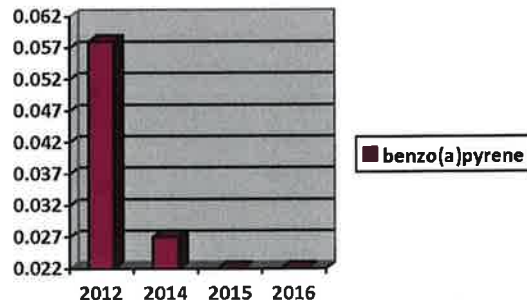
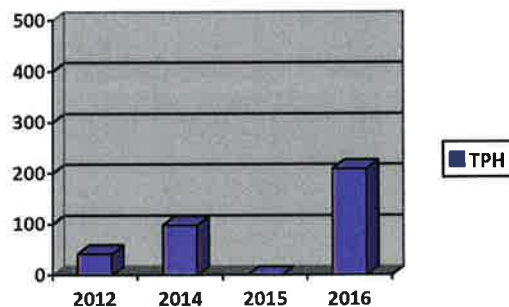


LINN Energy

Linn Operating, Inc.
Piceance Asset
Parachute, Colorado
May 16, 2017

B10 696 Landfarming Plan – Facility #442874

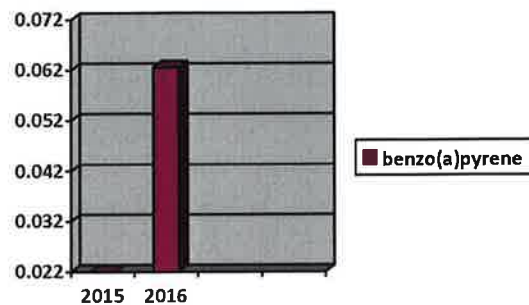
- History
 - Nine wells were drilled on this well pad in 2007. Two of the wells were plugged and abandoned. The remaining seven wells were completed and are producing. These wells were drilled with the use of diesel based drilling mud. Drill cuttings were blended with clean soil and stockpiled on location. Samples of these spoils have been taken annually (except 2013) beginning in 2012. TPH did not exceed COGCC Table 910-1 standards with readings from non-detectable to 204. Final discrete samples taken on Sept. 9, 2015 were non-detectable for benzo(a)pyrene and TPH passed the COGCC Table 910-1 standards. This treated spoil material was used to backfill the pit in 2016. The pad has not been interim reclaimed.



- Current Status
 - Approximately 414 cubic yards of spoil material that is being treated on site by land farming is from the bottom of the pit after the liner was removed. This material fails COGCC Table 910-1 for benzo(a)pyrene.

Landfarming began in the summer of 2016. The latest sample taken on Oct. 8, 2016 was 0.0626. This material was spread out and treated three times in 2016 (May 24, July 25, & Sept. 13).

- In 2017, the landfarmed material has been spread out to a depth of 6"-12" and has been tilled two times with an excavator. Amendments added to each treatment are phosphorus and fulvic acid. Tilling and adding amendments will continue once every 10 to 14 days until composite samples meet 910-1 standards.
- Composite samples were taken on May 6, 2017. Lab results are pending at the time of this report.



- Treatment - 2017

- Spoil will be turned over by an excavator or by a Kubota farm tractor with a chisel point plow 10 to 12 times (depending on weather and snow conditions) during the warm months in 2017. The soil will be turned over with the frequency established in the plan as a minimum or with a higher frequency if possible. The soil will be spread out to increase exposure to the atmosphere and sunlight as much as possible on the production pad.
- Pre-treatment samples taken in the early spring will determine the amount of amendments that will be added to the spoil based on an analysis of nutrients present in the spoils.
- Amendments
 - Based on analysis, phosphorus fertilizer and fulvic acid will be added during each tilling operation to address benzo(a)pyrene.

- Samples and lab tests

- Phase I - Composite sample will be taken from 8 locations on the spoil pile in early summer and analyzed.
 - If composite sample passes, discrete samples will be taken to confirm the composite samples.
 - If discrete samples pass, spoil will be buried per COGCC rules.
 - If discrete samples fail, landfarming will continue.
 - If composite sample fails, landfarming will continue.
- Phase II - Composite sample will be taken from 8 locations on the spoil pile in late fall and analyzed.
 - Procedure will be the same as Phase I

- Continuation

- Process will continue into 2018 - 2019 until spoil passes COGCC Table 910-1, specifically benzo(a)pyrene.