissioner of Conservation to declare an evacuation. So as to avoid conflict with these statutes, the proposed rules will not attempt to clarify or modify the definitions regarding evacuations.

27. The Office of Conservation should amend LAC 43:XVII.315.C to prohibit the permitting or continued operation of new coalesced caverns or caverns that will coalesce.

Any newly permitted coalesced caverns require public notice and public hearing. The Office of Conservation will have to make site specific considerations regarding the potential impacts on

public safety and the environment as well as any potential benefits associated with such a proposal prior to making a permit decision. Therefore, no change to this section of the proposed rules has been made.

28. There have been several comments that the regulations should require operators to have proof of adequate insurance and that it be available to the public.

LAC 43:XVII.307.B.11 and LAC 43:XVII.309.B require that the owner or operator of a hydrocarbon storage well shall maintain financial responsibility and the resources to close, plug and abandon and where necessary, post-closure care of the hydrocarbon storage well, cavern, and related facility as prescribed by the Office of Conservation. Further, the public does have the right to inspect, copy, and reproduce those records as provided for under the Public Records Law enacted by La. R.S. 44:1 et seq. Therefore no change was made to the proposed regulations.

29. LAC 43:XVII.337.A.3.a.i and LAC 43:XVII.337.B.1.a.i should be amended by removing the requirement that operators get a detailed cost estimate from a qualified, independent third party.

The use of a qualified, independent third party is consistent with other programs within the Office of Conservation where cost estimates are required. The simple reason for requiring a qualified third party prepare the cost estimate is to ensure there is no bias in the cost estimate provided to the Office of Conservation. Therefore, this comment is not adopted.

30. Permits should be reviewed every three years instead of every five years.

The five year permit review required by LAC 43:XVII.309.K sets forth a maximum time period between permit reviews, though more frequent review is possible. The Commissioner of Conservation does not need to wait for the five year time-period to run prior to a review, as he is authorized to act on his own to modify permit conditions, terminate permits, or suspend a permit for cause pursuant to LAC 43:XVII.311.K. One of the primary areas under review every five years is the distance to edge of salt. In geological terms as well as technological, the Office of Conservation believes that review once every five years is a reasonable time frame, especially considering that a more frequent review is possible upon the discovery of new information necessitating such a review. Therefore this aspect of the proposed rules was not amended or altered.

31. Permit applications should include detailed 3-D seismology, geological, and hydrological reports of any salt dome cavern near an aquifer.

This is addressed in LAC 43:XVII.313.B, which requires the applicant, owner, or operator to do a thorough geological, geophysical, geomechanical, and geochemical evaluation of the salt stock. Therefore no change to the proposed regulations is necessary.

32. There are several comments that hydrocarbon storage cavern expansion should require a permit.

Before a hydrocarbon storage cavern may be returned to storage after expansion, a sonar survey and mechanical integrity test must be run. In certain cases, where downhole work is required to solution-mine a hydrocarbon storage cavern a work permit is required prior to expansion. Although no new change is made, the Office of Conservation intends to study this issue further to consider future potential rulemaking.

33. The area-of-review of the radius around the well-bore in LAC 43:XVII.313.E.1.a should be changed from 1320 feet to 2640 feet.

This radius was established based upon U.S. Environmental Protection Agency requirements which seek to ensure a review of surrounding wells and well bores to ensure proper construction and in the case of plugged wells proper plugging to eliminate potential pathways for upward migration of stored hydrocarbons, brine water, or other liquids. The specific language in the proposed regulations make it clear that 1320 feet is the minimum distance for which such a review may be required. Larger areas of review may be required by the Office of Conservation depending on site specific and operational specific situations. Separate reviews are required by the proposed regulations to consider other risks to human health, safety and protection of the environment, which are not subject to the 1320 feet area of review minimum found in LAC 43:XVII.313.E.1.a. Therefore, no change to the proposed rules has been made.

34. The Office of Conservation should amend LAC 43:XVII.303.A.2.e to require specific information by applicant to document that due consideration has been given to alternative sources of water for leaching of cavities.

The section of the proposed regulations cited concerns a finding of fact which must be made by the Commissioner of Conservation upon review of and prior to determining that an application for a hydrocarbon storage well and cavern is complete. Therefore, the applicant will have to provide the specific information it deems supports that it has provided due consideration as to alternative sources of water for leaching activities. A determination whether or not the applicant has supplied information sufficient to make this finding will be made following review of the specific application, which would ultimately be subject to public notice, public hearing, and public comment. This requirement has been moved to LAC 43:XVII.311.F.2.h.

35. The Office of Conservation should amend LAC 43:XVII.303.B.2 to establish a specific time frame for the Office of Conservation to render a final determination for variance requests or applicants of alternative means of compliance.

Due to site specific analysis and the possibility that additional information may be required, a set time period for the Office of Conservation to review variance requests or applications for alternative means of compliance by owners or operators of hydrocarbon storage wells would hinder proper oversight by the Office of Conservation. In the interest of public safety, the orderly development of natural resources, and the environment, the Office of Conservation staff must have sufficient time to adequately and diligently review all requests. If any operator/applicant is not forthcoming with the information necessary for the Office of Conservation to make a timely decision, then the Office of Conservation may undertake appropriate enforcement actions against that operator/applicant. Therefore, the proposed change is not adopted.

36. LAC 43:XVII.311.H.4 and LAC 43:XVII.311.I.2 should be amended to include information on how the public can appeal the granting of the permit and how the appeal of the granted permit impacts the effective date of the permit.

The public right for judicial review of any and all administrative actions of the Commissioner of Conservation, including any action involving hydrocarbon storage caverns and wells, is set forth in La. R.S. 30:12.

37. The Office of Conservation should amend LAC 43:XVII.313.E.2 to include the identification of all producing formations of either active or depleted formations occurring anywhere within the vicinity of the salt dome as part of the Area of Review.

This comment is accepted in part. The requirement for assessment of well information and oil and gas activity within the vicinity of the salt dome in the area of the proposed hydrocarbon storage cavern/well is addressed at LAC 43:XVII.313.A.6.

38. LAC 43:XVII.305.D.2 should be amended to allow officers of LLCs to sign permit applications.

This is addressed in LAC 43:XVII.305.D.2.a-b. Therefore, no change to the proposed rules is necessary.

39. The Office of Conservation should amend LAC 43:XVII.313.F.1 to not require operators to properly plug and abandon wells or man-made structures that it does not control or own.

This comment is not accepted. All wells or man-made structures within the area-of-review which penetrate the salt stock must be properly constructed, completed, or plugged and abandoned or approved corrective action must be undertaken for an applicant to receive a permit. Additionally, minimum UIC requirements mandate that if the applicant is unable to properly plug abandoned wells within the area of review, then the application is deficient and must be denied or acceptable corrective action by the applicant must be proposed.

40. The Office of Conservation should amend the definition of "Permit" in LAC 43:XVII.301 by changing "to implement the requirements of these regulations" to "pursuant to Office of Conservation regulations."

This comment is not accepted as the language is consistent with other UIC regulations, including Statewide Order No. 29-N-1.

41. There are several comments suggesting the Office of Conservation amend LAC 43:XVII.303.A.2 to recognize that orders and permits have been issued with conditions, terms and language, which may not be identical to these proposed regulations.

This is addressed with LAC 43:XVII.303.B.3. By no later than one (1) year after the effective date of these rules the owner or operator shall provide for review documentation of any variance previously authorized by the Office of Conservation. This is further addressed in LAC 43:XVII.303.F, which allows for exceptions, variances, or alternative means of compliance to these regulations, which has proven to be reasonable and appropriate.

42. There are several comments suggesting the Office of Conservation amend LAC 43:XVII.311.H.6 and LAC 43:XVII.309.J.3 by adding the word "materially" before the word "changed" as extensions should not be denied merely because an insignificant condition has changed.

This comment is not accepted as the term "materially" is undefined and may lead to confusion regarding extension requests.

43. The Office of Conservation should amend LAC 43:XVII.337.A.6 to give operators sixty (60) days to submit a closure report as it is often a challenge to complete this work in thirty (30) days.

After careful consideration, this comment is accepted. Basic information regarding the actual plugging work performed will be available through the WH-1 report, which the operator is required to submit following closure within twenty (20) days following cessation of the closure work. Because it is foreseeable that receipt by the operator of the results of a mechanical integrity test, a sonar survey, and other technical data may prevent an operator from completing and submitting a closure report within thirty (30) days, the recommended change to sixty (60) days has been made.

44. LAC 43:XVII.337.B.1 should be amended to recognize that there can be certain conditions that should end post-closure requirements.

Any specific conditions to be considered in the post-closure process will be considered at the time that the post-closure plan is submitted to the Office of Conservation. The Office of Conservation cannot yet establish specific conditions regarding post-closure plans as such conditions are necessarily dependent on site specifics. Therefore the proposed comment is not adopted.

45. The Office of Conservation should amend LAC 43:XVII.337.B.2.c to recognize that a plugged and abandoned cavern does not have pressure to be monitored.

Again, what is proposed to be monitored in post-closure is necessarily dependent on site specifics and technological capabilities at the time of closure. For example, the cavern pressure may be inferred by external monitoring, testing or surveys. Therefore, what will be required in the way of monitoring will be considered at the time the post-closure plan, including any updates, is submitted to the Office of Conservation. Therefore, the proposed comment is not adopted.

46. The Office of Conservation should amend LAC 43:XVII.337.A.4.a.i by removing the

words "no less than" before "five years."

The five year monitoring period is a minimum time frame to establish static equilibrium for a cavern. A longer period of time may be required if deemed necessary.

47. The regulations should include a provision allowing the Commissioner of Conservation to issue a penalty of \$50,000 per day for an operator's failure to comply when failure is due to the operator's negligence.

The Commissioner's authority to issue civil penalties against operators of hydrocarbon storage caverns and associated injection wells is set forth in La. R.S. 30:18 as amended by Act 367 of the 2013 Legislative Session. Act 367 of 2013 authorizes the Commissioner of Conservation to issue civil penalties for violations of the proposed rules and orders issued in accordance with his authority. In a situation where an operator has violated an order issued by the Commissioner of Conservation, the Commissioner is authorized to issue a civil penalty of up to \$50,000 for each day of violation regardless of whether he can prove that the operator acted negligently. The Commissioner may issue a civil penalty in the amount of not more than \$32,500 for each day of violation of a provision of the applicable laws and regulations, with an additional penalty of not more than \$1,000,000 when such violation is done intentionally, willfully, or knowingly and either results in a discharge or disposal that causes irreparable or severe damage to the environment or involves the discharge of a substance which endangers human life or health. These penalty amounts are consistent with the amounts which may be levied by the Department of Environmental Quality for violations of its permits, orders, statutes and rules. The Commissioner of Conservation is limited to the amount established by this statute and therefore the proposed amendment is not accepted.

48. Regarding the requirement of reimbursement to parish government of its emergency response costs and evacuation assistance for residents in the evacuation area, hydrocarbon storage should be considered an inherently hazardous activity.

As to the portion of this comment regarding the reimbursement of Parish costs and evacuation assistance addressed at LAC 43:XVII.307.E.9, permits issued under the proposed rules will now require both. These new provisions ensure compliance with Act 368 of the 2013 Legislative Session by requiring that all permits for hydrocarbon storage caverns and wells mandate both evacuation assistance and reimbursement of parish and state response costs in case of emergency.

"Ultrahazardous activity" is governed by the provisions of Louisiana Civil Code Article 667, which would require a statutory amendment to change and is therefore beyond the authority of the Commissioner of Conservation to alter. Furthermore, consideration of Civil Code Article 667 was not included in the notice of intent for these regulations. Therefore the proposed change is not accepted.

49. Concerning LAC 43:XVII.303.A.2.c.i, the Office of Conservation should expand the requirements and stipulations governing the liability of stored materials.

Due to statutory authority, the Office of Conservation must limit LAC 43:XVII.303.A.2.c.i with current language, which states, liquid, liquefied, or gaseous hydrocarbons, which are injected and stored in a salt dome cavern, shall at all times be deemed the property of the injector, his successors or assigns, subject to the provisions of any contract with the affected land or mineral owners. Similarly based upon statutory authority, the operator of record for a particular hydrocarbon storage cavern is responsible for complying with the rules, regulations, and permit conditions established by the Office of Conservation. Private liability claims are governed by more general laws and are subject to enforcement by the judiciary, not the Office of Conservation.

50. The Office of Conservation should amend LAC 43:XVII.303 to prohibit the storage of radioactive materials and hazardous waste in storage caverns in salt domes.

The legislature has addressed the storage and disposal of radioactive materials in salt domes (see La. R.S. 30:2117(B)) and the Office of Conservation has promulgated rules for the disposal of E & P Wastes into salt caverns under Statewide Order No. 29-M-2 (LAC 43:XVII.Chapter 31). Therefore those specific legal and regulatory provisions will govern issues involving radioactive material and E&P waste storage/disposal and not the proposed regulations. Nothing in the proposed regulations is intended to changes or modifies those existing legal and regulatory requirements. Therefore no changes to the proposed rules have been made.

51. Language should be added to clarify which provisions of proposed Statewide Order No. 29-M apply to existing caverns and which apply to new caverns.

Pursuant to LAC 43:XVII.303.A, these proposed regulations apply equally to all new and existing caverns unless specifically stated otherwise. Therefore, no change to the proposed rule has been made.

52. There are several comments suggesting that the Office of Conservation amend the language of LAC 43:XVII.303.A.4 to correct the reference of "\$303.2."

This comment has been accepted and the typographical error in LAC 43:XVII.303.A.4 has been corrected.

53. There are several comments suggesting that the Office of Conservation amend the language of LAC 43:XVII.303.B.3 to replace "one year after authorization of these rules" with "one year after the effective date of these rules" to maintain consistency with other provisions of the proposed regulations.

This comment has been accepted and reflected in LAC 43:XVII.303.B.3 to maintain consistency with other provisions of the proposed regulations.

54. There have been several comments recommending the Office of Conservation amend the language of LAC 43:XVII.303.B.2 by replacing the words, "solution-mining" with "hydrocarbon storage."

These comments are accepted and the typographical error in LAC 43:XVII.303.B.2 has been corrected.

55. The Office of Conservation should amend the language of LAC 43:XVII.317.E by removing the word "allowances" and replaced with the term "alternate means of compliance as defined in LAC 43:XVII.303.F.3.

In order to maintain consistency with other provisions of the proposed rules, the comment is accepted and reflected in LAC 43:XVII.317.E.

56. The Office of Conservation should amend the language of the definition of the word "Contamination" in LAC 43:XVII.301 by substituting the word "for" in place of the word "or" in the phrase "unusable of their intended purposes."

This comment is accepted as a typographical error and reflected in LAC 43:XVII.301.

57. The Office of Conservation should amend LAC 43:XVII.303.F.1.a by changing the word "movements" to "movement."

This comment is accepted and the typographical error in LAC 43:XVII.303.F.1.a. has been corrected.

58. The proposed rules should be amended to require that every salt dome have a sign and on that sign it will say what is stored in that salt dome, who to call if there is a problem, how much money is paid to the Parish, what royalties are being paid to the State, and what are the political contributions from the companies that operate those salt domes and to whom those companies donate their political contributions.

All hydrocarbon storage wells are required to have a sign, which is required to include the operator of record of the well, the name of the well, the well serial number, and any additional information required by the Commissioner of Conservation (See proposed LAC 43:XVII.321.D.2 and past permits). Requirements for the disclosure of political contributions are governed by La. R.S. 42:1124, et seq., and are beyond the authority of the Commissioner of Conservation. State royalty payment amounts change and are not fixed, making reporting them on a sign impracticable. Further information on royalties to the State is public record and can be accessed in accordance with Louisiana's Public Records Law (See La. R.S. 44:1, et seq.). In addition to this information being available through already existing avenues, there is a real concern that requiring the amount of information proposed (which again would need to change every time a political contribution, tax assessment or royalty payment is made) would so clutter the required signage so as to make the critical information currently required on the signs difficult to quickly find. For these reasons, the proposed changes to the regulations are not accepted.

59. We need adequate security on the salt domes. Look at the Strategic Petroleum Reserve, it has armed guards.

Provisions on site security are found at LAC 43:XVII.321.B. Matters of homeland security are beyond the regulatory authority of the Commissioner of Conservation and therefore no change to the proposed rules has been made.

60. There have been several comments regarding LAC 43:XVII.315.B.2 & 3 particularly the spacing requirements for caverns.

The three hundred (300) feet spacing from the edge of salt stock was determined by taking the two hundred (200) foot minimum cavern separation from the current Statewide Order No. 29-M-2 regulations and adding a fifty percent (50%) safety factor of one hundred (100) feet. The current versions of Statewide Orders 29-M and 29-M-2 require the deepest cemented casing seat to extend a minimum of three hundred (300) feet below the top of salt and this requirement is duplicated in the proposed regulations. The absolute one hundred (100) foot minimum spacing from the edge of salt for all existing caverns is established as a safety factor due to potential margins of error in fixing the precise location of the edge of salt, uncertainty regarding the consistency of the salt stock at the salt dome/sedimentary formation interface, and as a barrier between cavern walls and adjacent formations with different pressures. The two hundred (200) foot minimum spacing requirement between caverns (or to any manmade structure) is the closest distance whether horizontal, vertical, or some oblique angle. These minimum distance requirements establish, for the first time, regulatory limits on new and existing hydrocarbon storage caverns and will make Louisiana one of the strongest jurisdictions for cavern safety. These proposed regulations exceed the federal requirements and are matched by few, if any, other states. Finally, it must always be remembered that these set back requirements are just one of the new protective measures enacted by these regulations. Enhanced monitoring as well as permit modification or revocation are possible options for the Commissioner of Conservation to pursue, even for those caverns that do not violate these minimum distance requirements should site specific conditions and monitoring results warrant. For these reasons, the proposed changes are not adopted.

61. LAC 43:XVII.315.B.3.c should be amended to allow operators at least one year from the effective date of these rules to remove wells from service having cavern walls one hundred (100) feet or less from the periphery of the salt stock.

This comment is not accepted. Based upon responses to a recent directive by the Commissioner of Conservation issued to all hydrocarbon storage well/cavern operators, no hydrocarbon storage caverns actively storing hydrocarbons were identified within this 100' boundary. However, the Office of Conservation realizes that due to operational limitations, should a hydrocarbon storage cavern actively storing hydrocarbons be identified within 100' of the periphery of the salt stock, it may take several months to empty the cavern after being removed from storage service. Therefore, additional time to remove wells from active storage is unnecessary.

62. The Office of Conservation should amend LAC 43:XVII.315.B.1.a and LAC 43:XVII.315.B.1.a.i to differentiate between consenting and non-consenting property owners and to further establish criteria for consent.

This comment is accepted in part by adding the phrase, "non-consenting" in front of "adjacent

property owners" to clarify that a party which has previously consented is not thereafter allowed to request a hearing to object, as without such clarification, the distinction between consenting parties and objecting parties would be meaningless.

63. The proposed regulations need to require safe buffer zones around the salt domes to protect the public from release and explosion.

EPA regulations at 40 CFR Part 68.25 require that the operator perform and submit a worst case release scenario for toxic substances and their potential offsite consequences. The proposed LAC 43:XVII.321.A requires applicants to list emergency contacts in an Emergency Action Plan, including local public safety officials, who will be notified in the event of an emergency. Additionally, the location of a hydrocarbon storage cavern is required to be recorded in the parish's conveyance and mortgage offices under LAC 43:XVII.309.N 43:XVII.311.H.5. Therefore, no change to the proposed rules has been made.

64. There are several comments recommending the Office of Conservation amend the language of LAC 43:XVII.303.F.1-2 regarding the burden of proof for a variance or exception.

In order to maintain consistency across the UIC program, the burden of proof as set forth in the proposed regulations was carried over from other UIC regulations, including Statewide Order No. 29-N-1, which has proven to be reasonable and appropriate. Therefore, no change to this portion of the proposed regulations has occurred.

65. There are several comments regarding the insufficiency of regulation of area permits.

All storage caverns permitted under Area Permits are subject to all siting, construction, operation, closure, and monitoring requirements of Statewide Order No. 29-M (Rev.3). Likewise, an area permit application requires the same public notice and public hearing opportunities as permit applications for individual hydrocarbon storage caverns/wells. Finally, area permits will be reviewed at least once every five years to ensure compliance with regulations and to make sure that any new information is considered which might require the modification, suspension or termination of area permits. In addition, any interested party may request a public hearing in accordance with La. R.S. 30:6. Finally, the area permit process conforms to the federal requirements under 40 C.F.R. § 146.33 (2013).

66. The Office of Conservation should amend the language of LAC 43:XVII.321.F to recognize that alarm systems often contain redundant detectors. As such, a failure of an individual detector should not necessarily trigger a warning or automatic shutdown.

This is addressed in LAC 43:XVII.303.F, which states that except where noted in specific provisions of these rules and regulations, the Office of Conservation may allow, on a case-bycase basis, exceptions or variances to these regulations. The granting of exceptions or variances to these rules and regulations shall only be considered upon proper showing by the applicant, owner, or operator at a public hearing that such exception or variance is reasonable, justified by the particular circumstances, and consistent with the intent of these rules and regulations regarding physical and environmental safety and the prevention of waste. Further, hydrocarbon storage caverns in existence, as of the effective date of these rules, may operate in accordance with alternative means of compliance approved by the Commissioner of Conservation ensuring comparable or greater safety of personnel and property, protection of the environment and public, quality of operations and maintenance, and protection of the USDW. Therefore, the comment is not adopted.

67. The Office of Conservation amend the language of LAC 43:XVII.321.G.2 to recognize that the safe design and operation of each cavern will be dependent on the systems that the operator has designed. So each system may not specifically contain "trips" for each item under LAC 43:XVII.321.F.

This is addressed in LAC 43:XVII.303.F, which states that except where noted in specific provisions of these rules and regulations, the Office of Conservation may allow, on a case-by-case basis, exceptions or variances to these regulations. The granting of exceptions or variances to these rules and regulations shall only be considered upon proper showing by the applicant, owner, or operator at a public hearing that such exception or variance is reasonable, justified by the particular circumstances, and consistent with the intent of these rules and regulations regarding physical and environmental safety and the prevention of waste. Further, hydrocarbon storage caverns in existence, as of the effective date of these rules, may operate in accordance with alternative means of compliance approved by the Commissioner of Conservation ensuring comparable or greater safety of personnel and property, protection of the environment and public, quality of operations and maintenance, and protection of the USDW. Therefore the comment is not adopted.

68. The regulations should include language that states, "new caverns must use the latest technology to determine the edge of the salt and contours."

The proposed regulations mandate that edge of salt determinations be updated as new information becomes available and at a minimum at least once every five years. The specific language proposed in this comment causes concern because the term "latest technology" is unclear and may lead to confusion regarding the requirement. The latest technology is not always proven technology and more accurate information regarding the distance to edge of salt may often be gained from traditional technologies. Therefore the comment is not adopted.

69. LAC 43:XVII.321.C should be modified to include language that while remote monitoring is acceptable, additionally operators must have two (2) personnel on site at all times.

Remote monitoring is often capable of allowing comparable, if not superior, monitoring of hydrocarbon storage well and cavern operations. In the case of some hydrocarbon storage caverns and wells, site conditions make on site presence by personnel at all times impracticable. The specifics of the sites and proposed monitoring and operations plans, as well as emergency response plans, must be reviewed on a site by site basis to determine what options provide adequate oversight and monitoring. Currently, the proposed rules at LAC 43:XVII.321.C require

any storage facility to have personnel on duty 24 hours per day at the storage facility unless a remote monitoring and control system approved by the Office of Conservation is installed with personnel on call 24 hours per day. Therefore this comment is not adopted.

70. The Office of Conservation should amend LAC 43:XVII.327.E.1-2 regarding failed mechanical integrity tests and subsequent rehabilitation should be amended to include a requirement for the Office of Conservation to review and approve the rehabilitation procedures prior to implementation by the operator.

This is addressed in LAC 43:XVII.319.B, which requires that no remedial work of any kind shall be done on the hydrocarbon storage well or cavern without prior authorization from the Office of Conservation. Therefore, no change to the proposed rules is necessary.

71. LAC 43:XVII.323.A.1 should be amended to allow pressure transmitters be used in lieu of pressure gauges.

Because this comment recognizes current technology and meets the intent of the proposed rules, the comment is accepted and reflected in LAC 43:XVII.323.A.1 by adding the terms "pressure sensors and transmitters."

72. The Office of Conservation should amend LAC 43:XVII.323.A.2 to recognize that not all strings in a well with high or low alarms warrant an automatic shutdown of a cavern.

This comment is accepted and reflected in LAC 43:XVII.323.A.2 by adding the word "appropriate" before "string."

73. LAC 43:XVII.323.C.1-3, requiring casing inspection logs, should be amended to recognize that operators who rely heavily on protection packer strings can cause damage to the packer system and potentially to the cemented casing if required to remove the protection packer string to perform the test. The commenter requests a change in language to substitute running the casing inspection log on the protection packer string instead of on the innermost cemented casing string.

This comment is not accepted as the casing inspection of the packer strings alone gives no indication of the condition of the inner most cemented casing string.

74. For clarification, the Office of Conservation should amend LAC 43:XVII.337.A.4.b to recognize that caverns being plugged and abandoned due to a failed mechanical integrity test do not need to have additional mechanical integrity tests run.

This comment is accepted and reflected in LAC 43:XVII.337.A.4.b by removing the requirement to correct mechanical integrity failure of a cavern prior to being plugged and abandoning, as plugging and abandoning may be the only appropriate corrective action in some cases.

75. The Office of Conservation should amend LAC 43:XVII.309.I.8.b.i to recognize that a

failed mechanical integrity test (MIT) does not equate to endangerment and to change the twenty-four (24) hour reporting requirement to allow sufficient time to analyze and determine the cause and/or implications of a failed MIT.

This comment is not accepted. While the Office of Conservation recognizes that a failed MIT does not necessarily equate to endangerment, nevertheless in order to ensure adequate regulatory oversight and, when appropriate, timely notification to appropriate emergency response officials a failed MIT must be reported to the Office of Conservation within twenty-four hours.

76. The Office of Conservation should amend LAC 43:XVII.323.G to recognize that monitoring wells need not necessarily be monitored quarterly and allow for monitoring frequency to be determined on a case-by-case basis.

This comment is not accepted as the quarterly monitoring requirement is a generally appropriate frequency for monitoring but applicants may make a request for alternate monitoring frequency under LAC 43:XVII.303.F should site specific conditions warrant.

77. The language of LAC 43:XVII.327.A should be changed from "witnessed by a qualified third party" to "testing shall be conducted by, or witnessed by, or results reviewed by a qualified third-party reasonably acceptable to the Department."

In an effort to ensure that the testing required by LAC 43:XVII.327.A is performed properly and not unduly influenced, the Office of Conservation has determined that it must be witnessed by a qualified third party. The proposed changes in the comment would allow an operator to limit the oversight provided by a third party, and is therefore not accepted.

78. LAC 43:XVII.327.B.3.d should be amended to recognize that it is unduly burdensome and unnecessary to require a mechanical integrity test (MIT) after each washing for wells that are in simultaneous storage mode and salt solution-mining (or washing) mode.

LAC 43:XVII.327.B.3.d has been amended to clarify that an MIT is required only when washing/solution-mining results in a significant increase in cavern capacity or change in cavern shape.

79. The language of LAC 43:XVII.327.E.4 should be amended to recognize that a cavern being plugged and abandoned because of a failed mechanical integrity test (MIT) cannot be required to re-establish mechanical integrity before plugging.

The comment is accepted and reflected in LAC 43:XVII.337.A.5.b.

80. The Office of Conservation should amend the proposed regulations to require that owners or operators of hydrocarbon storage caverns be required to move product to a different cavern within ninety (90) days of a failed mechanical integrity test.

Failure of a mechanical integrity test does not necessarily mean that the operations pose any risk

or threat to public safety or the environment. Additionally, depending on the hydrocarbon product stored as well as the volume, ninety (90) days may not be sufficient time to safely move the product to a different cavern. A mandatory emptying of a storage cavern is not necessarily appropriate and site specific situations will determine the appropriate response actions. Therefore, the proposed change to the rules has not been adopted.

81. LAC 43:XVII.317.F should be amended to recognize that industry along with the Solution Mining Research Institute are in the process of developing standards by which to design hanging strings to take into consideration flow induced vibrations.

This comment is accepted in part by removing the phrase, "including flow induced vibration" and reflected in LAC 43:XVII.317.F, thus removing the requirement from the regulations.

82. The Office of Conservation should amend LAC 43:XVII.321.H and LAC 43:XVII.323.D by removing the word "combustible" and replacing it with the word "liquefied" and that the words "a buildup of" be inserted into LAC 43:XVII.321.H.

This comment is not accepted because a threat to human safety is possible with "combustible" hydrocarbons and not just "liquefied" hydrocarbons. Further the intent of this portion of the proposed regulation is to detect a leak of any combustible product prior to it "building up" where it may pose an immediate threat.

83. The language of LAC 43:XVII.307.E.9.g should be changed by replacing the word "shut-ins" with "losses of well integrity."

The term shut-ins has been modified by adding the phrase "resulting in non-compliance with these regulations." Thus not every shut in of a hydrocarbon storage well requires notification pursuant to LAC 43:XVII.307.E.9.g; but only when the well is shut in due to non-compliance. Further, the modifying phrase "losses of well integrity" is too limiting as there may be other violations of these regulations which are not "losses of well integrity."