

Oil Conservation Division Energy, Minerals and Natural Resources Department State of New Mexico

Seismicity Response Protocol (rev. date November 23, 2021)

Category 1: Seismicity Response Protocol:

Effective when Two M2.5 Events Occur Within 30 Days and Within a 10 mile Radius

Within 10 Miles

Monitoring & Reporting Protocols

- Weekly reporting of daily injection volumes and average daily surface pressure
 - Reporting in addition to C-115 reporting, on form provided by OCD
 - Digitally measure injection volume and pressure. The Data must be recorded on an hourly basis at a minimum. Operator shall archive digital injection data and deliver upon request
- Operators must provide an analysis identifying the perforated injection interval and formation tops.
- Operator must monitor seismicity (magnitude >~M2.5 for 10 miles around well using USGS/NMTSO data)
 - Operators shall share monitor data with OCD when requested
- Additional requirements may be added if determined appropriate by the OCD.

Category 2: Seismicity Response Protocol:

Effective with one M3.0+ Event

M3.0+ event

All Category 1 Monitoring & Reporting protocols, and

- o 50% rate reduction within 0-3 miles
- o 25% reduction between 3-6 miles
- Reductions to rate should start immediately and be completed within a week
- Notify OCD of pertinent information within 24 hours or next business day, whichever is latest, of an event using the OCD form.

M3.5+ event

All Category 1 Monitoring & Reporting protocols, and

- Shut in at 0-3 miles
- o 50% rate reduction at 3-6 miles
- o 25% rate reduction at 6-10 miles
- Reductions to rate should start immediately and be completed within a week
- Notify OCD of pertinent information within 24 hours or next business day, whichever is latest, of an event using the OCD form.
- All rates should be reduced from the previous 6-month daily average of active injection days
- Notifications should be made to the OCD by submitting to the OCD Permitting within 24 hours of receiving monitoring data of a seismic event within 10 miles of its facility.
- Such notification can be based on private or public seismic network data; however, final actions will be determined by USGS data concerning magnitude and location. All distances in this document are based on determined Epicenter.
- Pertinent information will be submitted to the OCD by an OCD form which is in development and will be submitted to the OCD via OCD.Engineer@state.nm.us
- OCD my reduce or eliminate disposal volumes within the curtailment radii above, at its sole discretion, if after 6 months no M3.0 events have occurred within 10 mi. of the original triggering event and/or OCD approves an operator/industry response plan within the response radii.