

# Errata

Modifications, Corrections and Additional Information  
to the

Atlantic Rim Natural Gas Development Project  
Catalina PODs G&I Environmental Assessment

EA No.: DOI-BLM-WY-030-2009-0155

Added to the Catalina Environmental Assessment (EA) as Appendix 5:

Appendix 5 – Cumulative Effects

Added to the Catalina EA as Maps

Map 11 – Alternative A Route

Map 12 – Sawyer's Mule Deer Habitat Usage

Modifications and Corrections

***Text added is underlined.***

Transportation

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Affected Environment

The terrain in this portion of the ARP is generally flat to rolling and the area's grass and shrub communities easily traversed by motor vehicles. Two-track and other vehicle routes have been established in the past to fit the needs of commercial interests (ranching, utility construction/maintenance) and the public, primarily for hunting. These routes are generally not maintained, rough travelling, suitable for low speed traffic only and, in many cases, require all wheel drive and high clearance vehicles to traverse. Newly constructed roads would intercept and cross these routes, and, in many cases, be built on top of existing routes. This would serve to integrate the existing transportation network into the new, higher speed road network. Casual use by the public and ranchers occurs today and would continue into the future. It is the intent of the BLM to not alter the availability of access for use by ranchers and the public, as appropriate. Travel across the National System of Public Lands by vehicles for commercial purposes must be approved by a ROW. Without a ROW such travel is improper and the company responsible would be trespassing. It is possible for unpermitted vehicles of any company to cross the area and access the ARP under either alternative at the whim of the vehicle operator whether sanctioned by the company itself or not. Traffic to the ARP area generally originates from the north via Highway 789.

Effects common to all alternatives

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Either alternative would create additional noise, dust and wildlife disruption above current levels. Under either of the alternatives, traffic activity would increase above current conditions. Maximum traffic speed on the new and upgraded roads would increase by 15 to 25 miles per hour (MPH). Normally, traffic on a two-track route runs 10-15 MPH and on improved oil and gas roads 25-40 MPH. Increased access to existing two-track routes from upgraded roads, both within and outside of the POD areas, would occur under either alternative.

The Proposed Action

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## Driving Time and Distance

A grant of ROW for only DEPC commercial vehicles would occur under this alternative using the proposed action route. The distance from DEPC administrative site in T16N, R91W, section 6 to the proposed action POD I Central Delivery Point (CDP) (in section 25 of T17N, R92 W) is about 15 miles. At an average travelling speed of 35 MPH (dirt roads and State Highway 789) travel time to that point is about 25 minutes. The distance from DEPC's pipe yard adjacent to State Highway 789 is about 5.6 miles and at 60 miles an hour average would take about 6 minutes to reach the POD I area. Traffic travelling from State Highway 789 could enter the ROW and travel approximately 2.1 miles to the boundary of POD I. This route is not within the AREIS area, but would eliminate the need to drive an additional 8 miles of State Highway 789 to the Dad turnoff. Access to the PODs G&I area would generally be shorter for traffic travelling south on State Highway 789 and longer for traffic travelling north. This alternative would generally shorten driving times and distances compared to Alternative A. DEPC has supplied the BLM with a letter stating the company will install a locked gate following construction activities and post the proposed action route with a 20 mph speed limit sign.

## Access to POD G&amp;I and Atlantic Rim Area in General

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Approval of the proposed action with the resultant improvement of access from State Highway 789 would serve to encourage additional traffic through POD G&I and into the ARP area. The grant of a ROW would require 2.75 miles of existing partially upgraded and graveled road to be upgraded to the BLM collector road standards (State Highway 789 to the POD I Central Delivery Point). This would allow oil and gas development equipment and vehicles access to POD G&I under the BLM road quality standards. The north-west access route could also improve access to other areas of the ARP via existing two-track routes in the area without the need to travel another 7.7 miles to the Dad turnoff and from there into the ARP. The ease of natural gas related vehicle access and the associated rise in traffic volumes would lead to an increase in traffic, noise, dust and disruptive activities.

Alternative A

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## Driving Time and Distance

The distance from DEPC's administrative site in T16N, R91W, section 6 to the POD I CDP is about 6 miles. At an average travelling speed of 25 miles an hour (dirt roads) travel time to that point is about 15 minutes. The distance from DEPC's pipe yard adjacent to State Highway 789 to the POD I CDP is about 11.4 miles and at 35 miles an hour average (some highway mostly dirt roads) would take about 20 minutes. Traffic from State Highway 789 would enter onto Carbon County Road 608 at Dad, Wyoming. From that point the nearest approved well site is about 2.3 miles east at Catalina POD F. From the Dad turn-off to the beginning of the east access route is about 7.9 miles over a maintained dirt road. The distance from the Dad turnoff to the beginning of POD I is about 9.1 miles. This route is entirely within the AREIS area, and would eliminate the need to drive an additional 8 miles of State Highway 789 to the proposed action turn-off. Access to the POD G&I area would generally be shorter for traffic going north on 789 and longer for traffic going south. Adoption of Alternative A would cause traffic on State Highway 789 travelling from the north to travel approximately 7.7 miles further on the highway to the Carbon County Road 608 turn-off at Dad.

The Alternative A access route crosses mule deer crucial winter range on the southwest portion of the route on Carbon County Road 608 for a distance of about 1.6 miles. Then the route crosses mule deer CWR for 0.8 miles on the main Catalina entrance road for a total of 2.3 miles of mule deer crucial winter range traversed. The Proposed Action route crosses approximately 0.8 miles of mule deer crucial winter range.

For pronghorn, the Alternative A route passes through crucial winter year long range for a distance of about 4 miles. 3 miles are on Carbon County Road 608 and 1 mile on the Catalina main access road. The proposed action route crosses about 2.3 miles of crucial winter year long pronghorn range.

Miles of Route Within Crucial Big Game Ranges

<u>Species</u>	<u>Proposed Action</u>	<u>Alternative A</u>		
	<u>Route</u>	<u>CCR 608</u>	<u>Catalina Access</u>	<u>Totals</u>
<u>Mule Deer</u>	<u>0.8</u>	<u>1.6</u>	<u>0.8</u>	<u>2.3</u>
<u>Pronghorn</u>	<u>2.3</u>	<u>3.0</u>	<u>1.0</u>	<u>4.0</u>

In either alternative, road reconstruction would be required. Road reconstruction requires activities that include surface blading of the road, the construction of wing-ditches, the installation and/or upgrade of culverts, the reconstruction/upgrade of ditches and possibly the re-surfacing of the road with scoria or gravel.

Access to POD G&I and Atlantic Rim area in general

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The east access route requires POD G&I related traffic to move through the ARP area via the Dad access route. ARP traffic would be required to travel farther on unpaved roads and at slower speeds (est. 20 to 35 miles/hr.). Natural gas production related traffic to, and through, POD G&I would be restricted to POD G&I related activities. Ranchers and the public would continue to use the north-west access route off of State Highway 789 as they do today; oil and gas development traffic would not. Commercial interests working in the ARP area without a ROW for the north-west access route would be in trespass on the National System of Public Lands. Offenders could be identified and the company they are associated with could be cited by the BLM for non-compliance. Approval of the east access route would not further encourage additional or improper traffic through the PODs. The east access route would result in longer trip times and more miles for DEPC and its contractors due to slower vehicle speed requirements on unpaved roads. This is especially true for vehicles travelling south on State Highway 789 going to POD I or the west portion of POD G. Travel times would be about the same for traffic originating from the south on State Highway 789 but would occur at slower speeds once within the ARP itself. Alternative A would generally create greater dust and emissions compared to the Proposed Action. In addition, this alternative would intensify the amount of traffic within the Atlantic Rim area as compared to the proposed action and increase the risk of livestock / vehicle collisions proportionally.

Vegetation

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General descriptions of the project area vegetation communities, including weeds, are found in the Atlantic Rim Final Environmental Impact Statement, (AREIS; Chapter 3 Section 3.5, pg. 3-68 to 3-80, 2007). Invasive weed species were observed during on-site inspections of individual proposed well pads, roads, pipelines and facility locations. Halogeton, alyssum and cheatgrass are common throughout the project area depending upon the soil textures. Additional site specific vegetation inventory data would be collected by the company and submitted as part of any approved Reclamation Plan as per the Wyoming Reclamation Policy (March 2009), the Rawlins Resource Management Plan (RMP) Appendix 36 (Dec. 2008) and the ROD (March 2007) (p. A-3, Section 1.3.1) prior to any surface disturbance. The DEPC Reclamation Plan would include a weed management plan to address weed control.

Soils

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Effects common to all alternatives

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Potential impacts to soil resources are discussed in the AREIS (Ch. 4 Section 4.3, p. 4-16 to 4-19). The impacts anticipated with the construction of this project, and already realized on

previously implemented projects, are the same as those identified in that document: *“Removal/damage of existing native vegetation and surface litter would increase wind erosion potential, increasing raindrop impacts to exposed soils, water borne erosion potential and increasing soil surface temperature; removal/damage of biological soil crusts; removal/damage of topsoil and sub-soil fauna (macro- and microorganisms); compaction of soils; mixing of topsoil horizons, especially when mixed with sub-soils of high salt content; thus increasing topsoil salinity content; increasing potential for undesirable (invasive / noxious / poisonous) plant invasion and establishment; increasing potential for sedimentation / salt loads to the watershed, including stock ponds; and decreasing topsoil productivity”* (AREIS p. 4-17).

Soils with high salt content, high sand content, as well as shallow soils on moderately steep slopes would be disturbed by this project. The impacts are similar to those identified in the AREIS and would contribute to the significant impacts identified in the AREIS. In general, the extent of these impacts to the soil resource would be influenced by the success of mitigation and reclamation efforts. Reclamation success, in part, depends on the amount of surface area disturbed, quality of topsoil salvaged, stockpile/redistribution methods in disturbed areas, precipitation, soil type and moisture availability. The company submitted Reclamation Plans would address these identified issues in an attempt to reduce the soil loss and degradation associated with construction of the project.

Hydrology Page 22

Alternative A Page 26

The Alternative A road access would be constructed through terrain that is currently an existing two-track route and would result in the disturbance of 0.7 miles of road reconstruction. Impacts associated with this alternative would be similar to those associated with the proposed action but would occur on a shorter length of road. Additionally, Alternative A would reduce total road construction in the entire project. The construction of this access road would contribute sediment and salts to the Muddy Creek watershed; however, due to the shorter re-construction distance of the alternative, sediment and salt contributions would be less than those that would occur under the Proposed Action. Additionally, runoff from the Alternative A road would not drain directly into the impacted section of Muddy Creek, but would be filtered through several ephemeral drainages before reaching Muddy Creek itself.

Wildlife Resources Page 32

Effects Common to All Alternatives

Big Game Page 35

There is no equivalent migration/transition corridor seasonal timing restriction for the construction/drilling phase of oil and gas operations. Big game animals would be displaced from the source of any construction or drilling activity that might occur within migration/transitional ranges. This displacement would occur both during the fall and spring migration (Sawyer, 2009; Cox, M., 2009; Sawyer, 2006). Big game animals are in prime condition in the fall as migration begins and may be better able to absorb the added stress related to avoidance of construction and drilling activity. However, any additive loss in body condition and fitness that might occur during migration, when added to the rigors of breeding and maintenance requirements during the winter, would jeopardize an animal's chances of survival or successful parturition. Construction during the spring migration period would further exacerbate the additive loss of animal condition and result in higher late winter/early spring mortality or parturition failure (Cox, M., 2009; Reeve, A.F., 1991; Stephenson, T.R., 1996). The loss of recruitment into a population and the mortality of adults would eventually result in long-term declines in population numbers (Bartman, R.M., 1992).

Mule Deer Page 36

Disruptive activities associated with POD G & I development during the winter can impose a severe burden on a mule deer's energy budget, with potential for starvation and increased mortality during later winter for deer that winter within the POD G & I project area. In addition, the location of Catalina POD G&I would likely force a shift in migration to the north and west of POD G&I. Movement of animals to the east of POD G&I appears less likely due to the presence of other Catalina POD development. Displacement of mule deer to the north and west, away from POD G&I roads and other developments, would concentrate animals on the remaining CWR and against the State Highway 789 ROW. Increased presence of mule deer in close proximity to State Highway 789 could lead to increased vehicle collisions and animal mortality as deer attempt to cross the highway.

Proposed Action Page 42

General Wildlife

Big Game Page 42

Mule Deer Page 42

In addition to the impacts described above in the Impacts Common to All Alternatives section, the Proposed Action's north-west access route would add further disturbance and disruption to normal, mule deer migration patterns. The north-west access route would serve to encourage additional traffic to not only reach both Catalina POD G&I, but also to access Catalina POD C to the east and other ARP PODs adjacent to the proposed project. Generally traffic associated with access roads decreases once well sites are in production. However, the proximity of the north-west access route to State Highway 789 and the development of additional PODs in the ARP area would lead to continued heavy traffic along this route. Continuous traffic on the north-west access route would contribute to the exceedance of the significance criteria (criterion Number 3) in the AREIS, Chapter 4.7.2, p. 4-69 and 4-83.

Pronghorn Page 43

Fences along State Highway 789 create a migration barrier that precludes pronghorn movement from east to west across the highway. Pronghorn found east of this highway are restricted to CWR found along Muddy Creek and against State Highway 789 which creates a trap to animal movement (AREIS Chapter 4 pg 4-74). High levels of traffic associated with the north-west route would compound this existing situation and increase stress, reduce body condition and result in lower overall animal health going into the late winter/early spring season. This would result in similar impacts as those described above for mule deer and contribute to exceedance of the significance criteria (Criterion Number 3) (see AREIS, Chapter 4.7.3.5, pps. 4-82 and 4-83). The ultimate effect of blocking migration corridors is the potential for reduced winter survival and a decline in population size.

Alternative A (access by the "East Route") Page 44

General Wildlife

Big Game

Mule Deer Page 44

At this time, the access route (from Dad to POD C) is approved for company traffic to access Pod A-F. The development of POD G&I would increase traffic along the Dad to POD C route. This access route is south of the mule deer CWR and only crosses one migration corridor near its terminus. The majority of the Dad to POD C route avoids mule deer CWR and migration corridors and maintains the current functionality of the migration patterns and CWR use. As identified from the collaring study, the 0.7 miles of newly constructed road that would provide access to POD G&I would avoid the majority of the identified mule deer migration corridors and

CWR. The east access route would provide adequate access into POD G&I and avoid the center of the mule deer migration corridors and CWR. Use of the east access route would contribute to the exceedance of the significance criteria (criterion Number 3) in the AREIS, Chapter 4.7.2, p. 4-83.

#### Effects on Big Game Crucial Winter Range from Roads and Highways

Under Alternative A, traffic travelling from the north on State Highway 789 to PODs G&I (i.e. from Interstate 80 or Rawlins) passes the Proposed Action's turnoff point and proceeds about 7.7 miles south along the western boundary of the Baggs mule deer crucial winter range (CWR) to the Dad turnoff at Carbon County Road 608 (CCR 608). CCR 608 passes along the southern boundary of the CWR for a distance of 1.6 miles and turns onto the Catalina Project's main access road. This segment of the access route passes through about 0.8 miles of CWR. From the boundary of the CWR the Alternative A route continues generally north within the boundary of the Atlantic Rim Project.

Under Alternative A, traffic travelling to PODs G&I from the north on State Highway 789 (i.e. from Interstate 80 or Rawlins) passes the Proposed Action's turnoff point and proceeds about 7.7 miles south along the western boundary of pronghorn crucial winter / year long range (CWYL) to the Dad turnoff at Carbon County Road 608 (CCR 608). CCR 608 passes through the CWYL range for a distance of 3.0 miles and turns onto the Catalina Project's main access road. This segment of the access route passes through about 1.0 mile of CWYL until it crosses the habitat boundary. From that point the Alternative route runs generally north to the boundary of POD I in winter / year long habitat within the boundary of the Atlantic Rim Project.

The CWR and CWYL mule deer and pronghorn use along these road segments is already effected by the traffic using these roads. The incremental increase in Alternative A traffic levels from PODs G&I would have no to minimal additional effect on these big game populations.

Text added (underlined) to the EA following the Wildlife Resources Section and before the Finding of No New Significant Impact section.

#### Lands with Wilderness Characteristic's Analysis for POD's G&I

##### 3.4.8 Lands with Wilderness Characteristics

Section 201 of FLPMA requires the BLM to maintain, on a continuing basis, a wilderness inventory of public lands. The BLM may conduct the inventory of lands, including lands with wilderness characteristics (LWCs), using available information (e.g., existing maps, photos, records related to range projects, monitoring data) and field verification.

The inventory for wilderness characteristics is based on criteria defined in Section 2(c) of the Wilderness Act, and incorporated in FLPMA, for sufficient size, naturalness, outstanding opportunities for either solitude or primitive and unconfined recreation, and supplemental values (ecological, geological, or other features of scientific, educational, scenic, or historical values). Lands that clearly lack wilderness characteristics are those that do not meet the naturalness criterion because they have extensive surface disturbance and/or do not meet the size criterion of 5,000 acres or any of the size exceptions.

BLM reviewed the existing initial wilderness inventory conducted in 1979 to determine whether the project would directly affect any LWCs in the Application Area. A field inventory of identified units is planned for the summer of 2011 to verify the inventory findings. The inventory only addresses roadless units that the Application Area would intersect. Roadless area that did not meet the 5,000 acre size criterion of or any of the size exceptions or the naturalness criteria, were not evaluated for Wilderness Characteristics.

POD IPublic and Private Lands

The proposed project and individual sites encompasses 640 acres of contiguous federally managed surface and therefore does not meet the 5,000 acres of contiguous public lands requirement under BLM Manual 6301 part.14 Wilderness Characteristics B. Analysis of Wilderness Characteristics 1. "Size",

a. Determine if the size criteria will be satisfied for areas by meeting one of the following situations and circumstances:

1. Roadless areas with over 5,000 acres of contiguous BLM lands. State or private lands are not included in making this acreage determination.

PODs GThe National System of Public Lands and State of Wyoming Lands

The proposed project is located in an area that has been delineated by previous wilderness inventories. This project is surrounded by 375,000 acres of contiguous federally managed surface and, therefore, meets the 5000 acres of contiguous public lands required under BLM Manual 6301 part 14 "Wilderness Characteristics B. Analysis of Wilderness Characteristics 1. "Size",

a. Determine if the size criteria will be satisfied for areas by meeting one of the following situations and circumstances:

1. Roadless areas with over 5,000 acres of contiguous BLM lands. State or private lands are not included in making this acreage determination.

Once the size requirement is met, the Naturalness requirement is considered.

2. Naturalness.

- a. Affected Primarily by the Forces of Nature. Determine if the area appears to be in a natural condition.

(1) The area must appear to have been affected primarily by the forces of nature, and any work of human beings must be substantially unnoticeable. Examples of human-made features that may be considered substantially unnoticeable in certain cases are: trails, trail signs, bridges, fire breaks, pit toilets, fisheries enhancement facilities, fire rings, historic properties, archaeological resources, hitching posts, snow gauges, water quantity and quality measuring devices, research monitoring markers and devices, minor radio repeater sites, air quality monitoring devices, fencing, spring developments, barely visible linear disturbances, and stock ponds.

- b. Describing Human Impacts. Document noticeable human impacts within the area. If several minor impacts exist, summarize their cumulative effect on the area's degree of apparent naturalness.

Common to All

The BLM's 1979 wilderness inventory found wilderness character was not present on BLM-administered lands within the project area. The original Lands with Wilderness Characteristics analysis was accomplished as one unit that consists of 375,000 acres of mixed managed lands called the Wild Horse Basin WY-030-408 wilderness inventory area. An evaluation of 2009 aerial photography and review of project site-specific photography was conducted. Verification was made that some change has occurred with the original evaluation. Since the 1979

inventories the project area has increased in the number of man-made facilities and vehicle routes have increased.

Additionally, the project's location contains existing man-made facilities and disturbances. The area includes over fifty miles of two track routes, many miles of fence, man-made reservoirs and other water developments. The quantity of these developments detracts from *outstanding solitude* and *unconfined recreational opportunities*.

The frequency of the man-made facilities in the area are substantially noticeable by the average visitor. In addition the idea of natural integrity or the absence of a relatively unaffected ecosystem by human activities is not present. Existing facilities human impacts have contributed to the decreased naturalness of the area.

Lastly, the proposed project is part of a pre-existing NEPA analysis; the Atlantic Rim final Environmental Impact Statement and Record of Decision (2007) and is encumbered by oil and gas leases. No wilderness characteristic inventory is required for this project due to the frequency of present development already occurring in the lease area.

#### Finding of No New Significant Impacts vs. Finding of No Significant Impact

During the course of preparing the Decision Record the BLM determined that it would use the term "Finding on No Significant Impact" (FONSI) instead of the "Finding of No New Significant Impact" (FONNSI) included in the Catalina PODs G&I EA package released to the public for comment in January of 2011.

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