



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
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In Reply Refer To:
1510 (AK9300)

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Dear Reader:

The enclosed Errata Sheet documents minor changes to the text of the Draft Supplemental Environmental Impact Statement (EIS) for the Alpine Satellite Development Plan (ASDP) for the Proposed Greater Mooses Tooth Unit Development Project that was released in February 2014. These corrections reflect edits that were discovered after the release of the Draft Supplemental EIS. We have utilized "tracked changes" (underlined additions and crossed-out deletions) for some of the changes where we felt it would assist the reader to more easily identify the corrections. There are no changes or significant new circumstances or information identified in this Errata Sheet that affect the analysis and conclusions in the Draft Supplemental EIS. This Errata Sheet is part of the administrative record for the Draft Supplemental EIS. These corrections will also be posted on the BLM-Alaska website at www.blm.gov/ak/GMT.

For additional information or clarification regarding the attached Errata Sheet, please contact Bridget Psarianos, GMT1 Project Lead, at (907) 271-4208.

Sincerely,

Bud C. Cribley
State Director

Enclosure

Table 4.7-1. Mitigation Associated with the GMT1 Development Project (Continued)

Resource	2013 ROD BMPS	2004 ASDP ROD	CPAI Design Features and Other Agency Permit Requirements
ESA Species (Continued)	A-1 through A-7, A-11, A-12, C-1, E-4, E-8, E-10, E-11, E-18, F-1, I-1, J	during mid-June of each year in which activities take place between June 1 and August 1. BLM and cooperating agencies will also work with the Service to schedule oil spill response training in riverine, marine and inter-tidal areas that occurs within 200 meters of shore, outside sensitive nesting/ broodrearing periods or conduct nest surveys. The protocol and timing of nest surveys for spectacled eiders will be determined in cooperation with the Service, and must be approved by the Service. Surveys should be supervised by biologists who have previous experience with spectacled eider nest surveys.	
SOCIOECONOMIC ENVIRONMENT			
Community Health	A-1, A-2, A-4, A-10, A-11, A-12, I-1		
Cultural and Archaeological	C-2, E-13, I-1	Before construction of ice roads, CPAI will evaluate and assess possible cultural resources in the immediate areas of the proposed ice roads.	Cultural/archaeological resource surveys are conducted prior to ground-disturbing activity. CPAI routes ice roads to avoid archaeological sites where possible.
Economics			CPAI strives to hire qualified Nuiqsut residents for jobs in the oil fields. CPAI has an internship program (Career Quest) to introduce Nuiqsut high school students to jobs in the oil fields and in their community. CPAI's philanthropy program from the Alpine field provide income and other benefits to residents of Nuiqsut.
Environmental Justice	H-1 – see Subsistence		
Subsistence	A-4 through A-7, A-11, A-12, B-1, B-2, C-3, 4, and 5, E-1, 2, 6, 7, and 19, F-1, H-1, H-3, I-1, K-1, K-2, M-1	Roads will be available for subsistence use	CPAI employees and contractors receive cultural awareness training. Hunting and fishing by non-local employees and contractors is prohibited. CPAI consults with the Kuukpik Subsistence Oversight Panel (KSOP), the Native Village of Nuiqsut, and Kuukpik Corporation to ensure operations do not adversely affect subsistence activities, and holds public community meetings frequently and well in advance of future projects. Projects have been rescheduled or travel has been rerouted to avoid subsistence use and hunting areas during seasonal periods. Subsistence hunters are allowed access to CPAI's oil fields subject to safety policies. CPAI provides the community of Nuiqsut with clear and concise policies regarding use of the roads associated with the project and hunting prohibitions, if any, along the roads and near project components. Ensure that these policies are disseminated throughout the community. The policies should also be provided to BLM for their records.

Table 4.7-1. Mitigation Associated with the GMT1 Development Project (Continued)

Resource	2013 ROD BMPS	2004 ASDP ROD	CPAI Design Features and Other Agency Permit Requirements
Subsistence (Continued)	A-4 through A-7, A-11, A-12, B-1, B-2, C-3, 4, and 5, E-1, 2, 6, 7, and 19, F-1, H-1, H-3, I-1, K-1, K-2, M-1		<p>CPAI consults with the local community (Nuiqsut) on locations of road and pipelines.</p> <p>CPAI consults with Nuiqsut residents regarding the potential benefit (or impacts) of a boat launch on the Ublutuooh River that allows residents to access the Ting/Ublutuooh River and Fish Creek without having to travel to the Beaufort Sea. Topics for consultation should include the usefulness of the boat launch to Nuiqsut residents, the potential for creating new impacts on subsistence, and navigability of the Ublutuooh River to its confluence with Fish Creek. The consultation results should be documented, distributed to BLM and other stakeholders, and clearly identify actions to be implemented based on the consultation. CPAI implements a multi-year monitoring program in Nuiqsut to document the impacts of GMT1 on Nuiqsut subsistence harvesting activities.</p> <p>CPAI identifies areas of high snow drifting along the pipeline after construction and implement a snow drifting management program that clears drifts and creates access points in areas where drifts accumulate for a long distance along the pipeline. Consult with Nuiqsut residents as to an appropriate distance for cleared access areas as well as the depth of snow drifts that impede access under the pipeline. The consultation results should be documented, distributed to BLM and other stakeholders, and clearly identify actions to be implemented based on the consultation.</p> <p>In consultation with local hunters and local organizations, continue to facilitate, improve, and expand communication protocols to inform subsistence users of daily flight patterns and identify potential conflict areas during peak hunting times. This consultation should include efforts to advertise these communication protocols so that a majority of Nuiqsut subsistence harvesters are aware of them and confirmation that existing minimum altitude requirements are adequate. The consultation results should be documented, distributed to BLM and other stakeholders, and clearly identify actions to be implemented based on the consultation.</p> <p>During community consultation provide ample opportunities for input from various local entities (e.g., Kuukpik Subsistence Oversight Panel, Native Village of Nuiqsut, City of Nuiqsut, Kuukpik Corporation) in addition to knowledgeable subsistence users. CPAI will periodically document the level of local entities' participation in and satisfaction with community consultation.</p>

Table 4.7-1. Mitigation Associated with the GMT1 Development Project (Continued)

Resource	2013 ROD BMPS	2004 ASDP ROD	CPAI Design Features and Other Agency Permit Requirements
Subsistence (Continued)	A-4 through A-7, A-11, A-12, B-1, B-2, C-3, 4, and 5, E-1, 2, 6, 7, and 19, F-1, H-1, H-3, I-1, K-1, K-2, M-1		<p>CPAI should inform local residents of company subsistence leave policies and ensure that leave policies are flexible to account for annual variation in the timing and length of subsistence activities.</p> <p>CPAI should employ subsistence representatives who receive daily communications on project activities and report potential conflicts with subsistence users. Subsistence representatives should be local and knowledgeable residents and be included in field activities that the community believes have a high potential for conflicting with subsistence uses (e.g., helicopter surveys). CPAI will provide subsistence representatives with regular project updates and clear communication protocols and training on how to report potential conflicts with subsistence users.</p> <p>Except in the case of emergencies, prohibit the use of airboats on rivers that have been previously documented as boat subsistence use areas for Nuiqsut residents. Through consultation with local residents, identify key boating areas that should be avoided.</p>
Land Use	A-1, A-3, A-4, A-5, A-10, C-2, C-3, E-1, E-5, E-8, F-1, I-1, K-1e, K-1g		
Recreation	A-1, A-5, C-2, C-3, C-4, E-5, E-6, E-7, F-1, H-3, E-17, I-1, M-2		
Visual	A-1, A-3, A-4, A-5, A-6, C-2, C-3, E-5, E-17, F-1, I-1, M-2	<p>All permanent painted structures, including emergency spill containers located along watercourses, will be painted to blend with the natural environment. All colors will be pre-approved by the Authorized Officer. BLM will use computer generated colors and on-site testing to determine the color for structures that will blend in best with the background colors of the natural landscape. Self-weathering steel, non-specular surfaces, or BMPs shall be used on all metal structures not otherwise painted.</p> <p>Use a non-reflective finish on all pipelines.</p>	
Wilderness	A-1, A-4, A-5, A-6, C-2, C-3, E-5, F-1, I-1, M-2		

Subsistence – Potential New Mitigation Measures (Section 4.4.3)

Potential Mitigation Measure 1—Consultation Regarding Ublutuoch River Boat Launch

Objective: Determine whether a boat launch in the Ublutuoch River would be a benefit to the community of Nuiqsut.

Requirement/Standard: Consult with Nuiqsut residents regarding the potential benefit (or impacts) of a boat launch on the Ublutuoch River that allows residents to access the Ting/Ublutuoch River and Fish Creek without having to travel to the Beaufort Sea. Topics for consultation should include the usefulness of the boat launch to Nuiqsut residents, the potential for creating new impacts on subsistence, and navigability of the Ublutuoch River to its confluence with Fish Creek. The consultation results should be documented, distributed to BLM and other stakeholders, and clearly identify actions to be implemented based on the consultation.

Potential Benefits and Residual/Unavoidable Impacts: An Ublutuoch River Boat Launch could potentially provide a new, easier way to access the Fish Creek area during the summer months. The mitigation could offset the fuel costs associated with traveling to Fish Creek via the Beaufort Sea. However, the mitigation could also potentially introduce new impacts for subsistence users, such as increased use of Fish Creek and competition among local harvesters in that area.

Potential Mitigation Measure 2—Subsistence Monitoring Study

Objective: Monitor the impacts of the GMT1 development on subsistence harvests and activities for the community of Nuiqsut.

Requirement/Standard: The permittee would implement a multi-year monitoring program in Nuiqsut to document the impacts of GMT1 on Nuiqsut subsistence harvesting activities.

Potential Benefits and Residual/Unavoidable Impacts: A subsistence monitoring study would help identify the impacts of GMT1-related activities on Nuiqsut subsistence activities. The results of the study could be used to develop mitigation measures aimed at lessening the impacts of the project on Nuiqsut harvesters.

Potential Mitigation Measure 3—Pipeline Snow Drift Management Program

Objective: Reduce potential access issues for Nuiqsut residents traveling on snowmachine near the GMT1 pipeline.

Requirement/Standard: Require permittees to identify areas of high snow drifting along the pipeline after construction and implement a snow drifting management program that clears drifts and creates access points in areas where drifts accumulate for a long distance along the pipeline. Consult with Nuiqsut residents as to an appropriate distance for cleared access areas as well as the depth of snow drifts that impede access under the pipeline. The consultation results should be documented, distributed to BLM and other stakeholders, and clearly identify actions to be implemented based on the consultation.

Potential Benefits and Residual/Unavoidable Impacts: A pipeline snow drift management program would reduce potential impacts on user access for residents trying to cross under the pipeline to access subsistence use areas, particularly those near Fish Creek, during the winter months. Impacts may still occur during periods of heavy or blowing snow.

Potential Mitigation Measure 4—Consultation Regarding Aircraft Communication Protocols

Objective: Ensure that current communication protocols related to helicopter and fixed wing air traffic are adequate in addressing Nuiqsut concerns about the impacts of air traffic on their hunting activities.

Requirement/Standard: In consultation with local hunters and local organizations, continue to facilitate, improve, and expand communication protocols to inform subsistence users of daily flight patterns and identify potential conflict areas during peak hunting times. This consultation should include efforts to advertise these communication protocols so that a majority of Nuiqsut subsistence harvesters are aware of them and confirmation that existing minimum altitude requirements are adequate. The consultation results should be documented, distributed to BLM and other stakeholders, and clearly identify actions to be implemented based on the consultation.

Potential Benefits and Residual/Unavoidable Impacts: Strong communication protocols with the community of Nuiqsut regarding the timing, altitude, and location of air traffic should reduce the frequency of these impacts on subsistence users. However, such protocols will not remove impacts of air traffic altogether.

Potential Mitigation Measure 5—Dissemination of Policies Regarding Use of Roads by Local Residents

Objective: Ensure that residents are aware of the policies regarding use of project-associated roads for subsistence activities to reduce misunderstandings and ensure the safety of project workers and local residents using the roads.

Requirement/Standard: Provide the community of Nuiqsut with clear and concise **written** policies regarding use of the roads associated with the project and hunting prohibitions, if any, along the roads and near project components. Ensure that these policies are disseminated throughout the community. The policies should also be provided to BLM for their records.

Potential Benefits and Residual/Unavoidable Impacts: Clear policies regarding use of project roads for subsistence activities will likely reduce misunderstandings about whether and to what extent local harvesters can use and/or hunt from the road. Residents will be more likely to use project roads if they are well-informed about company policies and security restrictions.

Potential Mitigation Measure 6—Ensure Participation of Various Local Entities during Consultation

Objective: Ensure that all local entities are given adequate opportunities to participate in consultation to reduce concerns that some entities or individuals have less opportunity for input than others.

Requirement/Standard: During community consultation provide ample opportunities for input from various local entities (e.g., Kuukpik Subsistence Oversight Panel, Native Village of Nuiqsut, City of Nuiqsut, Kuukpik Corporation) in addition to knowledgeable subsistence users.

Permittee will periodically document the level of local entities' participation in and satisfaction with community consultation.

Potential Benefits and Residual/Unavoidable Impacts: Ensuring ample participation of all residents and entities during consultation efforts will reduce perceptions that local residents are not being heard.

Potential Mitigation Measure 7—Subsistence Leave Policies

Objective: Provide employment opportunities for local residents that allow adequate time for participation in subsistence activities.

Requirement/Standard: Permittee should inform local residents of company subsistence leave policies and ensure that leave policies are flexible to account for annual variation in the timing and length of subsistence activities.

Potential Benefits and Residual/Unavoidable Impacts: Providing adequate subsistence leave policies for local residents could encourage local participation in the workforce while reducing the potential for impacts on overall subsistence harvests in the community.

Potential Mitigation Measure 8—Subsistence Representatives

Objective: Reduce potential conflicts between the GMT1 project and subsistence activities through the use of subsistence representatives.

Requirement/Standard: Permittee should employ subsistence representatives who receive daily communications on project activities and report potential conflicts with subsistence users. Subsistence representatives should be local and knowledgeable residents and be included in field activities that the community believes have a high potential for conflicting with subsistence uses (e.g., helicopter surveys). The permittee will provide subsistence representatives with regular project updates and clear communication protocols and training on how to report potential conflicts with subsistence users.

Potential Benefits and Residual/Unavoidable Impacts: Subsistence representatives can improve industry-community relations and reduce the potential for impacts on subsistence users through the identification of potential conflicts and by providing traditional knowledge that can assist in avoiding potential impacts on wildlife, subsistence activities, and culturally important places.

Potential Mitigation Measure 9—Economic Study of Subsistence Impacts

Objective: To better understand the economic impacts of development on subsistence uses and activities and provide recommendations regarding how these impacts could be mitigated.

Requirement/Standard: A thorough economic study of the additional costs that individuals and families currently incur to continue subsistence activities at desired levels (or would have to incur to participate in subsistence activities if they have not been able to afford them) will be undertaken. The study will include an overview of the increased impacts to subsistence activities related to past, current, and proposed future projects, will account for the increase in cost of living, and will summarize mitigation funds received to date from all sources to determine the adequacy of this mitigation

Potential Benefits and Residual/Unavoidable Impacts: An economic study would provide a better understanding of how oil and gas development projects affect subsistence users when they have to travel farther or spend more time to harvest subsistence resources. Mitigation resulting from this study could be used to offset these increased costs.

Potential Mitigation Measure 10—Prohibit Airboats in Key Subsistence Use Areas

Objective: To reduce impacts from airboats on subsistence users and activities.

Requirement/Standard: Except in the case of emergencies, prohibit the use of airboats on rivers that have been previously documented as boat subsistence use areas for Nuiqsut residents. Through consultation with local residents, identify key boating areas that should be avoided.

Potential Benefits and Residual/Unavoidable Impacts: Prohibiting the use of airboats in places where residents are actively traveling by boat to harvest subsistence resources will reduce potential disruptions to subsistence users and resources.

Potential Mitigation Measure 11—Suspend Non-essential Helicopter Traffic during Peak Caribou Hunting Season

Objective: To reduce the impacts of helicopter traffic on Nuiqsut caribou hunters.

Requirement/Standard: In ongoing consultation with the City of Nuiqsut, the North Slope Borough Department of Planning, Native Village of Nuiqsut, Kuukpik Corporation, and the Kuukpik Subsistence Oversight Panel, Inc., the BLM will explore the possibility of an approximately month-long period during peak caribou hunting when non-essential helicopter flights will be suspended within a predetermined miles of rivers that have been documented as caribou subsistence use areas, or limit helicopter traffic during this time to established flyways. The consultation results should be documented, distributed to BLM and other stakeholders, and clearly identify actions to be implemented based on the consultation.

Potential Benefits and Residual/Unavoidable Impacts: Reducing helicopter traffic or limiting the geographic area affected by helicopter traffic would reduce the incidence of conflicts between GMT1-related helicopter traffic and Nuiqsut subsistence activities. However, other operators on the North Slope may continue to fly during the suspension period.

Public Health – Potential New Mitigation Measure (Section 4.4.1)

Potential Mitigation Measure 1—Public Health Monitoring (new required operating procedure)

Objective: To minimize the effects of harmful oil and gas development-related changes to population health.

Requirement/Standard: A public health monitoring program should be created at a regional level to track health indicators that are vulnerable to impacts from oil and gas activities. These indicators should focus on health outcomes and/or determinants of local concern that can be tied to oil and gas activity. Where possible, indicators should include threshold levels and specific actions should be developed for when thresholds are surpassed. The State should be responsible for the development and implementation of the monitoring program; however the North Slope Borough and the Alaska Native Tribal Health Consortium should be consulted in the identification of appropriate indicators, thresholds, and responsive actions.

Potential Benefits and Residual/Unavoidable Impacts: The public health monitoring program will expedite the detection of unacceptable changes in population health caused by oil and gas activity. The sooner health changes are detected, the greater the likelihood of avoiding controversial and devastating impacts that will not only impact the communities, but that will greatly harm the relationship between the communities and the State. However, a monitoring program will detect, but cannot by itself, eliminate any negative changes in public health that may result from oil and gas development.