



March 31, 2020

Montana Department of Environmental Quality
Air Quality Bureau
1520 E. Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

RE: Quarterly Progress Report: Denbury Onshore, LLC., AOC Docket #AQ-18-06

Dear Mr. Dave Aguirre,

On behalf of Denbury Onshore, LLC (Denbury), this document serves as the First Quarter 2020 Progress Report in accordance with the Montana Department of Environmental Quality (MTDEQ) order, Administrative Order on Consent (AOC) Docket #AQ-18-06 requirements listed under section II, item 27.

Construction Progress

Denbury's initial assessment of facilities in Montana included ninety-eight (97) locations. With the exclusion of facilities that are exempt, deregistered, pending deregistration approval or permit modification, and sites that have been bypassed and taken out of service, there are currently fifty (50) locations that require a construction related corrective action.

Fourteen (14) locations have been brought on-line and eighteen (18) more are nearing this point. These locations are in different stages of Pre-Startup Safety Review (PSSR), system testing, additional retrofitting, or being considered for compliance close-out inspection.

The remaining eighteen (18) facilities have completed portions of mechanical, instrumentation, and electrical construction. A limited number of these facilities are being evaluated for potential bypass or do not have enough production to justify the cost of corrective action and may be shut-in. A few of these facilities have recently undergone site sampling and are being evaluated for applicability to MTDEQ emission standards.

Table 2 has been modified this reporting period to include a column that details the construction progress for each facility. During the fourth quarter of 2019 and the first quarter of 2020, up to eleven (11) construction crews have been active implementing corrective actions associated with the AOC simultaneously.

Prior to the outbreak of the coronavirus (COVID-19) pandemic, Denbury estimated most of the facilities were projected to have corrective actions completed by June 30, 2020. A limited quantity of facilities (less than 10) were projected potentially to require time beyond this deadline to complete the necessary facility improvements plus the compliance inspection and permit efforts necessary.

Due to COVID-19, uncertainty now surrounds the timeframe between construction completion and facility close-out. When new or retrofitted facility emission control systems are brought on-line, new equipment is activated, and functionality is verified prior to completing facility close-outs. Discoveries during this verification stage are anticipated and common (i.e. on-site conditions may differ from modeled and/or engineering assumptions). This process is anticipated to be slower than previously experienced due to COVID-19 concerns, company procedures, and vendor availability. Furthermore, the interaction between Denbury and contractor personnel has been impacted as described in the next section by COVID-19. Therefore, the schedule of one of the most critical verification stages (functionality) of the project is currently compromised by COVID-19.

Request for Postponement of AOC Compliance Date

Based on conditions beyond Denbury's reasonable control, we are requesting a postponement of the AOC compliance deadline through March 31, 2021 to ensure completion of all required improvements necessary to meet air quality regulations. Our reasoning primarily revolves around the COVID-19 pandemic and its impact on Denbury and the nation as a whole. It is unclear what the long-term effects will be; however, it is clear in the short-term, the COVID-19 pandemic is having an impact on construction and completion efforts under our current AOC. Our rationale for this request is described below:

Internal and External COVID-19 Related Policies and Procedures.

During the week of March 16, 2020, Denbury implemented internal policies that limit worker potential exposure to COVID-19. The Denbury policies mirrored actions taken by the United States (U.S.) government in this same week. Some reports estimate COVID-19 ramifications have the potential to persist through August 2020 or possibly beyond that timeframe.

The Denbury worker health and safety policy includes *social distancing*. Group sizes for meetings have been set. Group meetings are only allowable under specific circumstances. Denbury employee interaction and contractor interaction has been restricted and travel has been suspended. Most Denbury employees (field and office) are now working from home and many of the contractors Denbury utilizes are operating under similar policies.

Additionally, Denbury has suspended all projects except for projects that are required to continue out of necessity or regulatory requirement. Implementation of this AOC falls into the latter category.

Force Majeure Request for March 31 – August 31, 2020

Force Majeure requires postponement of AOC related construction through the summer of 2020. This is the timeframe when news reports and health professionals have estimated the effects of COVID-19 may be at levels that allow the U.S. economy to return to normal business. If the effects of COVID-19 on normal business are the same or worse after the summer, Denbury will revisit this matter with the MTDEQ at that time.

Anticipated Contractor Delays September 1 – October 15, 2020

Assuming the COVID-19 pandemic subsides sufficiently by the end of summer, it will take several months to re-establish field efforts. Contractor availability during this period is expected to be a challenge due to a sudden high labor demand as the business world starts to return to normality. The current contractor resources utilized may have different capabilities or may not be available after this summer. New resources may need to be sought out, contracted and on-boarded. In addition, we anticipate competition for contractors due to the backlog caused by the economic disruption. Furthermore, at that time there may be a backlog and limited resources within Denbury's own

work force and capabilities. These factors will likely delay AOC construction and preparations as multiple projects, within Denbury and industry-wide, come online simultaneously.

Anticipated Seasonal Delays October 15, 2020 – March 31, 2021

Once the winter season begins in Montana, scheduling delays are common and construction efforts take longer to meet goals. Working in extreme cold weather conditions also presents safety risks that further slowdown the pace of construction. Additionally, safety hazards are increased in the winter. Therefore, Denbury may ramp up efforts in August and September to complete the project only to immediately slow down efforts due to inclement weather conditions.

In addition, the current fluctuation in oil price is causing uncertainty within Denbury; as it is with the entire oil and gas sector. Many of Denbury's facilities are dipping below minimum oil price used to conduct the economic analysis for corrective action decisions during the compliance assessment phase of the project. This is the decision assessment that determines if the site is to be shut-in as the most economically viable compliance solution. When oil price lowers to a level where the facility is uneconomic or does not justify the corrective action expense, the facility is shut-in. As oil price improves, the expense of corrective action is re-evaluated. If corrective action efforts are reconstituted and during that time oil price dips once more, the construction is again stalled. This is the level of oil price volatility the industry is currently experiencing. This oil price volatility has the potential to redefine the actions required at the facility level to complete AOC related tasks.

Denbury's COVID-19 Recommendation and Request

The detailed discussion provided is intended to justify Denbury's claim of Force Majeure through August. It is also intended to illustrate the anticipated post-pandemic effects on the project. Industry resources and the seasonal limitations on construction will present challenges after the COVID-19 pandemic has substantially subsided. It is Denbury's assessment that a March 31, 2021 postponement for the completion of the tasks specified in the AOC will be necessary to bring the project to 100% completion.

Deregistration of Denbury Facilities

Included in this submittal are requests to deregister the following six (6) facilities.

- Cabin Creek Sec 28 (Facility bypassed)
- Federal Montana 41-28 (Facility bypassed and taken out of service)
- Little Beaver Section 17
- Monarch 41-31H (Facility bypassed and taken out of service)
- Monarch 41-35H (Facility bypassed and taken out of service)
- Pennel 23x-20BH

This request is based on facility modifications, site specific analytical data from samples collected in the fourth quarter of 2019 and first quarter of 2020, a twenty (20) percent safety factor, and five-year look back on production data. Additional data collected and used in the deregistration determination include confirmation of the source of fuel for heater treaters. This data was collected to determine potential venting of produced gas at facilities with low production that rely solely on field gas for fuel. Where gas production was reported as zero (0), gas-to-oil ratio (GOR) data collected routinely at Denbury facilities was used to quantify potential produced gas volume.

During the ongoing corrective action construction, four (4) facilities were modified so that production currently bypasses the facility. The bypassed facilities are Monarch 41-31H, Monarch 41-35H, Federal Montana 41-28, and Cabin Creek Sec 28. The production equipment at each of these four (4) facilities has been placed permanently out of service except for Cabin Creek Section 28. All wells that previously produced to Cabin Creek Section 28 are now routed to Section 21; however, the facility continues to accept produced water from other areas of the field for injection. The impact to Section 28 site-wide emissions allow the facility to qualify for deregistration. Deregistration documentation is included as an attachment to this report (**Appendix A**).

A previous submittal to deregister the Pennel 23x-20BH facility in December 2019 was not approved by MTDEQ due to a discrepancy in the API number for the single well identified as producing to this facility. The API number in the deregistration packet was inaccurately reported for well 23X-29BH. This well produces to Pennel Section 17. The API number for the well associated with Pennel 23x-20BH has been corrected and the deregistration request is being resubmitted. The deregistration documentation is included as an attachment to this report (**Appendix A**).

The production at the Little Beaver Section 17 tank battery has declined such that using the production data over a five-year lookback from 2015 through 2019 results in a potential to emit (PTE) of less than twenty-five (25) tons per year (tpy) for regulated airborne pollutants. The deregistration documentation is included as an attachment to this report (**Appendix A**).

2020 Facility Deregistration Revisions

The Bloomfield McGarty 1-33-3B facility has been identified as qualifying for removal of controls on equipment. The facility will remain registered due to total emission estimates that exceed the twenty-five (25) tpy criteria for a regulated pollutants that require the facility to be registered. However, using a three-year look back on production data from 2017 through 2019, a twenty (20) percent safety factor, and site-specific analytical data collected in September 2019, the emissions have been recalculated to show that no equipment onsite exceeds fifteen (15) tpy of a regulated pollutants; thus, qualifying the facility for removal of emission controls. The production at this facility has continually declined and is not expected to increase beyond the current rate. The deregistration revision documentation is included as an attachment to this report (**Appendix B**).

Facilities Scheduled to be Shut-In

The capital required for corrective action for the Glendive State D tank battery is not supported by the production generated by the site. Therefore, the facility is scheduled to be taken out of service as a compliance corrective action, thereby eliminating emissions.

Facilities Added to the Program

The Bell Creek Enhanced Oil Recovery (EOR) facility was identified as being compliant during the assessment phase of the project. During the first quarter of 2020, leaking compressor packing and Vapor Recovery Unit challenges were identified as requiring corrective action. As such, this facility has been added to the corrective action program (**Table 2**).

If any additional information regarding this matter is required, please contact me at 972-673-2529. All written correspondence should be directed to my attention at: **Denbury Onshore, LLC, 5320 Legacy Drive, Plano, TX 75024.**

Sincerely,

DENBURY ONSHORE, LLC



Kevin Hendricks
Environmental Engineering Technical Lead

Enclosures:

Table 1 – Log of Regulatory Correspondence
Table 2 – Quarterly Progress Report (Site List)
Appendix A – Deregistration Applications
Appendix B – Deregistration Revisions