## R. T. HICKS CONSULTANTS, LTD.

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June 2, 2014

Mr. Mike Bratcher NMOCD District 2 811 S. First Street Artesia, New Mexico 88210 Via E-mail and US Mail

RE: Lime Rock Resources All Thorn Multi Well Fluid Management Pit

Dear Mike:

In order to improve the pit inspection program as it relates to determining the need for netting (see the permit application, Appendix B, page 2), Lime Rock Resources asked the Center of Excellence for Hazardous Material Management in Carlsbad, New Mexico to develop a scope of work for an avian protection plan in order to monitor and assess any hazards that the All Thorn MWFM Pit may pose to protected avian species and bats. A copy of the scope of work is attached. As suggested in Appendix B of the application, Hicks Consultants concluded that netting the pit in the absence of determining that such netting would be beneficial did not make operational or economic sense.

CEHMM has the capability, expertise and local experience to implement such a program. We anticipate that, after the course of the 12-month monitoring period, the CEHMM report will recommend one of three options:

- Netting the pit
- Implementation of a hazing program or
- Continued monitoring

In addition to the attached scope of work, during construction of the pit, Lime Rock will incorporate measures to facilitate rapid deployment of netting should the report of CEHMM determine that netting is necessary to protect avian species, including bats. The engineering plans are such that Lime Rock can quickly install bollards and netting upon a recommendation that netting is required. Lime Rock will provide OCD with a copy of the annual reports generated by CEHMM within 1 month of the annual anniversary of initially filling the pit with treated produced water.

Please contact me or Spencer Cox of Lime Rock if you have any questions

Sincerely, R.T. Hicks Consultants

Randall Hicks

Copy: Lime Rock Resources Scott Eddings, Huitt-Zollars

## Task Order #1- May 30, 2014 Avian Protection Program for Treated Produced Water Storage Pits By Center of Excellence for Hazardous Materials Management Carlsbad, New Mexico

This TASK ORDER is submitted in regards to mitigating the take of or harm to protected waterfowl, other avian species and bats, during the operation of the Mack Energy Round Tank Permanent Pit. Additionally, the deliverable associated with this TASK ORDER fulfills the requirements as defined in the OCD Pit Rule:

**19.15.17.11** *E.* Netting. The operator shall ensure that a permanent pit, a multi-well fluid management pit, or an open top tank is screened, netted or otherwise rendered non-hazardous to wildlife, including migratory birds. Where netting or screening is not feasible, the operator shall on a monthly basis inspect for, and within 30 days of discovery, report discovery of dead migratory birds or other wildlife to the appropriate wildlife agency and to the appropriate division district office in order to facilitate assessment and implementation of measures to prevent incidents from reoccurring.

CEHMM will meet or exceed criteria for the subject mitigation by evaluating and if necessary recommending accepted contemporary hazing or netting protocols endorsed by the US Fish and Wildlife Service and New Mexico Department of Game and Fish for effectiveness and safety to resident avian species. As the pit employs a game fence surround, protection of terrestrial wildlife is not part of this plan. The intent of this action is to determine if protected birds and bats would be harmed by the existence of the pit by establishing nests or reoccupying existing nests in an area designated for construction and operation of the proposed pit or by landing on or drinking from the pit. CEHMM proposes to implement this mitigation in three phases.

Phase I: CEHMM will contact the appropriate regulatory agencies (e.g., Oil Conservation Division, US Fish and Wildlife Service, New Mexico Department of Game and Fish) in order to inform respective agencies of intent, and to secure the appropriate permit authorizations for destruction of any existing nests from prior seasons' nesting and new nest starts without eggs or young. All regulatory implications for this project will be in accordance with state and federal guidelines for such an action.

Phase II: CEHMM will dispatch technicians to the subject area to conduct a reconnaissance of existing nests, nest structures and suitable habitat. This reconnaissance will require technicians to follow grid lines spaced on 50 meter intervals across the 5-10 acre parcel identified for construction and attendant produced water management operations (see attached Figure). Any old nests will be torn down with nest remnants placed on ground. Technicians will photograph the nests for later identification and document the location with handheld GPS devices. Any feathers, skeletal remains, or other parts will be collected and remanded to the property regulatory agency for identification and archive. Active nests (e.g., those nests either visibly occupied by a parent bird in incubation posture or with eggs or young) will be

documented by location and species with survey flagging tied on branches in near proximity (5 meters) in each cardinal direction. This means that an active nest can be located in the nucleus of the survey tape array and shall be left alone and undisturbed.

The deliverable for this phase of the project is a short report identifying possible protected species, including migratory waterfowl that could be potentially impacted by the operation of the proposed pits.

Phase III: During operation of the pit, CEHMM technicians will deploy to the pit area 6-12 times during the course of the first year of operation to evaluate the need to conduct hazing protocols or to install netting over the pit. CEHMM staff will

- 1. Periodically monitor the pit at dusk, dawn and during the day, as necessary, in order to observe any activity of protected avian species or bats
- 2. Interview staff regarding any mortality of protected species
- 3. Evaluate the chemistry of the treated produced water to determine if the water poses a hazard to protected species and
- 4. Prepare reports in the form of field notes and data sheets that will be provided to OCD upon request.

In the event that CEHMM personnel encounter protected wildlife mortalities such as dead birds, reptiles, amphibians, or mammals, they will be collected using sanitary, scientifically and regulatory acceptable protocols. Specimen transmittals will be to the appropriate regulatory agency or to an agency representative such as Wildlife Rescue. Based upon the observations over the course of 12 months, CEHMM will prepare an annual report summarizing the findings and making recommendations regarding the need for hazing protocols, netting or continued monitoring.

The estimated cost for each phase is provided on the next page.