

**ARKANSAS POLLUTION CONTROL & ECOLOGY
COMMISSION
ECONOMIC IMPACT/ENVIRONMENTAL BENEFIT
ANALYSIS**

Rule Number & Title: Regulation No. 34 – State Water Permit Regulation

Petitioner: Arkansas Department of Environmental Quality, Water Division

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2A. ECONOMIC IMPACT

1. Who will be affected economically by this proposed rule? State: a) the specific public and/or private entities affected by this rulemaking, indicating for each category if it is a positive or negative economic effect; and b) provide the estimated number of entities affected by this proposed rule.

Proposed Regulation 34 will directly impact the daily operations of the oil and gas companies that construct and drill oil and gas wells in Arkansas. This regulation will have a positive economic effect on these companies because facilities will be considered to have a permit by rule under Proposed Regulation 34. Proposed Regulation 34 incorporates by reference the Arkansas Oil and Gas Commission Rule B-17. As long as a facility complies with the conditions in Rule B-17, its activity is deemed to be authorized without requiring an individual permit or coverage under the Reserve Pit General Permit 0000-WG-P, thereby eliminating the payment of permit fees. At this time, the Department has issued coverage under the Reserve Pit General Permit 00000-WG-P to 79 companies for 1883 reserve pits. The General Permit fee of \$300 per reserve pit represents the savings in permit fees to oil and gas companies which will result from this proposed regulation.

Sources and Assumptions:

Information for the number of reserve pits and number of companies was taken from the Permit Database and the ADEQ Permit Data Summary (PDS) program.

2. What are the economic effects of the proposed rule? State: 1) the estimated increased or decreased cost for an average facility to implement the proposed rule; and 2) the estimated total cost to implement the rule.

Exhibit E

Proposed Regulation 34 will result in a decrease in costs associated with drilling a well. These costs are estimated to be approximately \$500 per reserve pit. This estimate includes the permit application fee of \$300 and 4 hours of technical work performed by an engineering technician or similar employee estimated to cost \$50 per hour to prepare and submit the permit application.

The Proposed Regulation 34 should have no associated costs to implement.

Sources and Assumptions:

Work related experience and conversations with oil & gas industry associates.

3. List any fee changes imposed by this proposal and justification for each.

Once the Proposed Regulation 34 is in effect, facilities will be considered to have a permit by rule under the Proposed Regulation 34. As long as a facility complies with the conditions in the rule, they are not required to obtain coverage under the Reserve Pit General Permit 00000-WG-P, thus resulting in permit fee savings of \$300 per reserve pit.

4. What is the probable cost to ADEQ in manpower and associated resources to implement and enforce this proposed change, and what is the source of revenue supporting this proposed rule?

There will be a reduction in costs to the Department for actions associated with the Reserve Pit General Permit 00000-WG-P. The Department will still inspect and enforce violations found at wellsites. The permit engineers will be less involved in the process than with the Reserve Pit General Permit 00000-WG-P. If a facility is properly operated, the costs to the Department will be approximately \$425 per reserve pit. If the facility requires an Enforcement Action, the cost to the Department increases to approximately \$1,147 per reserve pit. However, the Department will no longer receive the \$300 permit fee required to obtain coverage under the Reserve Pit General Permit 00000-WG-P.

The Inspection Branch maintains a staff of 21 Inspectors (with 4 dedicated to the Fayetteville Shale per the MOA with the Arkansas Game and Fish Commission), 2 Inspector Supervisors (one dedicated to the Fayetteville Shale) and a Branch Manager to inspect such facilities. The Enforcement Branch maintains a staff of 8 Enforcement Analysts (with 2 dedicated to the Fayetteville Shale), 2 Enforcement Supervisors and a Branch Managers for writing and reviewing enforcement actions. The Permits Branch maintains a staff of 4 Engineers and 2 managers to review documents and assist in matters associated with reserve pits. Other Water Division managers involved in the process are the Division Chief and Assistant Division Chief.

Sources and Assumptions:

It is assumed that this proposed regulation will not result in any change in the frequency of the Department's inspections or enforcement actions.

Exhibit E

Costs associated with the Permits Branch are based on 2.5 hours of Administrative Specialist work, 1 hour of Engineer review and technical assistance, and 2 hours of supervisory review. When these costs are considered, then the cost to the Department for the Technical Review is approximately \$131. The Permits Branch has Authorized 1883 reserve pits covered by the Reserve Pit General Permit 00000-WG-P.

According to the Inspection Branch of the Water Division, an inspection requires 8 hours to perform the inspection and write the inspection report. The report is then reviewed by 2 managers prior to approval. When these costs are considered, then the cost to the Department for the inspection is approximately \$294. The Inspection Branch has performed 181 inspections from July 2, 2009 to October 14, 2010 for permits covered by the Reserve Pit General Permit 00000-WG-P.

Combining the cost for permit review and inspections, the total cost to the Department for a facility in compliance would be \$425.

According to the Enforcement Branch of the Water Division, an enforcement action requires 6 hours to write and is reviewed by 7 managers prior to approval. It is expected to take approximately 2 hours to review per manager. When these costs are considered, then the cost to the Department for the enforcement action is approximately \$722.

The addition of the cost of an enforcement action would increase the cost to the Department to \$1147.

5. Is there a known beneficial or adverse impact to any other relevant state agency to implement or enforce this proposed rule? Is there any other relevant state agency's rule that could adequately address this issue, or is this proposed rulemaking in conflict with or have any nexus to any other relevant state agency's rule? Identify state agency and/or rule.

The Proposed Regulation 34 incorporates by reference the Arkansas Oil & Gas Commission Rule B-17 for Well Drilling Pits and Completion Pits Requirements. This rule mirrors the environmental protections afforded in the Reserve Pit General Permit 00000-WG-P. With the passage of Proposed Regulation 34, any facility that is in compliance with Rule B-17 will be considered to have a permit by rule.

Sources and Assumptions:

Proposed Regulation 34 and Arkansas Oil and Gas Commission Rule B-17.

6. Are there any less costly, non-regulatory, or less intrusive methods that would achieve the same purpose of this proposed rule?

No such methods are known.

Sources and Assumptions:

N/A

2B. ENVIRONMENTAL BENEFIT

1. What issues affecting the environment are addressed by this proposal?

Proposed Regulation 34 does not allow for the discharge of fluids to waters of the state as a result of pit construction, operation, or closure, which is consistent with the Reserve Pit General Permit 00000-WG-P.

2. How does this proposed rule protect, enhance, or restore the natural environment for the well being of all Arkansans?

Proposed Regulation 34 authorizes pit construction during the drilling, completion, or testing of an oil, gas, or oil and gas production well, Class II Disposal Wells, and Class II Commercial Disposal Wells as long as the facility is in full compliance with the requirements of the Arkansas Oil and Gas Commission Rule B-17 which is similar in content to the Reserve Pit General Permit 00000-WG-P. Also, Rule B-17, which is incorporated by reference, will allow for the reuse and recycling of such fluids which reduces the volume of contaminated waste to be disposed of or stored.

Sources and Assumptions:

Arkansas Oil and Gas Commission Rule B-17

3. What detrimental effect will there be to the environment or to the public health and safety if this proposed rule is not implemented?

If Proposed Regulation 34 is not passed, the Reserve Pit General Permit 00000-WG-P will still be in effect and drilling companies will still be required to obtain permit coverage prior to constructing the reserve pit. However, Rule B-17 will allow for the reuse and recycling of drilling fluids which reduces the volume of contaminated waste to be disposed of or stored.

Sources and Assumptions:

Arkansas Oil and Gas Commission Rule B-17

4. What risks are addressed by the proposal and to what extent are the risks anticipated to be reduced?

Proposed Regulation 34 will not result in a change from the current environmental impact. However, Rule B-17, which is incorporated by reference, will allow for the reuse and recycling of drilling fluids which reduces the volume of contaminated waste to be disposed of or stored.

Sources and assumptions:

Arkansas Oil and Gas Commission Rule B-17