

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

BASS ENTERPRISES PRODUCTION COMPANY

17-Jan-06

901 North Canal, Suite 704 Carlsbad, NM 88220

REMEDIATION WORK PLAN CONDITIONS OF APPROVAL -

BIG EDDY UNIT NO. 41 (INDIAN FLATS BASS FEDERAL BATTERY)

21325

A review of the remediation work plan submitted by Stoller Corporation on January 3, 2006 for the Big Eddy Unit No. 41 (30-015-22229) - Indian Flats Bass Federal Battery has been completed by this office. Your proposal to excavate and land farm the contaminated soils on the location is approved subject to the following conditions:



- Highly Contaminated/Saturated Soils must be remediated by excavating to the maximum depth and horizontal extent practicable until a representative sample from the walls and bottom of the excavation is below the contaminant specific remediation level for benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH) or other potential fresh water contaminants unique to the leak, spill or release (e.g. chlorides). Upon reaching this limit samples should be taken from the walls and bottom of the excavation to determine the remaining levels of soil contaminants. All soils removed from the location must be documented as to contaminants in the soils, contaminant levels, method of determining contaminant levels and disposition of the soils (OCD approved landfarm, centralized site, etc.).
- Unsaturated Contaminated Soils may be landfarmed on location by spreading the soil in an approximately six inch lift within a bermed area. The soils should be tilled regularly until a representative sample is below the contaminant specific remediation level. Tilling should be to a depth that ensures contaminant and microorganism contact and at a regular interval to ensure aerobic conditions (sufficient oxygen in the soil to allow microorganism development) are maintained. If necessary and upon approval by OCD, moisture and nutrients may be added to the soil to enhance aerobic biodegradation. This methodology does not apply to chlorinated organics and inorganic salts because they are likely to be toxic to microorganisms. If high concentrations of chlorides (above background levels of the surrounding area) are found during remediation or if chlorides become present during the bioremediation process then an alternative remediation proposal must be submitted to the NMOCD District 2 Office.
- Because landfarming is considered a long term remediation process, a quarterly report of activity associated
 with this project shall be submitted to the NMOCD District 2 Office until the remediation is completed. This
 report must contain:
 - All work since last report including date of work, who performed the work, what work was
 performed, amount(s) of any additive(s) added to the soil including nutrients and water.
 - Results of samples showing the level(s) of contaminants present and change since last report.
 - First report must be submitted on March 1, 2005 and then every three months afterwards until site closure is approved.
- Contaminated soils requiring remediation should be remediated so that residual contaminant concentrations are below the recommended soil remediation action level. If soil action levels cannot practicably be attained, a detailed evaluation of risk may be performed and provided in writing to OCD for approval showing that the

remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh water, public health and the environment.

- If alternate methods of remediation are to be used, prior approval from the OCD District 2 Office is required prior to beginning any work using these alternate methods. A specific proposal outlining the alternate methods must be submitted in writing.
- If ground water is encountered during the soil/waste characterization, excavation or remediation of the impacted soils, a sample should be obtained to assess the incidents potential impact on ground water quality and the OCD District 2 Office should be notified immediately.
- Notify OCD District 2 Office 24 hours prior to commencement of work by Bass Enterprises or contractors, sub-contractors or affiliated companies that is intended to excavate, wash, move or disturb (such as in tilling, blading, etc.) soils or contaminated materials for the purpose of remediation, or hauling any soils or contaminated materials into or out of the location covered under this remediation work plan. This notification is to ensure NMOCD personnel are able to monitor compliance with approved remediation work plans as required by the New Mexico Administrative Code. Therefore, if a reasonable schedule of work cannot be provided then a separate notification that work is to resume is required if work ceases at the location for more than 5 days.
- Notify OCD District 2 Office 24 hours prior to obtaining samples where analysis of samples will be submitted
 to OCD. ALL final delineation sample results must be submitted to the OCD whether or not the OCD actually
 witnesses those samples being taken.
- Upon termination of any required remedial actions, the area of a leak, spill or release may be closed, after
 obtaining approval for the closure from the OCD District 2 office, by backfilling any excavated areas,
 contouring to provide drainage, revegetating the area or other OCD approved methods. Upon completion of
 remedial activities a final report summarizing all actions taken to mitigate environmental damage related to the
 leak, spill or release will be provided to OCD for approval.
- For all Federal Lease wells, a "Like Approval" by the United States Bureau of Land Management may be required. It is the operators responsibility to obtain this approval and the approval of any other surface owner that may be required by law, regulation or contractual obligation of the operator and surface owner.

Acceptance of the remediation work plan does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of reports and work plans does not relieve the operator of responsibility for compliance with any other federal, state or local laws and/or regulations.

NMOCD District 2 Contact Person: Chris Beadle, Office: (505) 748-1283 x107 / Cell: (505) 626-0831 / Fax: (505) 748-9720 / E-mail: Chris.Beadle@state.nm.us

Thank you for your prompt attention to this matter and your efforts in helping to protect our environment and the infrastructure of the oil and gas industry.

Sincerely.

Artesia OCD District Office

cc: Don George, Stoller Corporation (unsigned copy delivered via e-mail)