Material Sites

Material sites, commonly referred to as "mine sites" within the planning area, are areas where common variety materials such as sand, gravel, rock, crushed rock, and rip-rap are extracted and processed. Material resources are required for the construction, maintenance, and expansion of infrastructure including roads, pipelines, airports, businesses, residences, utilities, and communication facilities among other types of projects. Some material sites or material sources exist that may have been previously developed and are not currently active or are newly identified sources. Ideally, source areas are located close to a project area or area of use to reduce transportation costs; however, appropriate material sources are not located uniformly in many landscapes, so transportation distances can vary. Transportation costs increase with distance from the material source area which quickly makes their use cost prohibitive, and therefore, a lack of materials sites within a reasonable distance from projects increases transportation costs and may effectively prevent some maintenance and development activities that are necessary or desirable. Due to their importance to activities throughout the North Slope, it is recognized that the development of specific material resources may take precedence over other uses.

Within the North Slope planning area, material source areas are more readily identified in land areas adjacent to the Dalton Highway from the southern plan boundary extending north to include the foothills area on the northern flank of the Brooks Range. Where river systems are close to the Dalton Highway, material sources are also located on the shore lands and adjacent areas where sand and gravel are common and exist in a natural thawed state. North of the foothills to the Arctic Ocean, material deposits are less available near project sites. In many cases haul distances may drive costs up significantly. Current trends and outlooks for the planning period indicate that demand for materials is high and will continue to grow as exploration is conducted and oil and gas projects are authorized by local, state, and federal agencies. Material resources for this plan have been assessed with the perspective of managing a relatively scarce resource when accounting for immediate availability in project areas.

Goals

Retain Land for State-Owned Materials Sites. Maintain in state ownership and make available to public and private users sufficient, suitably located materials sites to meet long-term economic and infrastructure needs of the area for material resources.

Minimize Material Site Impact. Sites will be consolidated to minimize impact to other resources, to the extent that is economical or practicable.

Objectives and Management Guidelines

Objective A. The State will designate material sites necessary for development and maintenance of infrastructure during the planning period.

- **Guideline A-1.** All state-owned material sites designated under AS 38.05.550 will be retained in state ownership unless determined by the Commissioner to be in the state's best interest to dispose of the land.
- Guideline A-2. Lands with potential for production of materials necessary for maintenance of existing infrastructure, or development of new infrastructure, are identified as such and shall be retained in state ownership unless a land disposal is determined by the Commissioner to be in the State's best interest.
- Guideline A-3. When designating material sites, the state may include appropriate stipulations. The designation of material sites may take precedence over other surface uses.
- Guideline A-4. When responding to a request for a new material site designation, the highest priority should be given to using or expanding existing designated material sites when the quality, quantity, and cost of the resource is acceptable.
- **Guideline A-5.** Consideration should be given to designating material sites near present or planned infrastructure projects.
- Guideline A-6. Construction materials resources are required for the development, maintenance, and expansion of critical infrastructure including roads, pipelines, airports, utilities, communication facilities, and similar types of projects. Because of the importance of material resources, it may be appropriate to locate material sites within areas not already identified in this plan. Unless specifically stated in the management intent, material sites should be considered appropriate in any classification.
- Guideline A-7. As a general policy, material sites will not be designated in known fish spawning areas or within 100 feet of known spawning areas.
- Guideline A-8. Material Site Designation decisions will go through the AS 38.05.945 public notice process which includes alerting the appropriate borough, municipality, village, and Native corporation entities. When authorizing a material sale, coordinate with the Alaska Department of Transportation & Public Facilities (ADOT/PF) and ADF&G for site-specific information.

Objective B. Designated material sites required for exploration and development activities will be limited to the minimum necessary and will include stipulations to minimize the environmental impact.

• Guideline B-1. A buffer shall be provided adjacent to anadromous waterbodies. The adjudicator shall consult with ADF&G on the width of the protection area prior to issuing an authorization. See also ADF&G Pit Performance Guidelines.

• Guideline B-2. Protect Area Adjacent to Anadromous or High Value Resident Fish Waterbodies. Consultation of the following reference is advised: North Slope Gravel Pit Performance Guidelines. McLean, R.F. 1993. Alaska Department of Fish and Game, Habitat and Restoration Division, Juneau, AK, Technical Report No. 93-9, 97 pp. Document available for download at http://www.adfg.alaska.gov/static/home/library/pdfs/habitat/93_09.pdf.

Objective C. Development of upland sources should be prioritized over streambed or riverine sources to minimize impact to river systems, to the extent that it is practicable.

Objective D. When siting, operating, or closing material sites, maintaining other uses and resources is to be considered to the maximum extent practicable.

- **Guideline D-1.** Prior to material extraction, the adjudicator will ensure that the requirements of the permit or lease adequately protect other important resources and uses.
- Guideline D-2. The disposal of materials should be consistent with the applicable management intent statement and management guidelines of the plan.
- Guideline D-3. In some instances, areas occupied by a material site may be appropriate for reuse for settlement or another form of development. These instances are noted in the 'management intent' of the affected unit when reuse of the parcel for the intended use is appropriate. If this occurs, the reclamation plan shall take this into consideration and account for the possible reuse.
- **Guideline D-4.** Land Sales in Areas of High Material Potential. Generally, if a settlement area contains sand and gravel deposits, rock sources or other similar, high value material resources, a pit area should be identified during subdivision design and retained in state ownership for future use.
- Guideline D-5. Where topography and vegetation allow, material sites should be screened from roads, residential areas, recreational areas, and other areas of significant human use. Sufficient land should be allocated to the material site to allow for such screening. Rehabilitation of the site shall follow the requirements of AS 27.19.020 and 11 AAC 97.250.
- Guideline D-6. Access Roads. Roads for access to material extraction sites should be dedicated to their respective material sites and maintained for materials extraction operations.

Objective E. Other Guidelines affecting Material Resources. Nearly all of the resource guidelines found within Chapter 2 either directly or indirectly affect material resources in the planning area. Other resources addressed in this chapter should also be considered.