

DECISIONS OVERVIEW AND PREFACE
FOR
THE TRUE NORTH PROJECT

In response to applications by
Fort Knox Gold Mining, Inc.

December 20, 2000

prepared by the

**ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND AND WATER**

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CHAPTER I. INTRODUCTION

PURPOSE OF OVERVIEW AND PREFACE

The purpose of this overview and preface is two-fold. First, Fairbanks Gold Mining, Inc. (FGMI) as operator of the True North Project submitted several applications and requests necessary for development and operation of the True North Project. Each application or request requires either a decision or an approval. This overview and preface serves as an umbrella document for each action and is incorporated by reference into each of those decisions. Secondly, the Department of Natural Resources (DNR) feels it is important for the public to understand the framework of the DNR's review and evaluation of the True North Project, to see how public input was considered by the DNR, and what changes were made as a result of public comment and agency concerns. Accordingly, this document provides background information, the review of public input, and a discussion of the most important issues of concern raised by the public.

STATUTORY FRAMEWORK

The decision-making process embodied in this overview and its attendant decisions must be viewed in light of DNR's constitutional and statutory responsibilities with respect to the development of state land. Within that framework, in managing and developing state land and resources, DNR represents the interests of all Alaskans. In exercising its management authority, the state considers the potential positive and negative effects of the mining activity on the environment and other resources, and objectively considers public input and available information. The care with which DNR has reviewed the True North project is in part driven by DNR's awareness that Alaskans' lives and, in some cases livelihoods, will be affected by DNR's decisions. DNR's decisions reflect an attempt to maximize the state's return from developing state land and resources, while minimizing the negative effects.

CHAPTER II. BACKGROUND INFORMATION

LOCATION

The True North Project is located 25 miles northeast of Fairbanks, on the northwest flank of Pedro Dome and approximately 11 miles from the existing Ft. Knox Mine. It covers an area of 2,096 acres within 79 state mining claims (see Figures 1 and 2).

The True North Project is located in a portion of the much larger True North Property. The overall True North Property area consists of a mixture of 388 state claims, 65.5 acres of federal patented land owned by Kinross, 401.2 acres of federal patented land under lease, and 4.68 acres of private real estate under lease. The entire True North Property contains approximately 10,000 acres.

Access to the True North Project is by the Steese Highway, the existing Pedro Dome Road, and historic RS 2477 roads.

WHO IS DEVELOPING THE TRUE NORTH PROJECT

FGMI, a wholly owned subsidiary of Kinross Gold Corporation, owns 65% of the True North Venture. LaTeko Resources, Inc., also a wholly owned subsidiary of Kinross Gold Corporation, owns the remaining 35%. The True North Project operator is FGMI.

PROJECT

FGMI currently plans to develop the True North Project by opening two surface mine pits (Hindenburg and East Pits). FGMI's operations will include development rock dumps, an ore stockpile, growth medium stockpiles, ore haulage, a shop/office complex, power and water supply, and the necessary general infrastructure including mine and exploration roads (see Figure 2). Ore from the True North Project would be hauled via an access/haul road connecting the True North Project to the existing Ft. Knox facility for processing.

The current projected True North Project mine life is 2.5 to 3 years. The mine life would change if an economically recoverable deposit was defined through FGMI's ongoing exploration activities in the True North Property area. FGMI is continuing exploration activities in the True North Property area. If additional ore is found, the project life may be extended for possibly a few years. However, the project description includes all ore that the company currently plans to mine, given the known, existing information.

If exploration confirms additional reserves, DNR must approve any changes to the True North Project Plan of Operations, Reclamation Plan, and any other necessary authorizations before new areas can be mined.

WHAT AUTHORIZATIONS HAS FGMI REQUESTED

FGMI has requested several authorizations and approvals from state and federal agencies to facilitate development and operation of the True North Project. The following DNR authorizations and approvals must be obtained by FGMI.

DNR Authorizations and Approvals:

- **True North Project Millsite Lease 416509.** The Millsite Lease authorized by AS 38.05.255 will allow surface use of state land.
- **Right-of-Way for True North Project Road ADL 416471.** This AS 38.05.850 right-of-way, in conjunction with an authorization from the Mental Health Trust Land Office (TLO), will provide access between the True North Project and the Fort Knox facility. The overall right-of-way will be approximately 8 miles.
- **Right-of-Way for GVEA power line to the True North Mine Project ADL 416477.** This AS 38.05.850 right-of-way, in conjunction with an authorization from the TLO, will provide 7.2/12.4 kV, 3 phase power to the True North Project from the existing GVEA substation located at Pedro Dome. The overall power line right-of-way will be approximately 3 miles.
- **Addendum to Fort Knox Millsite Permit ADL 414960 & 414961.** This Addendum allows FGMI to accept and process at the Ft. Knox facility ore originating from lands other than those currently allowed pursuant to the terms of the Millsite Permit and to place the resulting tailings in the existing tailings impoundment at Ft. Knox.
- **Plan of Operations Approval.** Approval of the True North Plan of Operations in conjunction with other necessary authorizations will allow FGMI to begin operations for the True North Project. The Plan of Operations consists of FGMI's Project Description, Reclamation Plan, and Monitoring Plan.

Other Agency Authorizations:

- Department of Environmental Conservation (DEC) **Solid Waste Disposal Permit (00031-BA008) Fort Knox Mine Tailing Disposal.** This permit authorizes off-site ore to be processed at the Ft. Knox facility.
- US Army Corps of Engineers (USACE) **Wetlands (404) Permit** for the clearing of approximately 34 acres of wetlands in the Hindenberg Pit area, and the filling of approximately 44 acres of wetlands for the construction of access roads.
- DEC **401 Certification** of the USACE Wetlands Permit.
- Department of Transportation and Public Facilities (DOT/PF) authorization for the underpass on the Steese Highway.
- Trust Land Office (TLO) authorization for the access/haul road on Mental Health Trust Land (the TLO is a separate organization that answers to the Mental Health Trust Authority, not to the DNR Commissioner).
- TLO authorization for material acquisition for construction of the access/haul road.

LANDOWNERSHIP

The landownership in the project area is a combination of state, Mental Health Trust land and School Trust land. DNR manages state owned and School Trust lands and other state land under the jurisdiction and management authority of DNR (for example, RS2477 rights of way, and certain

Omnibus Act roads). The TLO manages Mental Health Trust land. The Fort Knox Mine is primarily on state land, with the exception of the upland mining lease area (ore deposit) and the mill facility, which is on Mental Health Trust land.

- **State Lands**

The state owned or managed land includes all lands within the True North Millsite Lease, portions of the power line and access/haul road, and RS 2477s.

Two RS2477 access routes are involved in the new access/haul road: RST 644 (Fish Creek/Barnes Creek Roads), RST 1932 (Little Eldorado Creek Road). There is one Omnibus Act Road (FAS 6723 - Pedro Dome Road).

- **School Trust Lands**

Approximately 16 acres of School Trust lands are involved in authorizing this project. Portions of the new access/haul road and the Steese Highway underpass and on and off ramps are on these lands.

The purpose of School Trust lands is to generate revenue for the support and operation of Alaska's schools. These lands are currently involved in litigation. However, there is no injunction prohibiting activities on or authorizations for use of these lands; these lands are managed by the DNR under DNR Department Order 143. All transactions must be at fair market value and require notification of the plaintiffs via the Attorney General's Office. All revenue generated from School Trust lands are accounted for separately by the state.

- **Mental Health Trust Settlement and Beneficiaries**

The majority of the Mental Health Trust land associated with this decision was conveyed to the Trust in 1996 in accordance with the 1994 Alaska Mental Health Trust Settlement. Under the settlement, the Trust was conveyed over 50,000 acres in the area with the understanding that the Trust would strive to generate revenues from the land, most likely from mineral development. State and local land use plans in place at the time of the settlement were consistent with this understanding. Statewide and local conservation organizations participated in the development of the settlement and supported its approval. Revenues generated from these lands are and will be used by the Alaska Mental Health Trust Authority to improve the lives and circumstances of Trust beneficiaries, a significant statewide benefit.

Mental Health Trust lands are directly involved in the project in the following ways:

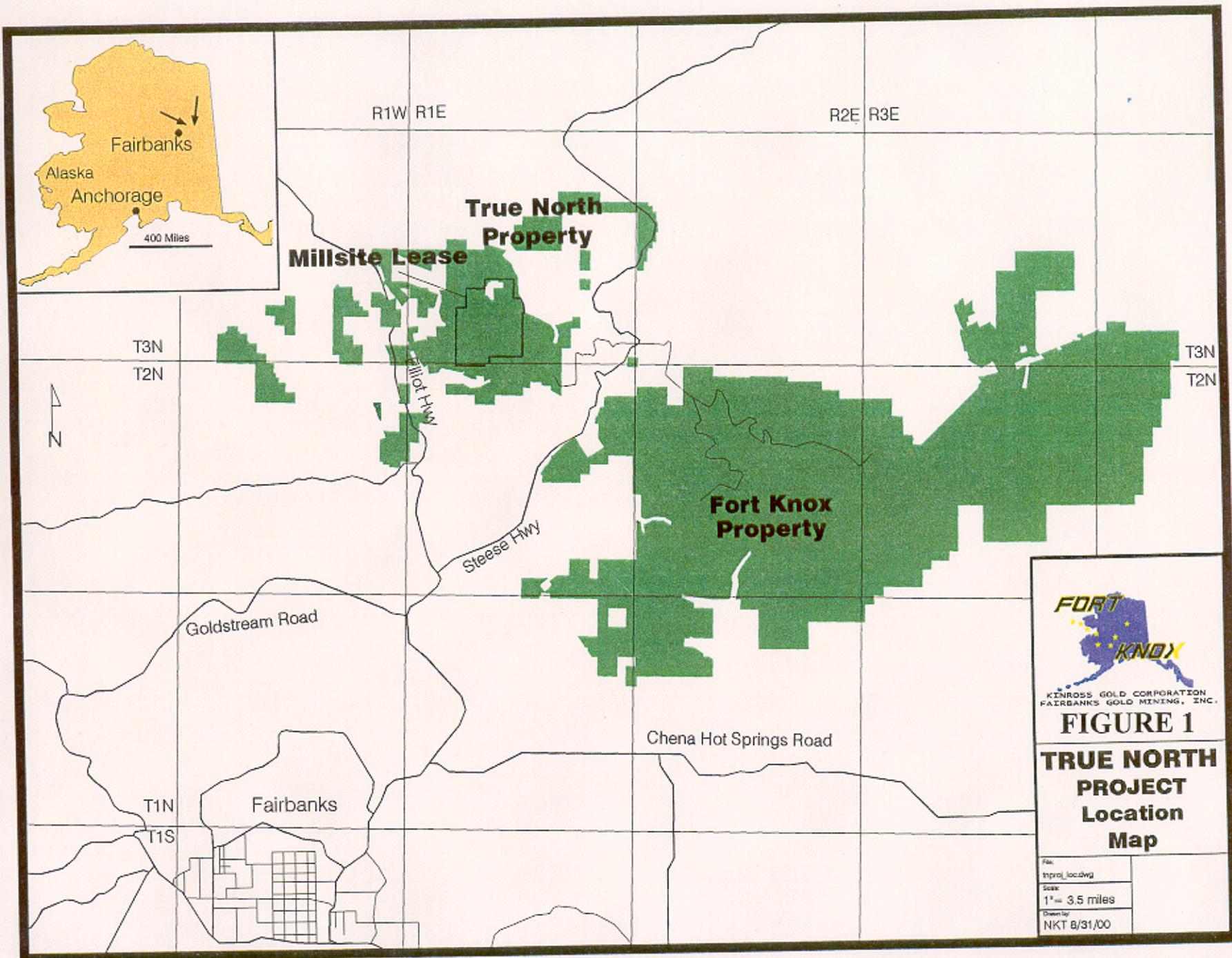
- Portions of the new access road between the True North Project and the Ft. Knox facility cross Trust land;
- Portions of the new power line to be constructed to power the facilities at True North Project cross Trust land; and
- A significant quantity of road building material (fill) will be purchased from the Trust (from Ft. Knox) to build portions of the new access/haul road.

The proposed processing of off-site ore at the Fort Knox mill will significantly increase the likelihood that Trust lands in the area will be made fully productive, as envisioned by the parties to the 1994 settlement.

In conjunction with the necessary DNR approvals on general state and School Trust land, the TLO is issuing easements on the Mental Health Trust land for the access road and the power line for the True

North Project. These easements will follow the preferred route requested by FGMI. The easements are issued in accordance with Trust land management regulations.

Pursuant to comments from the TLO, the Mental Health Trust Authority strongly supports the DNR authorizations to proceed on this project.

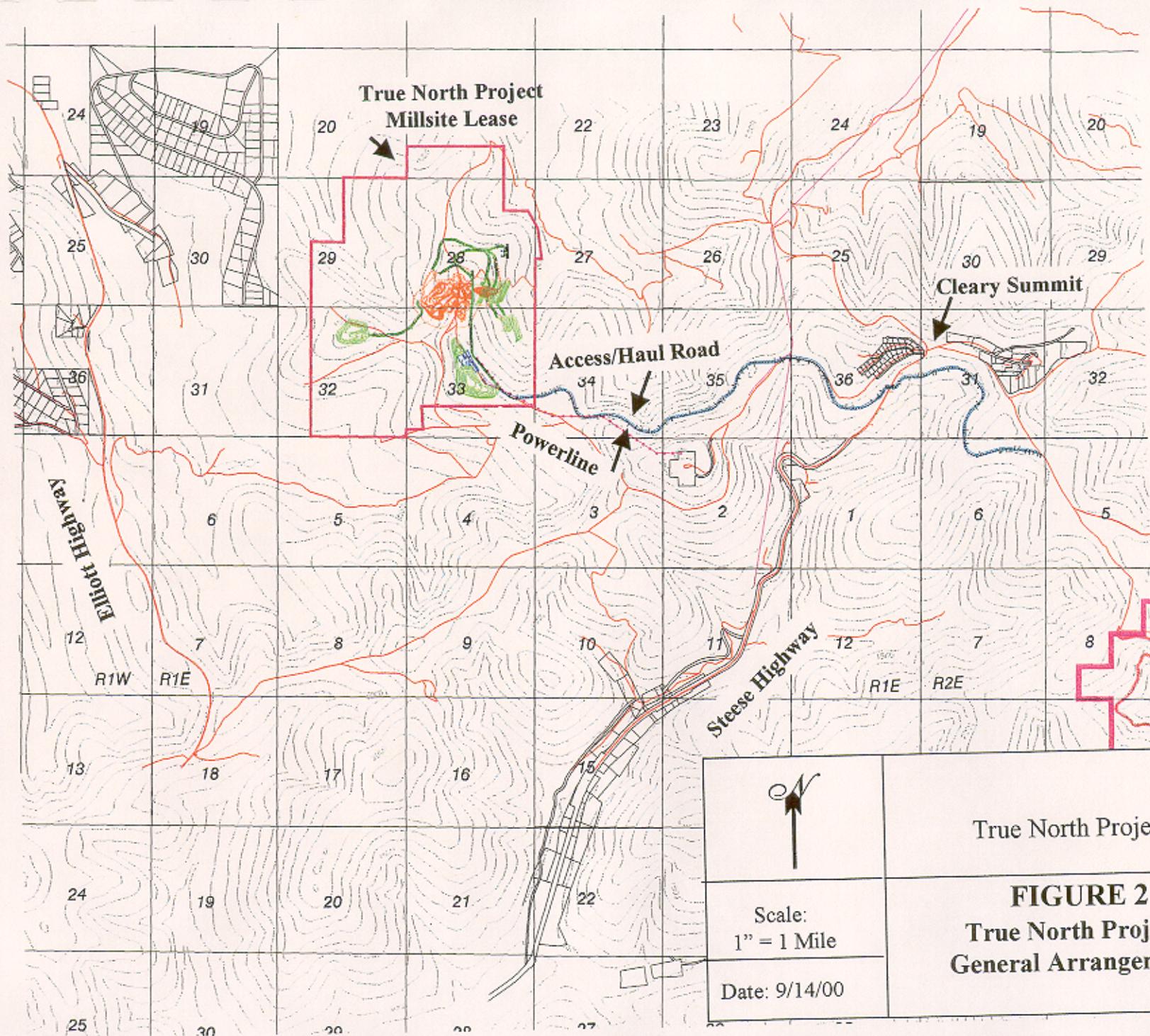


FORT

KNOX
 KINROSS GOLD CORPORATION
 FAIRBANKS GOLD MINING, INC.

FIGURE 1
TRUE NORTH
PROJECT
Location
Map

File:
 Inproj_loc.dwg
 Scale:
 1" = 3.5 miles
 Drawn by:
 NKT 8/31/00



	<p>True North Project</p>
<p>Scale: 1" = 1 Mile</p>	<p>FIGURE 2</p>
<p>Date: 9/14/00</p>	<p>True North Project General Arrangement</p>

CHAPTER III. PROJECT EVALUATION PROCESS

SCOPE OF PROJECT REVIEW AND EVALUATION

In reviewing this project, DNR looked at whether the proposal is an appropriate use of state land and whether it provides the greatest economic benefit to the state and the development of its resources. In making its determination, DNR evaluates the reasonably foreseeable, significant effects of the True North Project. DNR's decision evaluated the application with respect to material issues and facts (including local government land use plans, zoning designations, and ordinances), available land management information, public and agency comment, and DNR responsibilities under AS 19, AS 38.04, and AS 38.05. This overview and the individual decisions discuss the potential effects in general terms that may occur with the development of the True North Project, subject to the mitigation measures (measures designed to reduce or eliminate the possible adverse effects) that have been developed as terms and conditions of the project authorizations.

ROLE OF THE TANANA BASIN AREA PLAN IN THE REVIEW PROCESS

The True North Project falls within the state's Tanana Basin Area Plan (TBAP). The TBAP is a land management tool developed in accordance with AS 38.04.065. TBAP is DNR's preliminary decision for land use actions on state lands within the Tanana Basin, and provides specific land management policies. These land policies are described in the management intent statement for each management unit within the planning area. The True North Project is within Subregion 1 -- Fairbanks North Star Borough. The plan also sets out areawide goals and policies for the various resources, which include minerals.

Public participation was one of the most important aspects of the development of TBAP, which was adopted in 1985 and updated in 1991. During the development of the original plan, public meetings were held in almost every community in the Tanana Basin, with over 470 people attending, and many hundreds of people submitting comments. During the 1991 update of the plan, about three hundred people attended two rounds of public meetings throughout the planning area, and hundreds of comments were received. Information gathered during these public processes was instrumental in identifying important issues and shaping the final plan and its policies on what uses should be allowed on state land within the Tanana Basin.

TBAP planning process reviewed resource information and public concerns prior to making long-range decisions about public land use management. The planning process also resolved conflicting land use objectives and made clear to the public what choices were made and the reasons for these choices. TBAP establishes long-range commitments for use of public land and provides clear policies for public land management. As such, TBAP is important for the public as well as private landowners and owners of state mining claims. By the state publicly committing to land use patterns and policies, private investors can make reasonable decisions about investments in the area, and private landowners are informed about the anticipated land uses which may be allowed on adjacent state land.

Policies for Each Management Unit. In the Tanana Basin Area Plan Chapter 3, Land Management Policies For Each Management Unit, specific land management policies are provided for each subregion and management unit. The True North Project Area is within Subregion 1 -- Fairbanks North Star Borough. On page 3-6 of TBAP under Subregion 1, Minerals, the plan provides that

mining is a major industry within the Fairbanks North Star Borough. The area from Ester Dome to Cleary Summit is a highly mineralized region with many active claims. TBAP further provides that “these areas will be left open to mineral entry, and the areas where there are large blocks of claims (particularly the Cleary Summit and Ester Dome area) **will be managed primarily for minerals** (emphasis added).”

Within Subregion 1, the True North Project is within Management Unit 1J and Subunit 1J2. The primary land use designation for Subunit 1J2 is minerals and public recreation, and the subsurface is open for purposes of locatable minerals with land disposals prohibited as a surface use. The management intent for Management Unit 1J provides “The emphasis is on subsurface resource development, recreation, and maintaining fish and wildlife habitat.” Under the management intent, Minerals are specifically identified:

Minerals is designated a primary use in subunits 1J2, 1J3, and 1J4. Mineral development will be encouraged in these subunits. The Fairbanks Circle Trail will be open to mining related access.

Recreation also is specifically identified:

Recreation is designated a primary use in subunits 1J2, 1J3, and 1J4. Recreation is also a secondary use in Subunit 1J1.

Recreation values are important in the Cleary Summit area. The triangle of land bordered by the Steese Highway, Elliott Highway, and Chatanika River contains much of the Fairbanks gold mining heritage. This includes placer gold mines, ditches that carried water for hydraulic mining, the abandoned narrow gauge Tanana Valley Railway, abandoned townsites, and interconnecting trails.

Recreation will be emphasized to the extent that it does not interfere with mining activity (emphasis added). *Historic sites that do not conflict with current or future mining activity should be protected and retained in public ownership. The Division of Parks and Outdoor Recreation will work with the Division of Mining to identify historic sites. If these Divisions cannot agree on the location or boundaries of the sites, the sites will not be recommended for legislative designation as state historic sites....*

Area-wide Goals and Policies. TBAP, in Chapter 2, Area Wide Land Management Policies, sets out goals and management guidelines for each resource throughout the entire planning area. Goals are the general condition that the department is trying to achieve. Guidelines are the specific directives that will be applied to land and water management decisions for specific authorizations, such as the True North Project.

On page 2-27 of the TBAP under Subsurface Resources there are four goals listed. In summary, these goals provide that resources be made available to contribute to mineral supplies. Making resources available for development will contribute to providing stable job opportunities, stimulate growth of secondary and other primary industries, and establish a stable source of state revenues. In accordance with these goals, when developing subsurface resources, the DNR should strive to protect the integrity of the environment and affected cultures, aid in the development of infrastructure such as roads and railroads, and continue to provide geologic mapping and technical support for the mining industry. The goals for subsurface resources were used to guide DNR’s decisions for the True North Project.

Also, on page 2-27 under Management Guidelines -- Mineral and Coal Development, the plan provides area wide management guidelines, which have been used to evaluate FGMI's request for use and development of state land and resources within the True North Project area. Six of the area wide guidelines are:

Guideline "A. Mineral and Coal Exploration," provides that "Recognized exploration methods for locatable minerals will be allowed on all state lands unless specifically closed to prospecting. Exploration methods may be subject to conditions of a land use permit."

The True North Project that is being authorized by DNR is located on existing mining claims on state land open to prospecting. Exploration continues in the True North Property area under permits authorized by DNR on state owned lands.

Guideline "B. Open to Mineral Entry," provides that "All state lands open to mineral entry are multiple use areas where mineral development will be accommodated and encouraged consistent with applicable state law and the policies of this plan."

The state lands within the True North Project area are multiple use land open to mineral entry. In reviewing and evaluating the True North Project, DNR is accommodating and encouraging mineral development consistent with the applicable state laws and policies of TBAP.

Guideline "C. Reclamation of Mined Land," provides that "Land use permits and plans of operation for mineral development and gravel extraction will specify measures necessary to return the land to a useful condition. Specific measures and any requirement for a performance bond will be consistent with AS 27.19. Specific measures may include storage and reuse of topsoil, disposal, or overburden, regrading of tailings and revegetation, reestablishment of natural (not necessarily original) contours, reestablishment of natural drainage system, long-term erosion control measures, and removal of equipment, improvements, and other man-made items."

DNR will require the True North Project to return mined lands to a useful condition with a post mining land use consistent with TBAP. DNR will require the True North Project Reclamation Plan to adhere to the intent of this guideline.

Guideline "D. Access to Mineral and Coal Development," provides that "Existing roads should be used for access to mine sites wherever feasible. Access across tundra, wetlands, and other environmentally sensitive areas will be managed in a manner that minimizes damage...."

The preferred alternative for the True North Project uses existing roads to the extent feasible, and new construction. Where existing roads were not used and a new route will be constructed, DNR reviewed the route to ensure that damage to environmentally sensitive areas will be minimized. FGMI will obtain all appropriate wetlands permits for the project prior to construction. Mitigation measures will be implemented to reduce impacts from noise, lights and other operational processes. Please refer to Section 5, Access/Haul Roads in the Chapter IV, Summary and Response to Comments in this document.

Guideline "E. Control of Impacts," provides that "Guidelines will be developed as necessary through the land use permit or leasing process to minimize adverse impacts of mining, especially in settled areas, recreation areas, and in areas viewed from roads. In such areas, guidelines should

consider, at a minimum, the following items: control of solid wastes, removal of vegetation, siting of mining structures, tailings and overburden, roads, noise pollution, and rehabilitation of mining sites.”

All authorizations for the True North Project contain stipulations and conditions that will minimize adverse impacts of mining, including those listed in this guideline. In addition, the project, including the location of the access road right-of-way, was tailored to minimize the potential negative impacts to local residents and recreation users. Of particular significance is FGMI’s voluntary commitment to align and construct new sections of road in response to safety, noise, and light concerns. This commitment was made at a significant cost to FGMI.

Guideline “F. Coordination with Local Government,” provides that DNR “Coordinate subsurface development with local government zoning authority to best achieve common objectives.”

The development and operation of the True North Project will comply with North Star Borough requirements, including all applicable ordinances. Additionally, the use of the True North Project area for mining purposes is aligned with the FNSB’s Comprehensive Land Use Plan and zoning ordinances for this area and, therefore, achieves common objectives.

DNR has applied the area wide goals and management guidance in reviewing and authorizing the True North Project for use of state land and resources. DNR has done so within the framework of the TBAP designated uses. DNR has taken care to develop and tailor management decisions in consideration of public input while adhering to statutory and regulatory authority to authorize the True North Project and implement the plan.

In sum, development of the True North Project is consistent with the goals, management guidelines, and policies of TBAP.

FAIRBANKS NORTH STAR BOROUGH COMPREHENSIVE LAND USE PLAN

The Fairbanks North Star Borough (FNSB) Comprehensive Land Use Plan has designated the True North Project area as “Rural.” Within the “rural” designation, the Comprehensive Plan has designated the majority of the True North Project area and the area toward and including Ft. Knox as “High Mineral Potential.” The other portion of the True North Project area is designated as “Reserve Area.”

The FNSB Comprehensive Land Use Plan definitions for the above designations are as follows:

Rural: This area includes nine distinct land categories including reserve, military land, rural settlement, remote settlement, high mineral potential land, preferred agricultural land, preferred forest, open space/natural, and wildlife resource area.

High Mineral Potential: Areas in the rural and outskirts category have been identified as having a high potential for mineral deposits. The priority land use in these areas is mining. Land uses incompatible with mining are discouraged.

Reserve: Area to be reserved under present public ownership until sufficient data is available to make definitive planning judgements. Permitted uses include mining, hunting, fishing, trapping, recreation, forestry, and agricultural.

Below are the five community goals for Mining/Minerals Land Use designation in the FNSB Comprehensive Land Use Plan. These goals have been used to guide the decisions involving the True North Project.

Goal I. Encourage the mining industry as a basic industry of the Borough and of the Interior of Alaska.

Goal II. Encourage the development of the Borough's urban area as the support and administrative hub of mining activity for the Interior, and assure adequate transportation into and out of the borough proper for mineral activity.

Goal III. Encourage the identification and protection of high potential mineral-bearing areas that have not been developed with incompatible uses.

Goal IV. Encourage the provision of access within the Borough proper to high potential mineral areas while minimizing disruption to adjoining land uses.

Goal V. Prevent or minimize damage to environmentally-sensitive areas or historical facilities in developing mineral resources, and plan for the long-term reclamation of the land.

The following four FNSB Comprehensive Land Use Plan policies guide mineral development in the FNSB, these policies have been used to guide the decisions involving the True North Project.

Policy 1. Increase the Borough's role as the primary service, supply, and transportation center for the Interior Alaska mining industry and encourage the development of infrastructure which could enhance the economic potential of mining developments when economically feasible.

Policy 2. Encourage and conduct mineral research which identifies high potential mineral areas within the Borough and delineates appropriate methods to mitigate impacts associated with mining.

Policy 3. Discourage public residential land disposals in outskirt rural areas designated high mineral potential on the Comprehensive Plan.

Policy 7. Foster sand, gravel, and peat extraction and placer and hard rock mining in rural areas by:

- a. Discouraging public residential land disposals in areas of high mineral potential.
- b. Supporting provision of access to mining areas and transportation facilities for movement of mineral industry material into and out of the Borough when economically feasible.

NOTE: Policies 4, 5, & 6 (Not Applicable to Rural Areas).

FNSB TITLE 18 ZONING ORDINANCE DESIGNATION

The True North Project area is mostly on lands zoned General Use by the Fairbanks North Star Borough's Title 18, Zoning Ordinance. A portion of the access/haul road is on lands zoned Mineral Lands.

In the General Use District, any use is allowed with the exception of correctional facilities and some conditional uses. (FNSB Title 18.44.020)

The Minerals district is intended to protect mineralized areas from the intrusions of incompatible land uses, to allow active exploration for and development of mineral resources, and to allow development necessary to carry out the recovery of mineral resources. This district is further intended to limit structural development of nonmineral related uses that would conflict with future mineral development. This district is intended to compliment, and not be in lieu of, any applicable federal and state law. (FNSB Title 18.42.010)

The True North Project is consistent with the Fairbanks North Star Borough's Title 18 Zoning Ordinance.

CONSIDERATION OF ADJACENT LAND OWNERSHIP AND USES

In addition to the consideration of adjacent land ownership and uses that are inherent in the TBAP, the FNSB comprehensive plan, the FNSB zoning ordinances, adjacent land ownership and uses, existing private and commercial uses, and existing infrastructure were factors DNR used to evaluate the True North Project. DNR recognizes that there may be some effects on adjacent private lands, including noise and light impacts, but has mitigated these potential negative effects to the extent feasible through the project design and the implementation of numerous mitigation measures attached to the authorizations and decisions.

PUBLIC NOTICE AND PUBLIC PARTICIPATION

DNR has made a concerted effort to encourage public involvement and solicit public comment on the True North Project. For the True North authorizations, DNR has considerable discretion regarding the extent of public notice it uses.

What Public Notice Does the Law Require? Public notice requirements differ for some of the DNR authorizations. The statute governing the issuance of Millsite Leases (formerly millsite permits), AS 38.05.255, does not require public notice. Neither do the notice provisions of AS 38.05.945 apply since millsite leases are exempt from the requirements of AS 38.05.035(e). However, because issuance of a Millsite Lease is a disposal of an interest in state land, DNR determined that some public notice was appropriate.

The statute governing rights-of-way, AS 38.05.850, requires public notice, but does not specify how it is to be given. Rights-of-way are specifically exempt from the notice provisions of AS 38.05.945. Accordingly, DNR provides reasonable public notice of proposed rights-of-way under AS 38.05.850.

AS 27.19, the legislation that deals with reclamation plans, does not require any form of public notice. However, DNR recognizes the public's interest in reviewing and commenting on the True North

Project proposal, including the Project Description, Reclamation Plan, Monitoring Plan, and Transportation and Maintenance Plan. Therefore, DNR also provided reasonable public notice of the Reclamation and other plans.

Public Notice Accomplished for the True North Project. Two pre-application public meetings were held to familiarize the public with the True North Project, exchange information and to solicit issues of concern. These meetings were held on April 18, 2000 and May 22, 2000 in Fairbanks. The public was notified of these meetings by display ad in the Fairbanks Daily News-Miner (FDNM). The public has also attended and provided comments at project team meetings. The agencies considered all of the comments in the development of its preliminary decisions regarding the True North Project.

Based on the preliminary public response, the applicable statutes, and the information contained in the record, and in order to facilitate meaningful public comment, DNR prepared proposed decisions for the authorizations required for FGMI to develop the True North Project. DNR published a display ad to solicit public comments on these proposed decisions and the True North Project in the FDNM, on July 17, 2000, July 18, 2000, July 25, 2000 and August 1, 2000. The notice was also posted on the State of Alaska's online public notice web site, DNR's Public Notices web site, and DNR's web site. In addition, a flier was sent to approximately 350 people that had expressed an interest in the project at previous public meetings. This public comment period was open for 30 days.

During this public comment period, DNR conducted a public meeting/hearing on August 3, 2000 during which the public had the opportunity to hear FGMI's proposed project and to discuss issues and concerns with agency staff as well as FGMI. The public was provided the opportunity to give one-on-one oral testimony to a court reporter or to give oral testimony in front of those attending the hearing. Project-related information was also available at the public meeting/hearing that people could take. DNR provided additional information that was not available at the meeting/hearing upon request. Public testimony received at the hearing was transcribed and is part of the public comment record. Written comments were accepted until August 18, 2000.

DNR reviewed all of the comments received and incorporated them into discussions with FGMI on project design. Additionally, FGMI separately evaluated the public comments and prepared *FGMI's True North Project Environmental Evaluation (Response to Comments)*. In response to public concerns, FGMI also revised the Project Description and the Reclamation Plan. In addition, FGMI submitted its *Monitoring Plan and True North Transportation and Maintenance Plan* to DNR. To provide the public with an opportunity to comment on *FGMI's Environmental Evaluation (Response to Comments)*, and the *Monitoring, Reclamation, and Transportation and Maintenance plans*, the DEC and the DNR prepared a supplemental public notice that provided the public with 15 days to submit comments on the Environmental Evaluation. This notice was published in the FDNM on September 22, 2000, September 25, 2000, and October 1, 2000. The public comment period was from September 22, 2000 through October 9, 2000. The notice was also posted on DNR's web site, the Alaska Online Public Notices web site and the DNR Public Notice web site. Additionally, notice of the 15-day comment period again was sent to those persons who expressed an interest in the project (and provided a mailing address).

In response to public requests for additional time, DNR granted a 15-day extension to the comment period until October 24, 2000.¹ Again, the public was notified by display ads in the FDNM on October

¹ This ad was provided to the FDNM electronically with the correct dates. Due to an error by the FDNM, the notices misstated the end of the public comment period as both October 24 and October 9. An amended notice to clarify the October 24, 2000 close of the public notice comment period was

6, 2000, October 9, 2000, and October 18, 2000. A notification card was mailed to those persons who expressed an interest, and the information was also published on the State and DNR web sites.

From the more than 160 commentors that responded during the total 60 days of comment period, the comments were used to identify the major issues of concern to the public. Once these issues were identified, FGMI modified portions of its plan of operations to try and address these concerns. Also, DNR has included specific stipulations in its authorizations to address some of the concerns. The comments are summarized and included in this document along with DNR's responses (please see Chapter IV, Summary and Response to Comments). The compilations of all the comments we received are available for viewing at the Fairbanks DNR office.

In addition to the notices provided by DEC and DNR, the Corps of Engineers (USACE) provided parallel notices to the public for the federal authorizations.

AVAILABILITY OF INFORMATION

In addition to the extensive public comment outreach, DNR made a conscientious effort to make project information easily accessible in order to ensure a well-informed public and to facilitate meaningful public comment.

The public was able to download the original and revised True North Project Description, Reclamation Plan, Monitoring Plan, Transportation and Maintenance Plan, Cumulative Impacts Analysis, and the Environmental Evaluation (Response to Public Comments) from DNR's website. These documents could also be reviewed in printed form at DNR's Fairbanks office, the Departments of Environmental Conservation and Fish and Game, and the Noel Wien Library. Copies could also be purchased at cost at two commercial printing services. Although the Socioeconomic Baseline Report and Revisions document were not put on the website, these documents were made available to the public at the state offices and at the public meetings. The Fort Knox Environmental Assessment (1993) done by the Corps of Engineers was available for public review at agency offices and the Library. FGMI also provided copies to individuals upon request. DNR also asked the company to accommodate requests for information and directed individuals in some cases to contact FGMI directly for information not available from DNR. Additionally, DNR's files relating to the True North Project are public record and have always been open to the public for review.

DNR's effort to involve the public and to make project information available for review and comment was reasonable, was above the legal requirements of the law, and in a form that the Commissioner determined provided the interested public sufficient time to review and comment on the True North Project.

published on October 20, 2000 and October 22, 2000 by the FDNM, at its expense. All other forms of notification for the extended comment deadline (including postcard notices) contained the proper dates.

CHAPTER IV. SUMMARY AND RESPONSE TO COMMENTS

This chapter discusses the major issues of concern for the True North Project and how DNR dealt with them in its decisions. These issues of concern resulted from review of the public comments and agency input.

The issues of concern have been organized into the following categories:

1. Public Process
2. Promises Made
3. Nearby Residents
4. Development of the True North Project
5. Access/Haul Road
6. Processing Off-Site Ore at Ft. Knox Mill
7. Cumulative Impacts
8. Financial Status of Kinross
9. Economic Benefits
10. Other

1. PUBLIC PROCESS

This Section summarizes the public comments we received that related to the public process used by DNR in review of the True North Project application. After each comment summary, DNR's response to those comments is provided.

- 1.1 Confusing Public Process.** The public process has been confusing and the project has progressed piecemeal. The facts and information have changed so much that the public has been denied the opportunity to meaningfully participate in the public process. Public comment period was incorrectly noticed and legally deficient.

***Response.** The project was not piecemealed. The project has evolved throughout the public comment periods since the public process, to a large extent, has driven the progression and development of True North Project plans. Public comments received during each of the public comment periods resulted in revisions to the True North Project. As changes were made to the plans, DNR renewed and extended the initial comment period in order to encourage the further meaningful public participation in the project. Thus, the fluid nature of the project and the documents relating to the project are a reflection of FGMI and DNR responding to public comment.*

The public notices were not legally deficient. The public comment periods were more extensive than any required by law and were designed to reach as many members of the public as possible. In addition to soliciting written comment, the DNR and DEC held numerous public and neighborhood meetings to inform the public and to obtain oral testimony. Project information was widely available at the meetings and on the internet, as well as in the administrative record. A complete discussion of the public process can be found in Section III, Project Evaluation, earlier this document.

- 1.2 Withholding Information.** FGMI has been less than forthcoming with information and has actually withheld information from the public.

***Response.** DNR is not aware of any instance where FGMI has withheld information from the public. FGMI has and continues to be responsive to agency requests for information and to the best of DNR's knowledge has cooperated in fulfilling reasonable requests for information from the public.*

- 1.3 FGMI Data.** Permitting agencies are not entitled to use only FGMI generated data.

***Response.** The DNR commonly uses "applicant supplied data" in evaluating an applicant's project. The DNR staff review the supplied data for comprehensiveness and accuracy. If DNR staff does not believe the data is accurate, or has questions regarding specific data, requests for additional information are commonplace. In addition, for the True North Project, the DNR has hired an independent consultant, HMMH, Inc., to evaluate the Michael Minor & Associates "Final True North Noise and Vibration Analysis (August/September 2000)." In addition, the DEC hired another independent consultant, SRK Consulting Engineers and Scientists, to prepare a document entitled "Review of Geochemical Issues True North Project*

Fort Knox Mine.” While FGMI will eventually reimburse the state for these studies, both of these contracts were obtained using state procurement methods and the work being performed was directed by DNR and DEC.

- 1.4 Environmental Evaluation.** The Environmental Evaluation does not reference any specific comment or substantive points. Instead it is a complete reworking of the plans and analysis. FGMI only answers to challenges that have strong legal arguments without acting to prevent the challenge in the first place.

Response. *FGMI evaluated the public comments received by DNR during the July/August comment period and prepared the Environmental Evaluation in response to those comments. No particular format is required for the Environmental Evaluation. As noted in issue 1.1 above and as a result of the public comments and DNR’s input, portions of the project were redesigned. This is an important function of public participation and DNR’s permitting process. The validity of this process is not diminished by the fact that it is possible that some of the information may have been obtainable earlier or an issue could have been foreseen. No applicant, regardless of capability, is expected to know everything or recognize all of the potential issues that may arise out of a project. The public process assisted DNR in gathering as much information relevant to the project and making an informed decision.*

- 1.5 DNR Is Biased.** The DNR is biased and/or has a conflict of interest. DNR is not being objective. The State is unwilling or unable to objectively consider the resident’s comments that are directly opposed to negative impacts of FGMI’s transport method. People are concerned about the objectivity of the decision-makers, based upon comments made in the newspaper and the failure to grant additional time for review.

Response. *We strongly disagree. DNR is objective and there is no conflict of interest. The permitting process requires that DNR coordinate with the applicant and other agencies. In addition, as the state’s land manager, it is DNR’s statutory and constitutional role to evaluate the facts and issues relevant to the proposed activity, which includes a review and consideration of the public’s comments. DNR has done just that. To the extent there was not enough information in the record to address an issue, DNR contacted other knowledgeable people, including the applicant, for further information and clarification of the information provided.*

Concerns about objectivity have arisen as a result of comments reported in a September 10, 2000 Anchorage Daily News article. This article quotes Dick LeFebvre of DNR as saying, “I think there’ll be an impact. But I don’t think it’ll be as great as they fear.” Mr. LeFebvre’s comment recognizes that there will be some impact to the neighborhood from the proposed activity. However, he also recognizes in the comment that there are differing levels of impact that could occur from the project and that DNR was working with the applicant to mitigate many of the concerns expressed by the neighborhood. It does not show a lack of objectivity.

Claims have also been made that DNR was biased since it did not grant an extension for the amount of time requested by some commenters. As noted in issue 1.1 above and in the section in Chapter II of this document titled Public Notice and Public Participation, DNR granted an additional 15-day public comment period in response to the extension requests. This additional period was on top of the 45 days already provided by DNR for public comment.

While the extension was not as long as that requested, the extension was adequate to allow a thorough review of the new True North Project documents and far in excess of any public comment period contemplated by DNR statutes and regulations. The grant of an additional 15 days to comment on this project is not an indication of bias by the DNR.

- 1.6 Appeal.** Any permits issued will be subject to attack. During appeal (reconsideration), if FGMI begins construction, it'll be at FGMI's risk.

Response. *Many decisions of the Department are subject to appeal under 11AAC.02. The True North decisions are no exception. Please see the section describing the appeal/reconsideration process at the end of this document. The effective date of this decision is 30 days after the decision is issued, unless stayed by a reconsideration action or an action of the courts. FGMI is not authorized to begin work on the project before then.*

- 1.7 Information Exchange.** More contacts and information exchange needs to occur with the neighbors.

Response. *Residents in the area of the proposed project have been very involved in the review of this project. The DNR has initiated two neighborhood meetings with Cleary Summit/Skiland residents to further communication between the applicant and the neighbors. In addition, the local residents have been involved in project meetings and public meetings throughout the process. DNR has made considerable effort to involve the public (including the residents of the Summit and Skiland areas) in the process, and will continue to do so as it regulates this project. The extensive public comment period and the outreach to the Cleary Summit/Skiland residents, was more than adequate.*

- 1.8 Socioeconomic Report.** The Socioeconomic Report contained inaccuracies and omissions. Until it is corrected, republished, and evaluated, it is impossible to use this document as any basis for complete comment.

Response. *The Environmental Evaluation incorporated changes to the Socioeconomic Report. The information is found in Section 3.16 of that report. This information was available for the public to review during the September 22 through October 24, 2000 comment period.*

- 1.9 Following the Process.** The government regulators are following a process put into law for all citizens of the state to follow. Fort Knox is working diligently to abide by this process so that the company is in full compliance with environmental and other regulations. They have also attempted to resolve all realistic socio-economic concerns and public safety issues. They have done more than just meet the legal requirements-they have gone beyond them.

Response. *Comment noted. Several comments were received from the public that supported FGMI's request and FGMI's attempts to resolve the concerns and issues presented.*

- 1.10 DNR Web Site.** Providing the information via the DNR web site was a great leap forward for public awareness.

Response. *The DNR has made a concerted effort in the past few years to provide more information through the electronic media. Including public notices and project specific information on the Web allows the public easier access to project information and encourages meaningful public comment.*

- 1.11 Permitting Regulations.** Permitting agencies need to refrain from imposing every whim of the public on FGMI. FGMI is exploiting the State's weak permitting regulations.

Response. *These two comments demonstrate the sharply contrasting opinions DNR has received regarding the strength of DNR's permitting authority. Supporters of FGMI's project complain that DNR will impose too many restrictions on the project. Others complain that DNR will not impose enough restrictions on the project. DNR's role is to provide a balance between resource development and protection of the environment through the project evaluation and decisional process. The decision contains terms and conditions that are reasonable and necessary to protect the State's long term interests as the land owner. The fact that DNR has received these polar opposite comments is some indication that DNR has achieved a balance with respect to its permitting of this project.*

2. PROMISES THAT FGMI MADE

This Section summarizes the public comments we received that related to commitments that FGMI may have made during the Fort Knox Mine permitting process. After each comment summary, DNR's response to those comments is provided.

- 2.1 Delayed Recreational Benefits.** Processing off-site ore at the Ft. Knox mill prolongs the useful life of Ft. Knox and postpones the recreational benefits that were promised to the citizens upon the closure of Ft. Knox.

***Response.** Nothing thus far shows that the life of the Fort Knox mine will be extended beyond the timeframe listed in the original Fort Knox EA. The amount of ore that will result from the True North Project is less than the amount of ore that will fill the Fort Knox tailings impoundment. And, the life of Fort Knox is driven by the capacity of the existing tailings impoundment unless an alternative tailings facility is applied for and authorized. Any proposal to exceed the current capacity would require full review of the project. The existing tailings impoundment was expected to have a 12 year life span – a life span that will not be extended by the True North Project. It is not anticipated that the useful life of Ft. Knox will be extended. The public will be able to use the area once the reclamation requirements have been met at Ft. Knox.*

- 2.2 Regulatory Cooperation.** The Fort Knox Mine has cooperated with regulatory agencies in protecting the environment and enhancing wildlife habitat through the reclamation of previous mining disturbance.

***Response.** This is true. FGMI has performed reclamation work on historic mining properties at Ft. Knox. FGMI will also be reclaiming some of the previously disturbed mining areas within the Millsite Lease area at True North. The True North Reclamation Plan (September 2000), Section 4.1.3 indicates that approximately 68 acres of pre-mining disturbances will be included in the Reclamation Plan.*

- 2.3 Current Reclamation.** Ft. Knox reclamation plan is already being implemented. The new grass is growing next to the road currently used as primary access. FGMI also has set aside the dollars each year for final reclamation according to the approved plan.

***Response.** Comment noted. On-going reclamation and erosion control measures will also occur at the millsite and along the True North access road. Stipulations in the right-of-way will require FGMI to control erosion and reduce the visual impacts of the ore haul road.*

- 2.4 Stay In Fish Creek Valley.** We believe it is reasonable for FGMI to keep promises made for Ft. Knox, such as confining the Ft. Knox operation to the Fish Creek Valley.

Response. *At the time FGMI was permitting Ft. Knox, FGMI was only authorizing the Ft. Knox project area. FGMI, according to the Fort Knox Mine Environmental Assessment, August 1993, owned a large claim block (approximately 52,000 acres) surrounding the Ft. Knox project area. FGMI, at that time, did not own any claims in the vicinity that were not south and east of Cleary Summit since they had sold the True North property to La Teko Resources, Inc. in 1993. Accordingly, it is unreasonable to suggest that FGMI restrict its operations to Fish Creek Valley. Companies have the right to buy other properties, sell properties and make business decisions they feel are appropriate.*

The public process requires that if a company submits an application to operate in a new area then the public has the opportunity to comment on the request to the extent provided for by law. DNR cannot require a company to not submit an application for developing a mineral interest they own or intend to purchase. In fact, even if DNR could limit its future permitting authority, it would not be sound management of the state's resources. As discussed in this document and the attendant permitting decisions, the state is obtaining significant benefits from the grant of the True North Project permits. Additionally, the design of the project and the numerous mitigation measures attached to the permits for this project have minimized the potential negative impacts to the environment, including the surrounding residents and businesses.

3. NEARBY RESIDENTS

This Section summarizes the public comments we received that related to the potential effects of the True North project on nearby residents (specific comments on the effects from the haul road are presented in Section 5, Access/Haul Road). After each comment summary, DNR's response to those comments is provided.

3.1 Neighborhood Impacts. The local neighborhoods have been here since the 60's, and have co-existed with the mining industry, including Ft. Knox, until now. FGMI continues to erode our lifestyle with increasing traffic, noise and light pollution, road safety and air pollution. We have the right to quiet enjoyment and to sleep in our homes.

***Response.** As discussed in Comments 3.2 and 3.7 below and Section III of this Overview, the True North Project is located in an area that has a long history of mining activity and that has been designated for mineral use. As such, the local neighborhoods have co-existed with the mining industry. In order to further that co-existence, the DNR has worked closely with the public and FGMI to mitigate the potential adverse effects from the True North Project on nearby neighborhoods. Through this cooperation FGMI has spent hundreds of thousands of dollars on the development of numerous access road scenarios and Steese Highway crossings representing the concerns of the public commenters, on a noise study to determine the extent of the noise impact on the local residents. As a result of these efforts, FGMI will be spending an additional \$1,000,000 to construct an underpass across the Steese Highway so that mine haul trucks will not use the public highway (which would have potentially created time delays for traveling local residents and safety hazards from increased industrial use of the highway). The haul road has been relocated farther away from residences to minimize light and noise impacts, and safety hazards. Other mitigation measures will be used such as light hoods on truck headlights, and sound monitoring.*

Also refer to the responses for the comments in Section 5, Access/Haul Road for more discussion on mitigation of adverse effects from the haul road.

3.2 Mining Zone. The True North project is taking place in a mining area. The residents in the Cleary Summit area moved into this mining area and they should not now be heard to complain that mining is taking place. The people who bought houses and built on land that's zoned mining, knew or should have known that the area was zoned for mining.

***Response.** This area has high mineral potential, and the Pedro Dome, Skiland, Cleary Summit area has a long history of mining activity going back to at least 1901 (please see the True North Project Description for more information on the history of the area). These facts are reflected in the land use and zoning designations of the land management authorities. The Fairbanks North Star Borough has zoned the True North Project area and the Cleary Summit and Skiland subdivisions as General Use-1. The land east of this area is zoned Minerals Land (ML). According to FNSB Title 18, Zoning Ordinance, ML zoning "is intended to protect mineralized areas from the intrusions of incompatible land uses, to allow active exploration for and development of mineral resources, and to allow development necessary to carry out the recovery of mineral resources. This district is further intended to limit structural development of non-mineral related uses that would conflict with future mineral development. This district is intended to compliment, and not be in lieu of, any applicable Federal and State laws." The*

permitted uses in the ML Zone are 1) all uses related to mineral exploration, extraction and processing; 2) all secondary uses in support of mining activities; 3) bed and breakfast homestays; 4) bed and breakfast residences; 5) timber harvest, except as would restrict mining activity; and 6) outdoor recreational land uses except as would be a basis for restricting mining activity. Clearly, the intent of the FNSB is to not restrict mining activities.

Additionally, minerals is designated as a primary use and mineral development is encouraged in Tanana Basin Area Plan (TBAP) subunits 1J2, 3, and 4. The high mineral potential was the reason the Mental Health Trust acquired extensive land holdings in the area under the 1994 settlement. Further, adjacent subunits are made subject to the mineral development, such as the proposed Skiview Subdivision which requires an evaluation for conflicts with mineral development before the subdivision project is offered. The statements included in this publicly reviewed document clearly outline the intent of the DNR to manage this area for mineral development.

In the Director's Decision dated January 7, 1984, the 10 landowners receiving title from the state for parcels at Skiland were made aware of the mineral potential of the area and the transfers were made subject to specific mineral reservations (the State Patent reserved the subsurface estate to the state and its lessees, the right to entry in pursuit of those minerals, and to construct roads and buildings on the property in pursuit of those minerals both on the parcel and on adjacent lands). Additionally, the 1984 decision stated that the 1984 FNSB comprehensive land use plan designated this area as having high mineral potential. This remains in effect for this area.

3.3 Good Neighbor. FGMI is a multinational corporation that doesn't care about the local residents or the effect that mineral development will have on local resident lifestyles. FGMI used to be a good neighbor until gold prices dropped and they started talking about satellite mining.

Response. *DNR has worked closely with FGMI and the public to minimize the potential adverse effects on local residents that might result from development of the True North Project. FGMI's willingness to work with the public, redesign the project to accommodate the interests of the local residents, and implement mitigation measures that DNR considers necessary to minimize the potential negative impacts demonstrate that FGMI is a good corporate citizen. Please refer to the response for Comment 3.1 in this section and Section 5, Access/Haul Road, in this chapter for more discussion on how FGMI will be mitigating adverse effects on local residents.*

3.4 Mining District. While it will be inconvenient and at times noisy for residents of the area, not a single resident can claim ignorance of the fact that the area they live in is not only highly mineralized but also the oldest mining district in this part of the interior. The mining district can't just be moved and there are benefits (i.e., lower cost electric power) of the development which accrue to the entire community including the residents.

Response. *Mining has been the predominant activity in this area for many generations. On state lands, as well as in the Mental Health Authority's selection of replacement lands to the Trust, mining potential has been recognized as a significant use. TBAP also recognizes that the high mineral potential in designating primary uses for this area. This plan is used by DNR*

and other state agencies to provide management guidance when making land use decisions. See also Response to Comments 3.2 and 3.7, and Section III regarding the recognition of this area as a mining district.

- 3.5 Business Expansion.** Nothing was apparently done to let the businesses know about satellite mines. Area businesses began to flourish, business decisions were made, and businesses have expanded into new markets.

Response. *Businesses should have known about the potential for mining projects such as the True North Project. The area surrounding the True North Project and the Fort Knox Mine is a highly mineralized area with a long history of mineral development. This area has been identified as such in both the State's land use plan for this area (TBAP), and in the Fairbanks North Star Borough's Comprehensive Plan for this area. Each of these documents was subject to an extensive public review process, and are matters of public record. It is incumbent upon anyone wishing to purchase property or to start a business venture to thoroughly research the potential land uses (land use designations, zoning, and traditional uses) for adjacent land. Even a cursory review of state and local plans clearly shows that mineral development in this area is highly likely.*

- 3.6 Suspect Project.** To say that True North is a project on its own merit is suspect. Most claims are just being held or are waiting for someone to buy them.

Response. *FGMI has either purchased or leased all mining claims within the True North Project area. FGMI has full valid rights to the subsurface estate within the project area.*

- 3.7 Residential Designation.** We live in a quiet residential recreation (GU1) designated area, not on mineral designated lands that only came into being in the 90's long after we moved to this location. This area was first developed in 1954 leading to Mom and Pop mining. Major mining was out of the question and unheard of. Until the development of Ft. Knox in 1995, mining had minimal impact. Mom and Pop kept reasonable hours.

Response. *As discussed in the responses to the comments above, the area surrounding the True North Project and the Fort Knox Mine is a highly mineralized area with a long history of mining activity (going back to at least 1901). The State's plan for this area (TBAP) was completed in 1985 after a three-year public process, and clearly identifies this area as having important mineral values.*

While it may be true that the effects from a small "Mom & Pop" mining operation could be less than a larger operation, it is also true that in many cases a larger operation has taken the place of numerous "Mom & Pop" operations, thereby reducing the adverse effects in some respects. While some effects may be greater (for example, disturbance of greater acreage), a larger operation usually has more resources to channel into mitigating adverse impacts and completing good reclamation.

The FNSB Assembly approved the ML rezone on October 23, 1986. The GU1 zoning permits any use except correctional facilities and includes several conditional uses, none of which apply to this project.

4. DEVELOPMENT OF THE TRUE NORTH PROJECT

This Section summarizes the public comments we received that related to the development of the True North project on nearby residents. After each comment summary, DNR's response to those comments is provided.

4.1 FGMI's Rights. Through the mining law, FGMI has the right to mine this property.

***Response.** Technically, FGMI has the right to extract minerals. However, before FGMI may proceed with that extraction, certain authorizations are required from the State, such as plan of operations approval and reclamation plan approval. Other authorizations specific to a project may be necessary as well, such as a right-of-way for access.*

4.2 Reclamation. Concerns were expressed that FGMI's Reclamation Plan was inadequate, and would leave the land in an unusable and unsafe condition. Concerns were also expressed that the reclamation plan (March 2000) indicates FGMI apparently plans to leave the pits open and not backfill them.

***Response.** FGMI's reclamation plan is consistent with the requirements of State laws and regulations. FGMI revised the March 2000 Reclamation Plan in response to public comments. In the September 2000 Reclamation Plan, FGMI plans to backfill the East pit completely. The Hindenberg pit will be backfilled to allow free drainage to prevent formation of a lake. FGMI's goal is to maximize pit backfilling; however, a three-step approach will be used to determine the amount of backfill a pit receives. Please refer to the Reclamation Plan (September 2000), Section 4.2.2.*

In addition to maximizing the backfilling of pits, all roads determined not necessary for the post mining land use will be reclaimed and re-vegetated. Buildings and their foundations will be removed, and all reclaimed areas will be re-vegetated. A vegetative cover criterion of at least 70% will have to be achieved prior to releasing FGMI's \$1.3 million reclamation bond, and prior to abandonment of the site.

Some highwalls in the Hindenberg Pit may remain at closure. However, berms, interceptor ditches, and signage will be used to mitigate the safety concerns.

TBAP envisions the development of subsurface resources in the area encompassing the True North Project. The TBAP indicates that all state lands open to mineral entry are multiple use areas where mineral development will be accommodated and encouraged consistent with applicable state law and policies of this plan. The Reclamation Plan for the True North Project has been revised to account for public and agency comments.

4.3 Effects on The Chatanika River. There are downstream effects to the Chatanika River, including the impact to fish habitat that must be considered in the project design.

***Response.** Staff from DNR and from other agencies have reviewed the operations plan and reclamation plan for the True North Project. This review has included ADF&G biologists, DEC water quality experts, and DNR hydrologists. This review determined that changes to water*

quality and quantity associated with the True North project will be minimal. There will be no processing of ore at the True North mine site, surface runoff from waste rock piles will be monitored, diversion ditches will route surface runoff around active mine sites, and monitoring wells have been installed and will be operated to evaluate changes, if any, to water quality. DNR expects that the pit will cause no adverse effects on the Chatanika River.

- 4.4 Cyanide.** Fish may be negatively impacted if a cyanide spill occurs. The fish-bearing waters, such as the Chatanika River and ultimately the Yukon River, could be affected.

Response. *Processing of ore and the use of Cyanide will not occur at the True North mine site. All True North ore will be trucked to the Fort Knox Mine's mill for processing. Although cyanide is used at the Fort Knox mill for processing ore, all cyanide use there is in compliance with approved state and federal authorizations.*

- 4.5 Trails.** Construct some trailheads for use of the Davidson Ditch for snow machining, bike races and skiing. Define a trail system out there so people can recreate and have the mining all in due time.

Response. *DNR has no requirement for FGMI to construct trails or trailheads as part of the reclamation plan under consideration. For the safety of mine workers and the public, public access will be restricted within the millsite lease boundary and on the access/haul road during the term of the millsite lease. If the public requires access through the millsite lease on easements, they must coordinate with FGMI.*

- 4.6 Davidson Ditch and Cultural Resources.** The Davidson Ditch is a historic feature and should not be destroyed or backfilled. If the True North proposal is approved, there will be a rock dump blocking a half-mile of the ditch, compromising the integrity of the ditch itself. We would either like to see True North move its rock dump to the side, or engineer a way that you can go through that rock dump and stay on the ditch as a trail. Other cultural resources in the project area must be identified and protected.

Response. *In its revised proposed development plan for True North project, FGMI avoids stockpiling and development of any pits along the Davidson Ditch. See Environmental Evaluation, Figure 2.3-1.*

FGMI has redesigned the development layout to avoid construction activities that impact the Davidson Ditch. Where there is existing impact as a result of FGMI activities and prior disturbance, FGMI will be required to complete reclamation work approved by DNR. The current placements of the rock dumpsites as noted on the True North Project's Wetlands Map, dated August 18, 2000 have been reviewed by the State Historic Preservation Officer, Office of History and Archaeology (OHA). From a cultural resources standpoint, the proposed placements protect the resources by avoiding the Davidson Ditch.

In general, OHA's concerns for all the resources within the Millsite Lease remain, whether the project is under state or federal jurisdiction. Under the Alaska Historic Preservation Act, these resources are to be protected from destruction, injury, removal and appropriation [AS 41.35.200(a)]. Within the area of potential effect of the Millsite Lease, exist five historic

properties determined eligible for listing in the National Register of Historic Places. Stipulations were prepared to address data recordation, management and protection of these significant historic properties. These stipulations are included in the Plan of Operations Approval as Appendix A.

These stipulations require submittal of maps to OHA including a copy of the original maps of the historic Davidson Ditch, a map delineating the project area, the Millsite Lease area, and the location of each historical property found within and adjacent to the Millsite Lease. The map shall include the portion of the ditch, which weaves in and out of the Millsite Lease boundary area and the location of all known associated features, structures, and buildings. The stipulations also include mitigation, and submission for the National Register eligible properties, specifically the Davidson Ditch, Chomco Cabin, Spruce Creek Camp, Little Eldorado Penstock, and Mother Lode Mine.

Additionally, any unusual or unique artifacts encountered during the mitigation process shall be collected by the archaeologists in consultation with the OHA and FGMI. Artifacts shall be offered to the following repositories in descending order, University of Alaska Museum in Fairbanks, Fairbanks Community Museum, and the Pioneer Museum at Alaskaland.

If cultural or paleontological resources are discovered as a result of or during the activities authorized by the Millsite Lease, all work that might disturb these resources shall cease. OHA shall be contacted immediately, so that compliance with cultural resource procedures may begin. If vandalism is discovered to have occurred to these resources, the OHA shall be notified immediately.

Annual monitoring of the five historic properties shall be conducted to note impacts from vandalism or any land altering activities. An annual report, submitted each December to the OHA, shall discuss the results of the monitoring.

If there is a change to the scope of work of the True North Project, OHA will need to conduct another review to assess the impacts to cultural resources by any such changes.

- 4.7 Wildlife Enhancement.** The Fort Knox Mine has cooperated with regulatory agencies in protecting the environment and enhancing wildlife habitat through the reclamation of previous mining disturbance.

Response. FGMI's Reclamation Plan (September 2000), Section 4.1.3 indicates that approximately 68 acres have been previously disturbed within the Millsite Lease area from prior mining activities. This area would be reclaimed by FGMI as part of the Millsite Lease reclamation.

- 4.8 On-going Reclamation.** Ft. Knox reclamation plan is already being implemented. The new grass is growing next to the road currently used as primary access.
Response. *On-going reclamation and erosion control measures will also occur at the millsite and along the True North access road.*

4.9 Disturbance to wetlands. Concerns were expressed that the True North Project would disturb too many wetlands, and that the discharge of development rock into wetlands must be regulated as a discharge under section 402 of the clean water act, not under section 404 as proposed. Also, under the Corp's regulations, it must analyze the environmental impacts associated with the entire mining project and not simply those associated with the filling of wetlands. NEPA requires the corps to prepare an environmental impact statement before permitting the True North mine, and the Corps must complete a full section 404 analysis before issuing a permit for the true north project.

Response. *The above comments all relate specifically to the US Army Corps of Engineers (USACE) 404 Permitting Process and DNR directs the public to the USACE's response to public comments. It should be noted however, that FGMI has redesigned the development layout to reduce disturbance to wetlands. Please also see Section 7, Cumulative Impacts, in this chapter.*

4.10 Mining below ground water table. Some commenters expressed concerns that FGMI would be mining below the groundwater table.

Response. *FGMI will not be mining below the ground water table. DNR hydrologists will be monitoring well data collected during mining to ensure that the ground water is protected.*

4.11 Reclamation of previous mining. ADFG studies show thriving fish populations. Preservation of Davidson Ditch are outstanding examples to accommodate the public concerns

Response. *Comment noted.*

4.12 Reclamation Bond. FGMI is attempting to reduce the reclamation bond at Ft. Knox. Permitting agencies have a history of not taking into account the financial health of the corporation. Weak state permitting statutes permitted the Yellow Eagle Mine, and now there is a \$9.5 million repair bill.

Response. *FGMI has in fact committed to provide a reclamation bond for the True North Project that exceeds the amount that the DNR can require under AS 27.19. Furthermore, the proposed reclamation bond has been updated by FGMI to reflect changes to the project made to address public comments and agency concerns. The current bond to be posted by FGMI is \$1.3 million, and includes backfilling and capping portions of the Hindenberg Pit, post-mining water quality monitoring, additional topsoil replacement, and project management expenses. DNR has determined that this bond provides adequate financial guarantee should FGMI not be able to accomplish the required reclamation.*

The FGMI Revised Bond submitted December 11, 2000 includes indirect costs of 5% for Contract Administration, 5% for Mobilization/Demobilization, 10% for profit and 5% for contingencies. The total amount bonded for each acre to be reclaimed is now \$7,435.

4.13 Mine site plan. The drawings need updating as facilities and roads have been moved and deleted. Roads seem to go nowhere.

Response. The drawings have been updated.

4.14 Erosion & Sediment Control. Concerns were expressed about controlling erosion and sediment transport. The project calls for five road crossings of the Davidson Ditch in Spruce Creek drainage and not one BMPs in place.

Response. In addition, DNR staff will conduct regular inspections of the project site during development, production, and closure. Best Management Practices will be implemented during construction. If problems with erosion or sediment transport are encountered, staff will direct FGMI to correct the problems.

4.15 Safe Working Environment. Ft. Knox Mine maintains a safe working environment and can be expected to do the same at True North.

Response. FGMI is required by state and federal laws to meet OSHA and MSHA requirements.

4.16 Monitoring Plan. Concerns were expressed that adequate monitoring be conducted to ensure that surface and ground waters not be degraded after reclamation, and that adequate baseline monitoring was not done to establish natural conditions.

Response. The monitoring plan has been revised to include a more thorough description of the monitoring schedule during operations and post-closure. Monitoring has been extended to include lysimeters and toe-seep surveys in each waste rock dump. Monitoring results continue to be submitted by FGMI throughout the project application review period and will be used to evaluate the pre-mining conditions as necessary.

FGMI has collected additional baseline water quality data for both groundwater and surface water monitoring stations since the initial application to the state. In response to public comments and agency concerns, FGMI has installed two additional monitoring wells and initiated sampling of these locations. The state agencies have determined that continued monitoring of surface and ground water sites carried out prior to those sites being impacted by development activities can be used to establish natural conditions. However, in any case, the risk of initiating the development of the True North Project based on the current baseline water quality data set is assumed by FGMI. If the company should need to apply for background conditions with respect to water quality standards, data collected after the monitoring sites could reasonably be expected to be impacted by the development activities would not be allowed to establish natural background conditions. Monitoring site maps and monitoring rationale have been included in the revised True North Project Monitoring Plan – December 2000.

4.17 Characterization of waste rock and ore. Concerns were expressed that the waste rock and ore will be potentially acid-generating, will leach metals, and will degrade water quality. FGMI

needs to make a positive determination that they do not need a solid waste permit for waste rock disposal at the True North Mine. Waste rock is exempt from the requirements of 18 AAC 60, unless it has been determined that the waste rock could generate acid rock drainage. It is up to the applicant proposing a hard rock mine operation to determine whether a permit is required to dispose of mine waste. The information FGMI submitted in support of its permit application did not include a full acid/base accounting of the waste rock. This information needs to be submitted before a final determination about the need for a solid waste permit can be made.

Response. *A review of geochemical issues for the True North Project (done by SRK, December 2000), indicated that the existing database was sufficient to characterize oxidized waste rock and did not recommend any additional geochemical characterization of waste rock or ore until the pit development reached a depth of 300' below the original ground surface. The SRK report further added that "potentially acid generating material is not expected to be encountered at the project, but contingencies for identification and management of potentially acid generating material have been identified".*

In regards to potentially acid generating (PAG) rock encountered, samples are required to be taken for sulfur analysis via NAG or Leco furnace testing drill holes that are driven from a depth of 300' below the original ground surface of the site. If PAG rock is encountered, an approved plan for proper disposal will be activated.

The SRK report on the Review of Geochemical Issues at the True North Project found that: a statistical comparison of bulk geochemical characteristics by rock type indicated no significant differences between rock types; the statistics calculated for each drillhole failed to show any significant lateral variability; and no difference between the Hindenburg and East Pits could be recognized. The SRK report used the geochemical review of the material from both pits in its evaluation of potential impacts from the East Pit and waste rock from the East Pit.

A solid waste permit is not required for the waste rock at True North. Tailings from hard rock mines do need a solid waste permit as necessary to prevent a violation of the water quality standards. Waste rock from a mining operation, however, is exempt from the requirements of the solid waste regulations unless mixed with nonexempt waste, there is a public health, safety, or welfare threat or environmental problem associated with management of the waste material, or the waste material is being managed in a manner that causes or contributes to a nuisance. The True North project monitoring plan and the reclamation plan contain sufficient requirements to insure that any environmental problem is prevented, detected, or remediated.

4.18 Slope of Development Rock Dumps. In general 3H:1V slopes are recommended to ensure successful revegetation. The "multiple benching... to achieve an increased overall slope angle" will mean that some of the reclaimed rock dump will be significantly in excess of the proposed 2.5H:1V overall slope. FGMI should explain why 3H:1V slopes can't be used in reclamation.

Response. *The Review of Geochemical Issues for the True North Project (SRK December 2000, recommends that the waste rock dumps be constructed and reclaimed in a manner that minimizes infiltration of precipitation, enhances run-off and evapotranspiration and minimizes the overall footprint. These goals are better achieved through the reclamation of the waste rock dumps at a maximum slope angle of 2.5H:1V than through a 3H:1V slope angle.*

Regardless of the slope angle, FGMI must meet a 70% revegetation cover standard, and have posted a bond to ensure this.

4.19 Topsoil Replacement. In general 12-18 inches of growth medium are recommended for revegetation. There appears to be almost enough topsoil available for a 12-inch cover. The Reclamation Plan should discuss why this target cannot be met, and what the likely difference will be if only 12 inches of growth medium will be placed on reclaimed surfaces.

Response. *DNR will require FGMI to salvage, stockpile and bond for the potential replacement of 12" of growth medium over the reclaimed waste rock dumps and the reclaimed slopes and floor of the Hindenburg Pit. The exact depth of growth medium to be replaced will be dependent upon the results of revegetation efforts and of water quality and other monitoring during the operational and closure phases of the project. If the measured quantity and quality of pore water in the waste rock dumps indicates that leachate from these and other facilities is expected to impact ground or surface waters, a cap of growth medium of sufficient thickness to minimize this infiltration will be required. If the quantity and quality of leachate does not require the replacement of a specific depth of growth medium over various facilities, then the requirement to achieve a revegetation success of 70% will determine whether the replacement of growth medium will be required for these facilities.*

5. ACCESS/ HAUL ROAD

Many of the comments received on the True North Project were directly related to the ore haul road between the True North Project and the Ft. Knox mill. A large number of these are not easily separated into the issues listed below, but overlap into other issues. For example, it is difficult to discuss the alternatives without discussing the noise and light issues. While the comments and DNR responses for Route/Alternative Selection, Noise, Lights and Effects on Tourism overlap, they have been separated into different discussions in an attempt to clarify the issues related to each topic and the associated mitigation.

- 5.1 General.** Other mining methods should be considered which do not depend on extensive, continuous trucking over public highways.

***Response.** The ore deposit at True North lends itself to the open pit mining method. Processing methods other than using the Ft. Knox mill were evaluated by FGMI such as a heap leach and a stand-alone mill. Both methods would increase the amount of disturbance at True North. When comparing these two methods with the processing of ore at Ft. Knox, off-site processing was the preferred alternative when evaluating the economics and environmental consequences of all three processes.*

Four transportation alternatives were considered: off-highway trucks, over-highway trucks, conveyor, and railroad. FGMI selected specially designed over-the-highway trucks as the preferred alternative. These trucks not only can carry substantial payloads, but are quieter and have fewer safety concerns. Project Description (February 2000), Section 2.2.2 and Environmental Evaluation Section 2.2.1.2. Additional transportation methods, such as a conveyor or a railroad, were considered but they were not physically or economically feasible for the scope of the project. Additionally, the location of the access road and the use of the Steese Highway underpass have eliminated the use of public highways or roads for the trucking of ore from the True North Project to the Ft. Knox mine.

- 5.2 Existing Roads:** Commentors expressed that use of the existing roads and the Steese Highway intersection is dangerous to the motoring public. Some thought that the original, existing, route was safer than the alternatives and stated that FGMI had the right to use the existing roads to haul ore, as the trail and road system in the Cleary Summit area was built by mining. It is appropriate to use the mining trails and roads for this mining project. The mining laws grant mining claim owners the right, not the privilege, to ingress and egress on their claims.

***Response:** The existing roads are public and could legally be used to transport ore from True North to Fort Knox.*

Portions of the route include traditional mining roads identified by DNR as RS2477s. Use of the roads for highway purposes, as defined by AS 19.30.400, includes mining vehicles. The DNR manages RS2477 easements as it does other easements on state land, including requiring a permit to upgrade the easement to allow other uses to occur. When considering management options, DNR looks at traditional uses of a route when authorizing other uses. No traditional uses were identified in the public comment period. No alternative access is required in this area as the public will not be precluded from using the RS 2477 or Omnibus roads where they overlap the private right-of-way.

The existing road system has limitations when applied to a project such as the one proposed. These limitations include acceptable hauling grades for the trucks and their loads, road width, construction, maintenance, design and alignment, and safety to name a few. FGMI has evaluated using portions of the existing roads in combination with new construction in some of their alternatives. The preferred alternative uses existing alignments and new construction to achieve a safe ore haul road.

The preferred alternative mitigates all of the safety concerns expressed by the public for using the existing road alignment. Many, if not all, of these were also recognized by FGMI. The existing roads are included in the alternatives evaluated by FGMI. Environmental Evaluation, Section 2.2.1.3.

The mining law guarantees a mining claimant the right to reasonably access their claims.

5.3 Route/Alternative Selection. Numerous routes were proposed for this project both by FGMI and the public. In addition, other routes were evaluated by FGMI and DNR as they were presented to the Department. Specific Comments Included:

- Commentors were concerned that there was not an adequate analysis of the alternatives and that the company's preferred alternative was not the appropriate choice.
- Local residents suggested an alternative route that generally follows the 2000' contour and the residents would be involved in design and approve final design. In addition, residents wanted truck traffic to be restricted to 12 hours/day on this route.
- Commentors wanted economics of hauling options addressed.
- Local residents are opposed to 24 hour a day hauling.
- The land directly below the Skiland residences is Mental Health Trust land and the final decision by Mental Health will be made following its Trust management principles.
- Select the Pedro Monument alternative.
- Reject the application for the proposed haul route.
- The road should be at the bottom of the hill (Cleary No. 2 alternative), just for safety purposes.
- FGMI should build a tunnel from True North to the Fort Knox mine for the trucking of ore.
- The cheapest route should be selected for the access road.
- FGMI should build the North Pedro alternative.
- FGMI's proposed haul road (North Pedro route) effectively balances environmental disturbance and visual impacts for all the public with moving further away from residents on Cleary Summit.
- The impacts due to the North Pedro alignment will be minimal.
- The North Pedro alternative has the least visibility impacts to the existing homes at Cleary Summit.
- The haul road (North Pedro route) has been designed with grades that will accommodate operations.
- FGMI has adequately addressed the concerns of the local residents and has designed a system (North Pedro route) that mitigates those concerns.

Response. *While DNR has a very large role in the True North Project, DNR actually owns and manages less than half of the land along the route from True North to Ft. Knox. Of the approximately 7.34 miles of road between True North and Ft. Knox, DNR owns and manages 1.36 miles, 2.81 miles are on Mental Health Trust lands, and .99 miles are on School Trust*

lands managed by DNR. The remaining 2.18 miles are existing rights-of-way (RS 2477s and Omnibus Act) roads managed by DNR. Of the 2.18 miles, 700 feet are on DNR land, 1790 feet on School Trust land, and 1.7 miles on Mental Health Trust land.

The purpose of both the Mental Health and School Trust is to manage these lands for revenue generation to benefit the Trust and its benefactors. Decisions made by the MHT are made following the Trust's land management principles. School Trust lands are currently managed by DNR for the Trust. See Chapter II for more discussion on Mental Health Trust and School Trust lands.

Both DNR and the applicant have evaluated the proposed road alternatives and other road proposals that have been proposed by the public. Every alternative proposed has been evaluated (on some level) for feasibility, economics, impacts and benefits. This includes the alternatives received after the Environmental Evaluation was prepared. FGMI evaluated eight alternatives in the Environmental Evaluation, Section 2.2.1.3 and has identified the North Pedro alternative as its preferred alternative.

While both noise and light factor into the discussion of alternatives, that discussion will be addressed later.

The department supports the North Pedro Alternative and in doing so has considered the following:

- This route moves the mine traffic further down hill and away from the Skiland residents. This will reduce noise and light impacts upon residents of Cleary Summit at an additional cost to the company of \$3.2 million. While this alignment is less favorable to the Mental Health Trust than the original alignment proposed by the company, the MHT supports this location as it provides additional access to MHT lands. The MHT is not supportive of moving the road further downhill. In its opinion, moving the road further downhill will reduce the value of the MHT lands.
- While the other alternatives move the road further away from the Skiland/Cleary Summit residents, they increase the safety risk to FGMI's workforce, increase both construction and operational costs, and shift the potential impacts of the road from the Skiland/Cleary Summit residents to another neighborhood. In addition, these alternatives require more new road construction and increase the footprint in wetlands.
- The company has agreed to spend over \$1 million for an underpass in order to assure the safety of users of the road. This is a marked improvement over the prior design of an on-grade intersection with the Steese Highway. Prior to the underpass, the public was greatly concerned about safety of the intersection, especially during icy, foggy, and snowy conditions.
- The long-term plan for the reclamation of the Fort Knox Mine calls for the development of a recreation area. The North Pedro Alternative will provide a better route for the public to access this recreation area without having to drive through residential areas.

The North Pedro alternative has reduced significant effects regarding public safety, mine operation safety, visibility, and environmental disturbances. See the discussion in the True North Project Road Right of Way Final Decision .

5.4 Steese Highway Intersection, Safety and Underpass. Concerns were expressed regarding the safety of the existing and proposed Steese Highway intersections. Commentors were supportive of the proposed underpass. Others questioned disposition of the underpass upon completion of mining and bonding for removal of the underpass. The Cleary Summit area is subject to severe icing and fog conditions for much of the year. How can we be assured that the trucks will not operate when inclement weather conditions would mandate a delay in operations? While there might be measures in effect on Ft. Knox that ensure safety, there will be no control offsite to ensure that the traveling public is adequately protected from the ore trucks. The transportation of ore via truck from True North to Ft. Knox every 4 minutes will have a profound effect on traffic in the area, and raises numerous safety issues.

Response. *The Steese Highway has a 7% grade where the haul road crosses the highway. DOT/PF clearly stated that the proposed intersections met applicable sight distances and safety criteria. Cleary Summit and Skiland residents, and other commentors voiced strong concerns about the intersection's safety. The public believed that vehicles travelling downhill on the 7% grade would be unable to stop, and that a serious accident was inevitable. As a result, DNR worked with FGMI to revise its application to include an underpass at the Steese Highway. This underpass will cost approximately \$1 million, but it eliminates the safety concerns of an on-grade intersection. The underpass will be built and designed to DOT/PF requirements, pursuant to agreement between DOT/PF and FGMI. FGMI will be responsible for any maintenance for the underpass. DOT/PF will include any bonding requirements for the underpass in its authorization.*

FGMI's change from an intersection to an underpass on the Steese Highway alleviates the issues associated with weather conditions and safe crossing of the highway. There will still be an on-ramp south of the underpass for vehicles to reenter the Steese Highway. This intersection will be like any other intersection and drivers will be responsible for the safe operation of their vehicle, both on the Steese Highway and the access ramps.

In response to the public's concerns about safety and traffic on the haul road, DNR is issuing a private, exclusive ROW that will prohibit non-mine-related traffic, but allows Mental Health Trust related uses. The current design minimizes ore truck and public use of the same roads. It should be noted, however, that the ore hauling trucks proposed for use by FGMI are highway legal and can be co-located with the traveling public.

The underpass will probably not be removed upon completion of the True North and Ft. Knox projects. The TLO has indicated that they intend to leave the road in place on MHT land as the road will improve the value of Trust lands. In addition, this road would be used for access to the post-mining recreation site/reservoir. The road and underpass would also provide safe access to School Trust, Mental Health Trust and other state lands in the Pedro Dome area. If the roads remain in place upon completion of mining, then the underpass will also remain to provide for a safe Steese Highway egress and ingress.

During construction of the underpass, local Steese Highway traffic will be rerouted west of the underpass on the bypass road. See the Environmental Evaluation, p.2-36 and Figure 2.2-5 for more information.

5.5 General Road Usage: Prior to Ft. Knox, the amount of traffic on the Fairbanks and Fish Creek Roads could be characterized as being non-existent to very light, and seasonally dependent. Nighttime traffic was generally unnoticeable.

Response. *With the construction of the preferred alternative, FGMI will only maintain the proposed True North haul road. It is expected that traffic on the Fairbanks Creek Road will return to its pre-Ft. Knox usage patterns. All mine traffic will use the proposed road.*

5.6 Noise. Residents and business owners were very vocal in telling DNR that they value the area because of its remote feel and quiet. While they live near the Steese Highway, the highway experiences relatively little use at some hours of the day or during much of the night. Specific Comments included:

- The preferred alternative proposed by FGMI will result in adverse effects with regard to noise for those living in the immediate area.
- Noise levels are higher in the area as a result of Ft. Knox than they were prior to Ft. Knox.
- Before Ft. Knox there was no existing traffic noise as the roads were closed all winter. There was no noise traffic all night long.
- Noise carries in the winter. "I have heard train horns from Fairbanks 20 miles away."
- Residents should be allowed to retain independent experts to evaluate potential sound and light impacts and to review FGMI's conclusions. State should delay issuance until Cleary Summit residents retain and consult with experts. Background truck noise is different from the same level of living room noise or "bird calls." It changes the nature of the neighborhood from rural and remote to industrial.
- Commentors expressed concerns that the noise study was inaccurate and did not represent existing conditions and that nighttime averaging was incorrectly applied to the study.
- Commentors questioned the number of monitoring stations used in the study, adequacy of vegetation and berms to retard noise transmission, inadequate projected noise levels, and adjustments for winter conditions in the study.
- Nighttime averaging does not accurately reflect the noise levels for aurora viewing.
- The impacts to the residents near the proposed developments should be minimized by restricting the hours of operation, rather than allowing trucks to run 24 hours per day.
- There is no precedent for 24 hour mining.
- A limit on operating hours (12 hours in winter/16 in summer) needs to be established.
- At least 8 hours of quiet is deserved.
- The True North Project will steal this valuable commodity (quiet) from us.
- Most of the noise is contractor/vendor vehicles. Restricting contractors/vendors to daytime operations would only partially mitigate noise and light impacts.
- Many people wanted reduced ore haul truck hours of operation, and suggested other mitigation measures such as berms, and alternative routes.
- Noise should not exceed agreed upon residential limits.
- Want continuous sound monitoring by a qualified third-party.

Response. *Noise impacts from the proposed haul road was the most difficult issue for DNR to address. The following section summarizes extensive review by DNR staff on the issue of noise effects and how best to mitigate them. On the pages that follow, we have given the reader background information on the noise issue, the results of our noise analysis, possible*

mitigation methods. At the end, we describe the stipulations on noise effects that will be implemented as part of the True North Project authorizations.

Background Information. Noise is a relatively technical issue. The unit used to measure the loudness of sound is the A-weighted decibel scale or “dBA. FGMI’s Environmental Evaluation states on page 3-154 that, “A 10-dBA change in noise levels is judged by most people as a doubling of sound level. The smallest change in noise level that a human ear can perceive is about 3 dBA, and increase of 5 dBA is usually noticeable. Normal conversation ranges between 44 and 65 dBA when the speakers are 3 to 6 feet apart.”

Table 1, shown below, is found in FGMI’s Environmental Evaluation on page 4-261. This table provides a common-person explanation of decibel levels.

Table 1—Sound Levels and Relative Loudness of Typical Noise Sources Found in Indoor and Outdoor Environments

Noise Source or Activity	Sound Level (dBA)	Subjective Impression	Relative Loudness (human judgment of different sound levels)
Jet aircraft takeoff from carrier (50 ft)	140	Threshold of pain	64 times as loud
50-hp siren (100 ft)	130		32 times as loud
Loud rock concert near stage; Jet takeoff (200 ft)	120	Uncomfortably loud	16 times as loud
Float plane takeoff (100 ft)	110		8 times as loud
Jet takeoff (2,000 ft)	100	Very loud	4 times as loud
Heavy truck or motorcycle (25 ft)	90		2 times as loud
Garbage disposal, food blender (2 ft), Pneumatic drill (50 ft)	80	Moderately loud	Reference loudness
Vacuum cleaner (10 ft); Passenger car at 65 mph (25 ft)	70		1/2 as loud
Large store air conditioning unit (20 ft)	60		1/4 as loud
Light auto traffic (100 ft)	50	Quiet	1/8 as loud
Bedroom or quiet living room; Bird calls	40		1/16 as loud
Quiet library, soft whisper (15 ft)	30	Very Quiet	
High quality recording studio	20		
Acoustic Test Chamber	10	Just audible	
	0	Threshold of hearing	

Noise Analysis. In preparing its application, FGMI hired an independent consultant, Minor and Associates to conduct a noise analysis (True North Noise and Vibration Analysis, 2000, and True North Road Alternative 8 Traffic Noise Analysis, 2000). Minor and Associates used

the Federal Highway Administration’s (FHWA) Traffic Noise Model to determine the expected noise level from the ore haul trucks. The existing noise levels for the Cleary Summit/Skland area are summarized in Table 2 below. These number reflect the high and low noise levels for each season and the projected change based upon the Minor and Associates numbers in the Environmental Analysis:

Table 2 – Existing Noise Levels for Cleary Summit and Skiland

Season	Time of Day	Existing Noise Levels (dBA)	Projected Noise Levels (dBA)	Projected Change (dBA)
Winter	Daytime	26.4-39.7	32.1-42.9	1.1-6.7
	Nighttime	27.6-40.2	35.2-43.8	2.0-9.9
Fall/Spring	Daytime	26.9-40.6	38.0-42.9	0.7-6.1
	Nighttime	23.2-39.0	36.2-41.5	0.2-9.7
Summer	Daytime	29.9-42.9	38.0-43.7	-0.1-4.6
	Nighttime	27.9-39.8	38.3-42.9	1.0-8.2

The Minor and Associates’ study concludes that there would be little significant effect to neighboring residences due to increased mine traffic on the FGMI preferred route alternative with 24 hour ore hauling. See Environmental Evaluation Section 3.15 and 4.10 for the complete noise analysis information.

Because the noise field is so technical and scientific, both DNR and the local residents had numerous questions. Many of the questions are noted above in the comments received during the public notice period. The study was discussed on at least two occasions with Michael Minor and the residents in an attempt to better understand the noise issue.

In response to the Minor analysis, a Skiland property owner contracted with Earl Mullins, Mullins Acoustics, to review the Minor report. The Mullins’ report was provided to the DNR on November 21, 2000. While the Mullins report agreed with much of Mr. Minor’s analysis, he concluded:

Because of the continuous day/night operations, ore trucks are quite likely to create objectionable noise at the surrounding homes. In my opinion, there will be a significant noise impact on the areas closest to the haul road. Simply stated, adding haul truck noise to a very quiet rural background noise level will create a significant new noise impact.

The DNR also hired an independent consultant, Harris Miller Miller & Hanson, Inc (HMMH), to review the Michael Minor noise analysis and the Mullins’ report. HMMH generally agreed with the majority of the Minor analysis. HMMH conducted its analysis on a representative sample of the data. They agreed with the values for the existing noise levels. However, HMMH calculated the truck noise to be 3 to 4 decibels higher than that provided in the Minor analysis. The HMMH analysis found the maximum decibel level to be 46-60dB (light auto traffic to large store air conditioning unit). HMMH indicated that its maximum sound level computations were conservatively high because it assumed no dampening effects due to topography or shielding.

Maximum noise levels are typically used to assess activity interference, such as speech interference or sleep disturbance. Based upon the expected maximum noise levels generated by the truck pass-bys, the HMMH study concluded that the maximum noise levels would not be high enough to cause speech interference or sleep disturbance.

Possible Noise Mitigation Methods. Discussions were held with HMMH regarding possible mitigation methods to reduce the expected noise levels. Options discussed included:

- Relocating the road away from the residences to a location shielded by the terrain. (Doubling the average distance of the road from the affected residences without the addition of terrain shielding would decrease the L_{dn} by only about three to five decibels.)
- Building a tunnel for the road.
- Building a full or partial shed over the road, such as a snow shed. (Depending on the construction of the shed, this may reduce noise levels by ten to fifteen decibels.)
- Quieting the trucks significantly through enhanced mufflers and vibration isolation of engines.
- Eliminating or reducing nighttime hauling. (Rescheduling all nighttime hauling to the daytime would reduce the L_{dn} by about six to seven decibels.)
- Scheduled “quiet periods” during the night.
- Stockpiling trucks at night and then moving them en masse at a specified time to avoid the constant noise at night. (This would not reduce L_{dn} but may eliminate or reduce complaints.)
- Providing sound insulation for the affected homes.

Relocating the road, building a tunnel, and constructing a shed are not feasible mitigation measures. Regardless if the road is moved, there is not a practical terrain shield that will effectively reduce the decibel level before the noise is introduced into another neighborhood (the Pedro Monument neighborhood). FGMI has already committed to quieting the trucks by using the Donaldson “Silent Partner” muffler system. Totally eliminating nighttime hauling, using convoys and stockpiling ore for daytime hauling will, according to FGMI, significantly increase the cost of operating True North to the point of being uneconomical. By FGMI estimates, it would cost approximately \$1 million annually to reduce operations to 20 hours per day. To reduce operations to 12 hours per day would cost approximately \$2 million annually.

Establishing a Noise Standard. DNR discussed a potential noise standard with HMMH. In addition to the EPA and FHWA standards, several state and local noise ordinances and criteria were reviewed. Below is a summary of those standards.

Federal Highway Administration Standards. FGMI’s consultant recommended that DNR use Federal Highway Administration (FHWA) Noise Abatement Criteria as a standard. The most restrictive FHWA outdoor noise standard is for “Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.” The FHWA standard for this special land category is an L_{eq} of 57dBA. (L_{eq} is the hourly equivalent sound level — essentially an average noise level for a particular hour).

A slightly less restrictive FHWA standard of 67 dBA is for “Picnic areas, recreation areas, playgrounds, active sports areas, parks residences (exterior) motels hotels, schools, churches, libraries and hospitals. FGMI’s response to comments indicated that “Operational noise levels

would be maintained below the FHWA roadway noise abatement criterion of 67 dBA at the exterior of residences.”

The Mullins report took issue with the FHWA standard for a number of reasons, particularly that “single event noise levels...will be significantly higher than the reported hourly average levels. Annoyance and noise complaints are often provoked by the loudest events.” He also criticized the report for not treating nighttime noise events separately. He indicated that, “We know that nighttime noise does create more impact, especially on residences.” DNR’s consultant, HMMH, came to a similar conclusion. “In our opinion, the FHWA noise standards are not appropriate for this evaluation because of the extremely low existing noise levels and the nature of the intruding noise source, which may be characterized as a series of periodic single events, rather than the continuous steady noise source generally associated with traffic noise. In addition, the FHWA standards are meant to be applied to the loudest hour of the day, not to quiet nighttime periods.”

EPA Criteria. Mullins recommended and HMMH discussed using the EPA criteria instead. EPA bases its noise criteria on expected community reaction. It rates new noise sources by the likely community reaction, which ranges from “None...to sporadic Complaints...to Widespread Complaints...to Threats of Legal Action...to Vigorous Action.”

Unfortunately, DNR found two problems with this standard. First, the Department has trouble basing a standard on expected community reaction. DNR takes public comment seriously, but it is difficult to base a decision under applicable statutes and regulations solely on whether the public, or a segment of the public, will like or oppose the activity. That is, DNR is providing access to private and Trust property — to the privately owned mining interest at True North and to the Mental Health Trust Land. A decision on providing this access must take into account more than approval by all or a segment of the public.

In addition, the EPA criteria has a 5 dBA adjustment for new noise sources and the EPA criteria are based on the L_{dn} descriptor that penalizes nighttime noise sources by 10 dBA. Thus, new activities from 10 PM to 7 AM have a 15-dBA penalty. According to EPA criteria, to begin a new noise activity at night and keep community reaction below EPA’s “Widespread Complaint” standard of 5 dBA above background would require that the new activity be 10 dBA less than the ambient sound level. Put another way, any new activity at night would have to be, on average for an hour, half as loud as the near-wilderness at night. Such criteria would have the effect of granting nearby property owners almost a property right to near-silence at night over the adjacent state land and Trust land. This is inconsistent with DNR’s legal obligations.

Criteria used in Other Locales. In discussion with HMMH about ways to resolve the issue, the consultant suggested that we review noise ordinances from some state and municipal governments that have grappled with protecting existing rural landowners while also allowing new development to occur. Some typical characteristics of those noise ordinances include a lower standard for “average” nighttime noise (allow less noise), and a built-in standard to ensure that noise spikes do not dominate the average more than a certain percentage of the time. DNR reviewed five such ordinances (three actual ordinances and an article that referenced two more). The ordinances all had a daytime dBA standard that ranged approximately 50-60 L_{50} during the day and 45-50 dBA L_{50} at night. The lower standard tended to be for more rural areas. In addition, Massachusetts and Oregon included a limit of

10 dBA above background ambient levels for some areas. Oregon also excludes sounds created by road vehicles that comply with noise standards for road vehicles.

In reviewing these standards, it is useful to remember that 40 dBA is approximately the sound in a bedroom or quiet living room or bird calls; 50 dBA is the sound of light auto traffic at 100 feet; and 60 dBA is the sound of a large store air conditioning unit at 20 ft.

Stipulation. In deciding which, if any noise stipulation to impose in its decisions, DNR must consider:

- its responsibility to provide access to the privately owned mineral interest;
- its responsibility to the residents and business owners of the subdivisions;
- the fiduciary responsibility of the Mental Health Trust Authority toward those lands;
- DNR's fiduciary responsibility toward the School Trust Land it administers;
- the surrounding state land has a primary classification to support mineral development and is zoned for general use or mineral development by the borough; and
- activity in the area begins earlier because of the commute to/from Fairbanks.

DNR must also consider its statutory requirement under AS 38.05.850 that "in the granting, suspension, or revocation of a permit or easement of land, the director shall give preference to that use of the land that will be of greatest economic benefit to the state and the development of its resources." In applying this section, DNR looks at whether there is a project competing for that land that would bring greater economic benefit to the state.

Considering all of these factors, DNR is requiring that FGMI's use of the haul road not cause the ambient statistical noise levels² L₁, L₁₀ and L₅₀ for any hour within the subdivisions to be greater than the levels specified below based upon the existing ambient noise. These standards are for True North/Ft. Knox mine-related traffic and are comparable to light auto traffic at 100 feet to a vacuum cleaner at 10 feet:

<u>Day (5 AM to 9 PM)</u>		<u>Night (9 PM to 5 AM)</u>	
L ₅₀	55 dBA	L ₅₀	45 dBA
L ₁₀	60 dBA	L ₁₀	50 dBA
L ₁	75 dBA	L ₁	55 dBA

These standards are similar to those used by the Oregon Department of Environmental Quality for Industrial and Commercial Noise Source Standards for Quiet Areas. DNR's use of these standards recognizes the unique situation that exists in the Cleary Summit/Skiland area and should not be construed as a precedent for other DNR authorizations. See the Right of Way decision regarding noise, Section VIII.D.

DNR will require FGMI to submit a Noise Monitoring Plan to DNR prior to commencing to haul ore. If the monitoring shows that the standards are not met, FGMI will be required to submit a corrective action plan within 10 days of notification by DNR. If the plan and continued monitoring does not show that the required levels are being met, FGMI will be prohibited from hauling ore for one-half of the night-time period: 10:30 PM to 3:00 AM. Finally, this stipulation will not be applied to the shift-change traffic that now occurs on Fish Creek Road that will be relocated to the new haul road.

² L₁ means that the sound level is exceeded 1% of the time, L₁₀ means that the sound level is exceeded 10% of the time and L₅₀ means that the sound level is exceeded 50% of the time.

Conclusion. This standard implements the Department's responsibilities and statutes. It imposes costs and responsibilities on FGMI. It means that the Cleary/Skiland area will experience a noise level that is greater than what now exists and that they most probably will not want. However, the nighttime L₅₀ standard of 45 dBA means that on average at night, the residents, businesses and clients will experience, on average, sound level that approximates light auto traffic at 100 feet. This is little different than what many of the borough's residential subdivisions now experience. The Department believes that this stipulation balances its competing responsibilities to the land Trusts, the local residents and businesses, and to the applicant, and that it is consistent with its statutory and regulatory responsibility.

FGMI has committed to chip sealing the road below the residences to reduce potential dust problems. The road surface should have some noise-reducing affect.

See Transportation Plan Section 3.2 and Environmental Evaluation Section 2.3.21 for additional Noise mitigation measures.

5.7 Lights. In meetings and letters, many of the Cleary Summit/Skiland Residents expressed concerns about lights on the proposed haul road. The concerns were basically in two categories: residential concerns and concerns about aurora viewing. Residents were concerned that the overall level of darkness that they value would be reduced, that direct light from headlights would make it difficult to sleep and disrupt outside work, and that aurora viewers would be disturbed and would be unable to take time-lapse photographs. In addition, commentors indicated that the lights could destroy the aurora viewing/winter tourism market for Fairbanks. Specific comments included:

- The preferred alternative proposed by FGMI will result in adverse affects with regard to lights for those living in the immediate area and will adversely effect the relatively natural lighting of the Cleary Summit area.
- The True North Project will steal this valuable commodity (darkness) from us.
- It is not the residents' problem to mitigate light impacts.
- There is no precedent for 24-hour mining.
- Two or three trucks will be visible the whole time below Cleary Summit B&B.
- Lights will ruin aurora photography as there will be light streaks across the photo.
- Since there were no light studies (only the visual simulation), how can one conclude that there will be little or no impact from lights?
- Commentors recommended mitigating the light issue through reduced ore haul truck hours of operation, lights shields, berms, other transportation methods, and alternative routes.
- Relocate road so lights are never line-of-sight visible.
- The impacts to the residents near the proposed developments should be minimized by restricting the hours of operation, rather than allowing trucks to run 24 hours per day.
- A limit on operating hours (12 hrs in winter/16 in summer) needs to be established.
- Some comments expressed concern that no scientific studies have been completed that evaluate the effect of lights on winter tourism.
- Winter tourism should be recognized as an economic activity in the True North Project area that is on par -- if not surpassing -- that of gold mining.
- Concerns were expressed that the proposed alternative will have a detrimental effect on local businesses, specifically those businesses associated with aurora viewing.

- May lose winter tourism industry to other markets outside Alaska, such as Scandinavia, Canada, and Russia, if effects of the True North Project are not mitigated.

Response. *DNR recognizes that light impacts are an issue with the residents and that there will be some impact to the existing conditions due to the operation of vehicles on the road. Residents of Cleary Summit have objected to the location of FGMI's preferred road option and to noise and light impacts from the operation of trucks along FGMI's preferred road alignment. Based upon the record, it appears that the best hours for visitors to aurora viewing businesses are from 10:00 p.m. to 3:00 a.m. on winter evenings from approximately September 15th to March 31st. Owners of such businesses state that visitors taking time lapse photography, videos and other photographs of the aurora, which are aimed in the general direction of the road, will experience light pollution at the bottom of such photographs. The business owners believe this will spoil the experience for the visitor and perhaps result in a reduced number of visitors and an adverse economic impact on the aurora viewing businesses.*

While visitors who desire to take time lapse photographs, videos and other photographs could do so to the north or from other locations to avoid any potential light pollution from the road, this may be impractical. Based upon a conversation with Dr. Charles Deehr³, the aurora would be south of the viewing areas, especially during times of high or active auroras. Dr. Deehr did indicate that it was rare that an aurora could be heard. It could possibly occur once a month when the conditions were favorable. However, it is difficult to hear the aurora when the wind is blowing. Dr. Deehr stated that Skiland and Cleary Summit were not a good place to try and hear the aurora as there were usually winds at elevations over 1500 feet.

DNR spoke with Dr. Laura Milner⁴ regarding the Japanese winter tourism market and the effect this project could have on winter tourism. Dr. Milner indicated that Fairbanks was competing with other winter tourism/aurora viewing markets such as Scandinavia, Canada, and Russia. She was concerned that the project would harm this destination and that the visitors would be lost to other locations. DNR recognizes that winter tourism is important to the Fairbanks community and that it is an expanding part of the tourism industry.

DNR personnel on two occasions observed nighttime vehicular traffic on Fish Creek and Fairbanks Creek Roads from the Skiland Subdivision. The lights were visible and on the existing road may have provided direct lighting towards the residences on a few occasions. (The "no direct lighting requirement" in DNR's approval requires FGMI to fix this problem in the road design and construction phase.) Also observed at this time were lights from vehicles on the Steese Highway, though few vehicles travel the highway during the middle of the night.

DNR does not control traffic on public roads, such as the Steese Highway or roads designated for public use. To mitigate some of the lighting concerns, FGMI will be required to design and construct the mine road such that there is no direct lighting from truck headlights to any residences in the area. This will be included in the Transportation and Maintenance Plan and right-of-way stipulations.

As part of the Transportation and Maintenance Plan, DNR will also require FGMI to experiment with alternative light sources and displacement measures, such as the use of hoods, running lights, non-white headlights, or other measures designed to further reduce the

³ Dr. Deehr is Professor Emeritus in Physics and an auroral forecaster at the University of Alaska Fairbanks Geophysical Institute.

⁴ Dr. Milner is a University of Alaska Fairbanks professor specializing in marketing.

effects of light intrusion to the surrounding areas. The result of these experiments will be evaluated by DNR and, at DNR's discretion, will be implemented as appropriate. See the Transportation and Maintenance Plan and the stipulations in the access/haul road right-of-way decision.

Effect on Businesses/Aurora Viewing. DNR does recognize that time lapse photography of the aurora will have light streaks in photographs taken in the direction of vehicle lights, whether they are on the ore haul road or the Steese Highway. DNR does not believe that the indirect lighting will have a significant effect on viewing the aurora overhead. Viewers will be aware of the vehicle lights in the foreground and their experience may be slightly altered, but not significantly.

Effect on Residential Use. The "no direct lighting requirement" should eliminate much of the concern that truck headlights will disrupt sleep and work in people's houses. It will not have a great effect on the overall level of darkness that the residents' value. It will not completely eliminate that fact that what used to be de-facto wilderness in the middle of the night will now have some indirect light from headlights and taillights.

Conclusion. The only mitigation measures that would further address this issue is totally removing the road from the viewing area (see discussion on road alternatives), and restricting nighttime use of the road. The subdivision is a small enclave surrounded by state land with the primary use of supporting mineral development; by land that is zoned by the Fairbanks North Star Borough as General Use and Mineral Development; and by Trust land where the Trust authorities have a fiduciary responsibility to maximize revenue. DNR does not believe that subdivision residents have a right to total darkness in all directions. For these reasons, DNR believes that the proposed mitigation measures are an appropriate response to the issue.

- 5.8 Air Quality.** Truck traffic along the new access roads between True North and Ft. Knox will increase emissions and dust into the air and will result in poorer air quality in the project area. Calcium chloride does not effectively control the dust problem.

Response. DEC regulation 18 AAC 50.045(d) addresses dust and other particulate matter. This regulation under PROHIBITIONS states: A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air. See Environmental Evaluation Section 4.9.

To reduce the potential for dust, FGMI will chip seal the ore haul road from where it is below the Cleary Summit Subdivision over to below the Skiland subdivision. This will reduce any potential dust problems in those areas. In other areas, FGMI will provide dust control using either water or calcium chloride.

The True North project area is outside the Carbon Monoxide Non-attainment Area for the Fairbanks North Star Borough. This area seldom experiences the extreme temperature inversions and still air that lead to exceedences of the air quality standards and the development of ice fog that is found in the Fairbanks area. It is, therefore, unlikely that vehicle emissions would result in exceedences of air quality standards at this elevation.

5.9 Property Values. Concerns were expressed that the True North Project will lower the local property values. One lot was sold in the Cleary Summit leasehold for ½ the assessed value in the last five years. Several lots in Skiland sold for less than the current assessment. Property assessment is not a determination of mining impact. FGMI says they have stayed the same, if not increased.

***Response.** It is difficult to determine the true effect of the mine on parcel value because there has been limited transaction activity and a market basis has not been established. Assessments are not a reflection of what a parcel will sell for, but rather the value for FNSB tax purposes. AS 38.04.910(3) states that fair market value is the price at which a willing seller and a willing buyer will trade. DNR researched the possible effects of the mining activity on property values and found no evidence that property values would be affected one way or the other. Additionally, Mental Health Trust, School Trust and other state lands will likely benefit from the project through the development of access to and through these lands.*

5.10 Maintenance Costs. Concerns were expressed that FGMI should be responsible for maintaining the True North Mine access/haul road.

Response. FGMI will be responsible for construction and maintenance of any haul road, as well as the Steese Highway underpass, for the life of the project. The Transportation and Maintenance Agreement between FGMI, DNR and the Mental Health Trust addresses this very concern and is addressed in the right-of-way decision. Upon completion of the project, the roads will be turned over to the State of Alaska.

5.11 Disposition of Road. Commentors questioned the disposition of the road at the end of the True North Project.

***Response:** The TLO expects that the improvements (ie. road and powerline) will provide ancillary benefits for future use and development of MHT land in the future. As a result, the road will not be removed upon completion of mining at True North or Ft. Knox. The road will provide access to Mental Health Trust lands, School Trust lands and general state lands. Improved access is necessary when developing these lands.*

No reclamation bond will be required for the access roads. An \$80,000 performance bond will be required to ensure the roads are constructed to the design standards should the company run into problems completing the road construction portion of the project.

5.12 Restricted use of access/haul road. Concerns were expressed that this road will become the main haul route for other projects related to the processing ore at Ft. Knox. If other ore will be hauled up the Steese Highway, there should be a third lane or an alternate route proposed.

***Response.** At this time there are no foreseeable projects that will use the Steese Highway to haul ore to the Ft. Knox facility. Any proposals for future projects will be required to address transportation of the ore from the mine to Ft. Knox in its plan of operations.*

5.13 Scenic Integrity. Concerns were expressed that construction of the access/haul road will effect the scenic integrity and have negative effects on the viewshed. Roads are the most distracting disturbance of the near field landscape, and concern was expressed about the addition of another road.

Response. *The DNR recognizes this road will be constructed in close proximity to other existing roads. However, the existing roads have been demonstrated to be of concern for the intended purpose. The right-of-way on state land will contain a stipulation for a Bank Stabilization Plan. This plan will address revegetating cuts and fills to reduce the visual impact of the road and to reduce the potential for erosion.*

- 5.14 Transportation Plan.** The Transportation Plan did not provide enough detail. The development of a regional mill and satellite mining projects will result in increased numbers of vendors. A plan should be developed that will minimize the impact of the vendor traffic on the local Cleary Summit community.

Response. *The Transportation Plan is being updated to reflect the haul road as a private road. Additional detail will be provided regarding signage. Local vendor traffic will use the mine access haul road and be restricted to 5 AM to 7 PM deliveries, with the exception of fuel delivery.*

- 5.15 Geotechnical Data for Preferred Alternative.** There is now a 10' – 14' wide cat trail along approximately 7 miles of FGMI's preferred route for the ore hauling road between True North and Ft. Knox. This was done under the guise of gathering geotechnical data.

Response. *The "cat trail" was authorized by both the DNR and the TLO to perform geotechnical work along the route. The steep terrain along the route required FGMI's use of a cat to clear a route in and a level pad for the drill rig. FGMI was not authorized to clear a trail in Section 36, School Trust Land. If the road is not authorized along this route, FGMI will be required to reclaim the cat trail to the satisfaction of the Director.*

- 5.16 Ore hauling by third parties.** Comments were received that FGMI employees were to be driving the ore haul trucks. Now, FGMI appears to be contracting out the ore hauling to a "low-bid" trucking company. How can we be assured that ore hauling will be done in a safe manner with safe equipment? Instead of contract hauling, FGMI should be directly involved with the ore hauling by leasing the vehicles. They will have more control over what happens with the vehicles.

Response. *FGMI made an internal business decision to contract out the ore hauling. DNR considers FGMI as the responsible party regardless if there is a contract hauler or if FGMI does the hauling. DNR stipulates that FGMI must ensure that its employees, contractors, and subcontractors comply with terms and conditions of the authorizations. As a result of the stipulation, if there were problems with any of the above entities, FGMI is the responsible party.*

- 5.17 Wildlife.** Comments were received that wildlife will be negatively impacted by the development of access roads and the satellite mines and due to the ore truck traffic.

Response. *Changes to wildlife habitat and use of these habitats will occur. Localized displacement of wildlife will occur at active mining areas and possibly along roads with high volume traffic. Pits not backfilled and recontoured will have decreased value as wildlife habitat. FGMI will backfill one of the pits and has committed to stabilize and revegetate disturbed areas. The earlier successional stages created will provide more diversified habitat for wildlife than the climax vegetation present at this time.*

6. PROCESSING OFF-SITE ORE AT FT. KNOX FACILITY

6.1 Central Milling Facility. It makes more social and environmental sense to have ore transported to a central milling facility rather than setting up a tailing facility and a mill onsite. The infrastructure exists and reduces the effects of satellite mines doing on site processing, such as heap leaching.

Response. *The Department strongly agrees. While trucking the ore creates impacts to the Cleary/Skiland subdivisions, it dramatically reduces environmental impacts at the True North site. The short-term and long-term environmental impacts of the project are much less than if the True North site had a larger footprint, a tailings impoundment, freshwater reservoir, and a processing facility on-site. The current plan has limited long-term environmental impacts on the site, and poses little significant risk on the valuable Chatanika River drainage. There are strong environmental benefits to moving the ore to Fort Knox for processing.*

Because of the capital costs of developing an on-site mill, the concept of a mill that receives ore from satellite deposits improves the economics of developing satellite deposits. Additionally, there is less impact at the satellite deposit as the overall mine footprint is less and reduces or eliminates on-site environmental risks that are associated with the beneficiation process. It makes sense to use the Ft. Knox facility because the tailing disposal impoundment exists and has the physical capacity to accept the tailings without increasing the footprint of the originally authorized impoundment. Further, DEC approval must be obtained thus ensuring that the ore being processed meets DEC permit requirements.

6.2 Processing Off-Site Ore Not Contemplated. Processing ore from satellite mines at Ft. Knox was not contemplated in the original evaluation of the project.

Response. *The millsite permit for Ft. Knox contemplated that at some time modifications would be requested and provided for a process to review the request. DNR determined the process appropriate for review of the requested modification consistent with the permit provision and within the law.*

6.3 Reclamation of Tailings Impoundment. Processing off-site ore at Ft. Knox facility will have adverse effects on Ft. Knox millsite area, in particular reclamation of the tailings impoundment.

Response. *Since any new tailings placed in the Ft. Knox tailing facility will be limited to the design capacity originally permit (Elevation 1483) and because ore from off-site must first receive DEC approval there should be little, if any, adverse effect on either the tailings or reclamation. DEC bonding and requirements address water quality.*

Ore from True North may be processed at the Fort Knox mill provided that the testing procedures specified in the solid waste permit are followed and that the Department of Environmental Conservation determines that there will be no impact on mine closure, reclamation, or water quality. The acid generating potential of the ore, and of the mixed tailings, will be closely monitored to ensure that potentially acid generating conditions can not develop in the Fort Knox tailings facility.

- 6.4 EIS Should Be Done.** Processing off-site ore at Ft. Knox creates adverse effects and an environmental impact statement (EIS) should be done.

Response. *DNR is not required to do an EIS and further does not feel an EIS is necessary. An EIS is a federal requirement. The State of Alaska has no EIS process. The state analyzes issues as they believe are important for the authorization decisions. If there are specific issues that need more work, they should be analyzed. However, the Department believes that they have adequately analyzed the issues necessary to make the required decisions on this project.*

- 6.5 Effect of Processing Off-Site on local Area.** Construction of a mill with its attendant satellite mines and access roads will result in an economic loss in tourism and local small businesses (bed and breakfasts and ski resort) and will destroy winter tourism (aurora viewing, skiing, dog sledding) in the immediate area.

Response. *The Ft. Knox facility already exists. Any “Satellite Projects” require a separate and individual evaluation process and authorization to be developed as a project on State land. DEC authorization would be necessary to allow ore to be processed at the Ft. Knox facility. The effects of any such project would be evaluated at the time the project was proposed. Nearby residents and businesses can not expect that change will not occur as a result of development occurring on adjacent private lands and State land designated for minerals development or other uses. There will be effects as a result of the True North Project being authorized to process off-site ore at the Ft. Knox facility. However, the DNR has placed mitigation requirements on FGMI and has stipulated standards to be achieved. Nearby businesses should anticipate private lands to be developed in adjacent areas within existing local zoning and requirements.*

- 6.6 Tradition.** Fairbanks is a traditional mining town, and development of a mill with satellite mines is in line with that tradition.

Response. *It is true that Fairbanks was established initially as a mining community, however, DNR recognizes that as the second largest city in Alaska, that mining is not the only resource that needs to be considered when making decisions about development and settlement of state land. Therefore, DNR has involved the public in making the decisions for this project, taking into account the existing planning decisions and local governments plans and zoning.*

- 6.7 Habitat Enhancement.** Processing off-site ore at the mill will ultimately enhance habitat since the areas will be reclaimed in a manner that will provide recreation areas and wildlife habitat.

Response. *The mill is already established as part of the Fort Knox mine and is located on Mental Health Trust Land. The Fort Knox Reclamation Plan has identified the post-mining land use as recreation and wildlife habitat. The reclamation proposed for True North is consistent with the current Tanana Basin Area Plan designation for this area. FGMI has worked with the Department of Fish and Game to enhance habitat development.*

7. CUMULATIVE IMPACTS

Background

DNR, in looking at reasonable foreseeable, significant effects, concludes that each of the five satellite deposits are independently viable and that authorizing the True North Project does not in and of itself affect the state's ability to process a request for the other satellite deposits. Each satellite deposit if authorized could have a positive effect on the economy of Fairbanks. DNR concurs with FGMI that none of the satellite deposits can be considered "a project" or "reasonably foreseeable" for cumulative impacts analysis purposes or for processing by DNR unless and until four criteria are met:

1. *delineation of the ore body, including its size and grade, and a determination that it represents a mineable reserve;*
2. *preparation of a plan to extract the ore and dispose of overburden and waste rock in an environmentally acceptable manner;*
3. *development of sufficient environmental and social information to allow permits to be obtainable;*
4. *determination of project economic viability following steps 1 through 3.*

The Environmental Evaluation submitted by FGMI provides the current status of each of the satellite deposits *vis-à-vis* the above criteria to be as follows:

- Ryan Lode – because drilling showed insufficient ore at a high enough grade, Fort Knox General Manager, Tom Irwin, announced in early October 2000 that further exploration activity at the Ryan Lode has ceased. (This illustrates why none of the satellite deposits can be considered reasonably foreseeable until the above criteria have been met.)
- True North Phase 2 & 3 -- advance stage exploration/feasibility, definition drilling on close spaced grid, reserve modeling, budgeting
- Gil -- early-stage exploration/pre-feasibility, needs infill drilling, early reserve modeling, costing
- Amanita -- grassroots exploration, soil sampling, geologic reconnaissance, scout drilling
- Steamboat/Westridge -- grassroots exploration, soil sampling, geologic reconnaissance, scout drilling

The Environmental Evaluation also explains the level of information available for each satellite deposit.

Because each of the satellite deposits is in an early/middle stage of exploration, the Environmental Evaluation made clear that its estimates were based upon hypothetical scenarios using information to the extent it was available. The Environmental Evaluation states: "The localized environmental impacts of mining at the satellite deposits cannot be known or described until their ore bodies are delineated and relevant, permitable ore extraction plans are prepared." Nevertheless, "estimated areas of hypothetical development disturbance to wetlands" by hydrologic drainage were made using the best information available (see EE Section 4.20.8). Hypothetical impacts on the tailings impoundment at Fort Knox were estimated (see EE Section 4.20.5). Hypothetical socioeconomic impacts were estimated for the True North Project Area and the Greater Fairbanks area (see EE Section 4.20.6). Potential impacts to the regional air shed were estimated (see EE Section 4.20.7). Traffic impacts from the development of Central/Sheppard and Westridge/Steamboat which are within the True North Project Area were described; traffic impacts from then-potential development of the

Ryan Lode deposit, exploration of which has now been discontinued, were described; and a more general description was given of traffic impacts from the Gil and Amonita deposits (see Section 4.20.9).

For State evaluation and permitting purposes just because estimates could be made of the hypothetical impacts described above, that estimates could also be made of impacts on the areas adjacent to each of the satellite deposits is unrealistic and beyond what is required by statute or DNR considers necessary in DNR's evaluation. Local impacts depend upon a more detailed site specific analysis which DNR does not require of FGMI given the exploration status of each of the deposits.

Limiting consideration of effects to the True North Project Area.

As stated above, the Environmental Evaluation describes impacts inside and outside the True North Project Area depending upon the environmental value involved (e.g., wetlands, air, etc.). Hypothetical wetlands impacts were estimated by hydrologic drainage; air impacts were estimated based upon the regional air shed; impacts upon the Fort Knox mill from each satellite deposit was estimated. The Environmental Evaluation admits and DNR agrees that there is not enough site specific data to either permit or go through the NEPA process for any of the satellite deposits. DNR believes that the Environmental Evaluation made the best estimates of impacts possible irrespective of whether those impacts occurred inside or outside the True North Project Area.

There is no question that there are additional interests that are being explored by FGMI or Kinross. The fact that they hold these interests does not necessarily mean that any one or more may ever be developed. The information contained in Annual Reports, in newspaper articles and in public statements by FGMI has only expressed the desire to develop.

The exploration activities on state land authorized by DNR and the Environmental Evaluation are the main basis DNR used to confirm the status of the satellite deposits, not Annual Reports, newspaper articles or statements which predate the Environmental Evaluation. For example, the Annual Report portrays an optimistic outlook for conversion of the satellite deposits from exploration to development projects. The Annual Report is especially optimistic about such a conversion of the Ryan Lode. However, subsequent to preparation of the Environmental Evaluation, FGMI announced that it was suspending exploration activity at the Ryan Lode because of the deposit's failure to meet economic criteria. DNR has no choice but to deal with the actual status of the deposits and to disclose that information when processing applications. The True North Environmental Evaluation makes this disclosure.

FGMI's statements that higher-grade ore from the satellites is needed to make the Fort Knox Mine a viable operation does not necessarily mean that the five satellite deposits are reasonably foreseeable. The Environmental Evaluation describes the Fort Knox Mine as a viable operation the economics of which would be enhanced by blending higher grade ore from satellite deposits with ore from Fort Knox. (See Section 4.20.4.) This describes a general strategy which is not specific to any of the named satellite deposits. Thus, it is entirely consistent for FGMI to desire to convert satellite deposits from exploration to development projects to supply a higher grade ore to Fort Knox while maintaining that none of the named satellite deposits has yet met the criteria for becoming a development project as set out in Section 4.20.2. Ryan Lode is a good example of how optimistic hopes for such a conversion are not realized when a project is analyzed using the criteria. Nor is it inconsistent for FGMI to desire to convert an exploration project to a development project by the time ore is depleted from the True North Project without any of the named satellite deposits having met the criteria for

becoming a development project of Section 4.20.2 and thus, becoming a “project” or “reasonably foreseeable.”

DNR, through TBAP, has *designated land use* for state land, but there is insufficient information for FGMI to seek authorization for the individual satellite mines, or for DNR to evaluate any other satellite or to consider them reasonably foreseeable based on the criteria above that DNR would use. DNR has made preliminary decisions regarding land management of state land in *TBAP*. *However, as a practical matter, analysis will be limited based on the availability of information which in turn will be limited depending upon the exploration status of each satellite deposit.*

Because of the failure of the Ryan Lode to meet “development project” criteria and the exploration status of each of the other satellite deposits, DNR concludes that the Environmental Evaluation has presented sufficient information and reasonably evaluated effects.

DNR finds that for its evaluation purposes the “project area” in the Environmental Evaluation analysis of the direct, indirect and cumulative impacts of True North is sufficient. To the extent information is available, the Environmental Evaluation describes cumulative impacts outside the area it defines as the “project area.” The direct project area is defined as the area in which the only action proposed (i.e., the True North Project) is to occur – the area tributary to the proposed road and mine pits. Since analysis of cumulative impacts starts with the incremental impacts of the action, this, too, is described by the area tributary to the proposed road and mine pits. Where the context requires it (e.g., wetlands impacts), the impacts outside the project area are describe in order to satisfy the cumulative impacts requirement.

DNR concludes that since there is no other viable, reasonably foreseeable project and that the Environmental Evaluation logically defers analysis of local impacts of any satellite deposit until such time as there is a deposit that meets the criteria to be considered a project. The Environmental Evaluation’s main focus is to analyze the environmental effects of the True North Project.

The cumulative impacts analysis has not been phased by deferring consideration of local site specific effects of satellite deposits until permitting (if the exploration stage becomes a development stage for any or all of the satellite deposits). The Environmental Evaluation provided information available with respect to each of the satellite deposits and explained when in the process more information would be provided if any or all of the satellite deposits reached the development stage. Each satellite deposit is still in the early to middle exploration stage. For DNR purposes, *it is thus reasonable that localized information is not yet available nor applicable for evaluation of the True North Project.*

Comment Summaries and Responses for Cumulative Impacts

This Section summarizes the public comments we received that related to the potential cumulative impacts of the True North Project. After each comment summary, DNR’s response to those comments is provided. Because cumulative impacts were such a significant issue for many people, a background section precedes the comment summaries and responses.

7.1 Need EIS. Need EIS to properly assess the cumulative human and environmental impacts of trucking ore from satellite sites. The impacts analysis must take into account the impacts that will result from shipping ore from the each of the satellite mines that may be developed in the future, impacts include aurora viewing, other businesses, land values, lifestyle, light and sound.

Response. *The Environmental Impact Statement (EIS) process is a federal requirement under the National Environmental Policy Act (NEPA). DNR statutes do not have a similar requirement for review of this project or the authorizations FGMI has required. However, through application of state statute and regulation, DNR has thoroughly considered the impacts of this project.*

The TBAP plan does not make specific decisions regarding resource development projects, such as the True North Project. For this reason, cumulative impacts were not evaluated in the plan. Although cumulative impact review (or “consideration of primary and secondary impacts,” as they are often referred to) may be considered through the permit review process, the scope of such review is limited by statute. For example, for disposals, under AS 38.05.035(e)(A) the scope of individual project review, “may address only the reasonable foreseeable significant effects of the proposed use to be authorized.” In addition, under AS 38.05.035(e)(B)(ii), the director may limit the scope of the review to the facts, “that are known to the director or knowledge of which is made available to the director during the administrative review.” During the 1994 changes to the best interest finding statutes, the legislature clarified that it was not requiring DNR to engage in a NEPA-like process in determining how to dispose of state resources. The analysis required under AS 38.05.255 and As 38.05.850 (each is exempt from the requirements of AS 38.05.035(e)) is less specific than that required under AS 38.05.035. However, DNR may consider information made available through the agency and public review process.

*Only the True North Project exploration area has been sufficiently explored for FGMI to define proven and probable gold reserves. The only actions being contemplated are the extraction of ore from the True North Project, the construction of an access haul road from the True North Project’s Hindenberg and East Pits to the Ft. Knox Mill, the deposition of ore tailings in the Ft. Knox tailings impoundment, and the construction of an electric utility right-of-way. The “satellite mines” (Ryan Lode, Gil, Amanita, West Ridge, and Steamboat) are not part of the project since they have not been sufficiently defined. While there is a possibility that one or more of these satellite deposit’s could be developed in the future, based on the current state of exploration at each of these satellite deposits, FGMI has not proposed any of them for development. The potential for development of each of these satellite deposits is speculative at best. Even the Ryan Lode satellite deposit was recently taken out of the schedule for possible development. These satellite deposits may become projects in the future once the exploration process has progressed and the ore body is more defined. **(See FGMI’s True North Project Environmental Evaluation, Section 4:20)***

However, since each of these satellite deposits are not currently defined and not part of the project being permitted by the State of Alaska, under Alaska Supreme Court case law, DNR does not take these satellite deposits into account in its cumulative effects analysis for the True North Project. Therefore, the effects to aurora viewing, other businesses, land values, life style, light and sound from potential development of any of these “satellite mines” are not taken into account in the cumulative effects analysis with respect to the True North Project.

7.2 EIS for Fort Knox Changes. An EIS needs to be completed for the changes being made to the Ft. Knox mine and the proposed processing of off-site ore so that the cumulative impacts can be adequately analyzed.

Response. Whether an EIS needs to be completed depends on whether the development of the True North Project would result in a significant change to the environment impacts

described in the 1993 Fort Knox Environmental Assessment. This is a decision to be made by the USACE. An EIS is not required under state law.

For purposes of DNR's review, the development of the True North Project (and even the other speculative satellite deposits) would not result in significant changes to the impact analysis in the Fort Knox EA. In the Fort Knox EA, it was contemplated that the Fort Knox mine would operate for 16 years. Approximately 10,000 tons of True North Project ore per day will be proposed at the Fort Knox Mill. This amount of ore would be approximately one quarter of the Ft. Knox mill's daily ore supply and would be blended with the Ft. Knox ore. The blending of the True North Project ore with the Ft. Knox ore would extend the Ft. Knox mine life by making the lower grade ores economic to mine and process. However, based on the unused capacity of the tailings impoundment of 164 million tons (210 million tons minus 46 million tons currently at the impoundment), the True North Project would extend the Ft. Knox mill life by 5 years. (See Environmental Evaluation section 4.20.5.1 and table 4.20-1.) This would still be within the 16 years contemplated in the EA for the life of the Ft. Knox mine. The deposition of 40 million tons of ore (hypothetically) from Central/Sheppard, Ryan Lode North, Gil, Westridge/Steamboat and Amanita will still not result in an increased foot print or increased height of the tailings impounded contemplated in the EA for the Fort Knox mine. For further discussion, see environmental evaluation regarding water quality impacts (section 4.20.5.2), regarding socioeconomic impacts (section 4.20.6), regarding air quality impacts (section 4.20.7) and regarding wetlands impacts (section 4.20.8).

- 7.3 Effects on Recreation.** Development of satellite mines, the regional mill, and the access roads will have a negative impact on local recreation, including snow machining, four-wheeling, berry picking, hiking, biking, skiing and aurora viewing.

Response. The only satellite mine contemplated for development at this time is the True North project. The other satellite deposits may be developed in the future depending on the results of further exploration and other factors (such as gold prices). See Environmental Evaluation Section 4.20.5.1 and Table 4.20-1.

DNR recognizes that the development of the True North Project may have a negative effect on local recreation, including snow machining, four-wheeling, berry picking, hiking, biking, skiing and aurora viewing. Most of these negative effects would result from the development of the access road from the True North Project to the Fort Knox mill. However, the road has been specifically designed to minimize the potential negative effects, and is located on Mental Health Trust land.

- 7.3 Feeling of Remoteness.** The development of a regional mill, the development of satellite mines, and the construction of new roads that will have an ore truck passing every few minutes will destroy the current feeling of remoteness in the Cleary Summit area.

Response. DNR recognizes that there will be a reduction in the remoteness experienced by local residents and tourists. However, DNR disagrees with the "wilderness" concept advertised by these commercial operators, especially due to the occurrence of recreational activities such as skiing, snowmachining, ATVs, and motorcycle use of the surrounding area and private properties. Commercial operations, especially mine vehicles, will decrease the sense of remoteness. DNR has mitigated some of the effects of these operations in its authorizations.

7.4 Enhancement of Recreation. The development of True North and Ft. Knox will ultimately enhance recreation since, once mining is completed, the area will be reclaimed as a recreation area.

Response. The reclamation plan identifies the land uses expected to occur after the mining is completed. Consistent with TBAP, wildlife habitat and public recreation have been identified as the primary post-mining land uses. At Ft. Knox, it is anticipated that the wetlands complex and the freshwater reservoir area will be eventually used as a public use area and continued enhancement of terrestrial and aquatic habitat.

7.5 Trails. Local recreational trails will be negatively impacted by the development of True North and the access road.

Response. The existing RS 2477 will not be impacted up to the point of the millsite lease boundary. The secondary trail that was constructed for the use of snowmachines will still be available for use.

7.6 Growth Inducing Effects. The True North Project will cause growth inducing effects on other satellite deposits in the area because the income from the satellite ore will be used to explore and encourage additional growth in the area.

Response. The Environmental Evaluation points out that none of the satellite deposits is a project because none meets FGMI's (or DNR's criteria) for becoming a project. On the other hand, each satellite deposit has the potential to become a project. Thus, to the extent information is available, the cumulative impacts of each has been displayed. As in the case of Ryan Lode, not all of the satellite deposits will ultimately meet the criteria necessary to become a project. Nevertheless, its cumulative impacts have been displayed so that the public are aware and DNR has disclosed and considered the types of impacts which can occur in the surrounding area. DNR does not expect or require FGMI to describe the impacts of satellite deposits which it has not yet located.

8. FINANCIAL STATUS OF KINROSS

- 8.1 Financial Stability.** Concerns were expressed about the Financial Stability of FGMI, Kinross, and Kinam, and the potential effects on the True North Project.

Response: *The State has required FGMI to post the necessary bonds for Ft. Knox and True North Project. The Financial Status of FGMI, Kinross, and Kinam does not affect the State's ability to use the bonds for the purposes intended. Additionally, the State has required a corporate guaranty from Kinross. Should Kinross fail, the State still has the ability to use the bonds, if and when appropriate.*

The millsite lease has provisions that specifically address transfer, temporary closure, final closure and reclamation. A Reclamation Bond is required to complete reclamation consistent with the approved reclamation plan. If Kinross's financial status is considered a factor in determining whether or not to process applications for the development of the True North Project, the more likely scenario would be that because of the financial disposition of Kinross, the True North and Ft. Knox properties would be purchased or taken over by another company. However, DNR is not in a position or does it serve any purpose to speculate on the future of Kinross. Instead, DNR has directed its efforts in evaluating the project bonding requirements to ensure the project can be reclaimed consistent with the approved reclamation plan.

- 8.2 Permitting Delays.** Any delay in permitting will be lost revenues to the mine money and potential jobs until such time as the mine is operational.

Response. *Authorization to begin mining operations or construction of the access route and mining facilities requires completion of the public process. Until FGMI has acquired the appropriate authorizations, work can not commence. DNR has a specific process that it follows which provides for public input into decision making and the ability of the public to appeal DNR's decisions. Corporations are made aware of the process before application.*

- 8.3 Fort Knox Bond.** In light of the potential processing of off-site ore at the Fort Knox mill, there should be no reduction in the reclamation bond at Fort Knox until the entire Satellite Mine Plan has been reviewed and evaluated for potential impacts to the Fort Knox facility.

Response. *The Fort Knox facility reclamation plan is independent of any satellite mine project that may be authorized. There will be no physical changes to the Fort Knox facility requiring additional reclamation bonding as the direct result of the additional tailings being placed in the authorized footprint of the Ft. Knox tailings impoundment. The tailings from any satellite mine must fall within the design capacity of the approved tailings impoundment – the capacity cannot be exceeded without approval by the State.*

- 8.4 Bonding of Historic Sites.** The state must hold fast to the bonding requirements to insure proper/prompt reclamation of all historic sites (Davidson Ditch), historic road and trails, all pits and rock piles.

Response. *The reclamation bond required by DNR will be sufficient to reclaim any disturbance as a result of the mining activity, as approved by DNR in the Reclamation Plan. In its approval of the Reclamation Plan, DNR will consider public use of trails and other incidental use of the area that may occur in the future, consistent with the TBAP management intent for this unit. DNR conducted an internal review of the reclamation costs and determined the appropriate bond amount necessary for the project.*

8.5 Viability of Ft. Knox Mine. When the Fort Knox project was designed, gold was selling for considerably more money than it is today. It is very important that the project remain viable, and the True North Project is the quickest and easiest way to insure that.

Response. *By using ore from the True North project and blending it with ore from the Ft. Knox project, FGMI will be able to extend the life of its facility. However, the economic benefit of this project is just one factor that DNR considers when issuing authorizations and approvals.*

9. ECONOMIC BENEFITS

- 9.1 Economic and Social Benefits.** The economic and social benefits resulting from the completion of these plans are vital to the stability and vitality of Fairbanks. Support approval to provide the economic base for employment and revenue base for Fairbanks and services.

Response. Comments Noted. The report by the McDowell Group and Information Insights, "The Economic Impacts of the Fort Knox Mine on the Fairbanks North Star Borough" (February 1999), clearly presents the significant contribution Ft. Knox makes to the Fairbanks economy. The True North Project will contribute as well to the borough and local economy in general.

- 9.2 Economic Base.** The Information Insights/McDowell Group Report commissioned by Doyon, TCC, FNA and the Fairbanks Chamber emphasized the combined economic strength of native held enterprises.

Response. Comment Noted.

- 9.3 Lost Revenues.** Any delay in permitting will be lost revenues to the mine and potential jobs until such time as the mine is operational.

Response. Authorization to begin mining operations or construction of the access route and mining facilities requires completion of the public process. Until FGMI has acquired the appropriate authorizations, work can not commence. DNR's process provides for public input into decision making and the opportunity for the public to appeal DNR's decisions.

- 9.4 Keeping Ft. Knox Viable.** When Ft. Knox was designed, gold was selling for considerably more money than it is today. It's very important that the project remain viable, and the True North Project is the quickest and easiest way to insure that.

Response. By using ore from the True North Project and blending it with ore from the Ft. Knox Project, FGMI will be able to extend the life of its facility. However, the economic benefit of the True North Project is just one factor that DNR considers when issuing certain authorizations.

- 9.5 Property Values.** Concerns were expressed about the effects of the True North Project on property values in the area.

Response. The True North Project may result in an increase property values in the future for State, School Trust, and Mental Health Trust Lands because of the improved access to these properties. The road will allow LTO to consider opportunities that will use the now access. The road also provides the TLO access to Mental Health Lands for development purposes. Improved access to school and State lands will also allow for consideration of new development and use opportunities. There is a possibility that the development of the True North Project could have a negative effect on some of the property values. See Comment 5.9.

9.6 Winter Tourism / Recreation. The Winter Tourism / Recreation sector, although not producing the tax dollars of a mega – industrial complex like the Ft. Knox mine, is a thriving economic activity in the True North Project area. Winter Tourism should be recognized as an economic activity in the True North Project area that is on par – if not surpassing – that of gold mining.

Response. *The State recognizes the contribution made by both the Mining Industry and Tourism. To the extent feasible and prudent, efforts are made to encourage, both through mitigating measures, not to exclude one over the other.*

10. OTHER

- 10.1 Concern for Environment.** FGMI has shown that it is concerned for the environment. Ft. Knox began in an old mining area that has since been rehabilitated and the habitat has been enhanced.

***Response.** Reclamation of the Fish Creek valley below the tailing impoundment has occurred concurrently with mining activities. Wetland and aquatic habitats have been constructed and use by waterfowl, raptors, wolves, moose, beaver, and fish is occurring. Work continues to improve the value of these habitats for fish and wildlife and options for developing more wetlands in the valley are under active consideration. Downstream water quality (e.g., suspended sediment concentrations) in the Little Chena River has improved with the installation of the water supply and tailing dams and rehabilitation of abandoned placer mine sites.*

- 10.2 Good Record.** The Fort Knox Mine has demonstrated its commitment to the environment by the excellent environmental compliance record with no Notice of Violations having been issued in the four-year operating history.

***Response.** Comment noted. The DEC, ADFG and DNR annually inspect the project for permit compliance.*

CHAPTER V. STATE'S DECISIONS

The State's decisions are based on a reasoned evaluation of the relevant factors and available information. The State has taken a hard look at environmental consequences and effects in making its decisions for both the Ft. Knox Mine and True North Projects. In doing so the State has carefully reviewed the available information, public input, DNR's Tanana Basin Area Plan (TBAP), the Fairbanks North Star Borough's Comprehensive Land Use Plan and the applicable zoning.

None of the planning documents prohibit the use of Ft. Knox to process off-site ore or the development of the True North Project. To the contrary, mining is an allowed use if not specifically encouraged. Since such planning documents as they were developed allowed for, and solicited, public input, the land use decisions represented by the approved plans provide guidance for decision-makers at the federal, state and local levels of government.

Public comments received on the State's proposed decisions and those heard at the public meetings are similar. Although issues of concern included those that were broader than the True North Project and Ft. Knox in terms of cumulative effects, the majority of commenters' issues of concern were more localized. These issues dealt with the effects from ore haul trucks, and included noise, light, dust, frequency of trucks, devaluing property, interference with tourism and recreation, effect on wildlife and development of satellite pits using Ft. Knox to process off-site ore.

Final decisions, such as the State's decisions on Ft. Knox and the True North Project are based on its review of the specific request in light of these planning documents, consideration of public input and evaluation of the project and the effects of authorizing the Ft. Knox to process off-site ore and development of True North Project.

AUTHORIZING THE FT. KNOX FACILITY TO PROCESS OFF-SITE ORE

Allowing the Ft. Knox facility to process off-site ore is within the authority of AS.38.05.255 and the existing mill site permit. To the satisfaction of DNR, FGMI has demonstrated in its analysis that any tailings placed in the existing authorized tailing impoundment will not exceed the design capacity elevation of 1483'. Thus, there are no anticipated changes to what was originally authorized as the physical footprint of the Ft. Knox tailings impoundment. Approval from DEC is required before off-site ore can be processed at the Ft. Knox facility; DEC is responsible through its solid waste permit for evaluating the ore on a project by project basis. DEC determines if it will authorize the ore to be accepted and processed. This evaluation and determination is outside the scope of DNR's authority but DNR has made DEC's authorization a prerequisite to tailings being placed in the impoundment. DNR has evaluated the physical capacity question and determined that the capacity is sufficient to allow True North ore. DEC is responsible for determining and evaluating the effects to ground water. However, hauling ore falls under the authorization of the True North Project, not the Ft. Knox Mine.

Another consideration is the ownership of the land on which the mill is located. The Mental Health Trust Authority received this land in the settlement of the Mental Health Trust Land Litigation. The land is now owned by the Mental Health Trust Authority and managed by the Trust Land Office (TLO). It is in the interest of the Trust to maximize the revenue generated from land it manages. Extending the operating life of the Fort Knox Mine increases the return to the beneficiaries of the Trust;

therefore, not to consider its interests as land owner and the purposes for which the land was received may very well have legal ramifications.

After review and consideration of FGMI's request to modify the Ft. Knox mill site permit, and after considering public comments, DNR finds the modification acceptable and will execute the addendum.

REVIEW OF ROUTE ALTERNATIVES

The State has reviewed and evaluated the route alternatives proposed and suggested not only by the FGMI, but also by the public. These route alternatives were evaluated in terms of the True North Project effects and the existing use by FGMI's personnel, public and vendors.

The existing route could continue to provide access to Ft. Knox for the True North Project from the Steese Highway going east to Ft. Knox. However, the historic access from the Steese Highway going west to the True North Project would require upgrading and new construction. It is a physical and feasible alternative considering TBAP recommends use of existing roads whenever appropriate; however, it is not a prudent alternative, primarily because of the effects it would have on local residents and the safety concerns associated with the Steese Highway intersection.

Alternatives further downhill from the preferred route (advocated by Skiland area residents) and alternatives recommending the use of the Elliott Highway were eliminated based on economics, grades, length, and topographic conditions and because, for the most part, these routes simply shifted effects to a new group of receptors resulting in few, if any, overall benefits.

The preferred FGMI route was accepted by the TLO, the primary landowner adjacent and down gradient from the existing road and Skiland residents. Between the Mental Health Trust Land and Steese Highway are School Trust land (lying within Section 36). The TLO agreed to the FGMI preferred route, but did so under the condition that it would not be restricted in developing Mental Health land upslope from FGMI's preferred route nor restricted in the use of the new road for TLO authorized purposes. Any uses of the road for TLO purposes will be coordinated with FGMI. The location of the road on Mental Health Trust Land is under the jurisdiction of the TLO. Because the roads must align, however, the TLO and DNR cooperated in determining the final alignment on non-Mental Health Trust Land. DNR and the TLO agreed that the road within section 36 on School Trust land would provide enhanced opportunities for developing the School Trust Lands and that the access off the Steese at the location approved by the Department of Transportation and Public Facilities should remain regardless if the road was used for hauling ore.

By authorizing FGMI's preferred route to the west of section 36, both the Mental Health Trust and the State benefits with improved access to the True North Project following the route on the north side of Pedro Dome.

The alternative supported by some of the Cleary Summit residents was eliminated based on decisions made by the land owner. Any non-negotiable restrictions placed on the right-of-way may at some future point effect development or use of the road opportunities authorized by the TLO or for School Trust lands. As previously mentioned, these lands were selected to generate revenue for the benefit of the Mental Health Trust beneficiaries. The TLO has a fiduciary responsibility to manage its land guided by Trust management principles.

The DNR reviewed FGMI's preferred option, evaluated the alternative and in consultation with the TLO accepted the preferred option. DNR's decision is to issue a right of way for the preferred alternative – North Pedro route.

To mitigate the effects on the local residents due to use of the road for access to both Ft. Knox mine and the True North Project, FGMI will require mine personnel, vendors, service contractors and haul trucks to use the new route. Additionally, FGMI will require vendors and service contractors to use the road between the hours of 7 AM and 7 PM only, unless circumstances require a later or earlier delivery. To reduce noise effects and to control dust, the road surface will be chip sealed from approximately the intersection of the new road with Pedro Dome on the west side of the Steese Highway to the location where the road reaches Fish Creek Road on the east side of the Steese Highway. Dust control measures consistent with the True North Project transportation and maintenance plan will be applicable to the remaining portions of the access/haul road.

Other noise mitigation measures are identified in the Transportation and Maintenance plan. In consideration of the noise effects on the local residents, DNR has established standards that FGMI must meet in the transportation of ore from the True North Project to the Ft. Knox facility and return. (See section 5.6 Noise in the Summary and Response to Comments.) Failure to meet the required standard may, if not corrected, result in reduced hours of operation as specified. DNR has attempted to strike a balance between what is desirable and what is achievable. DNR considers the standard reasonable and achievable by FGMI. DNR also considers the standard as reasonable in the absence of local controls, the designated uses for state land in the area, that FGMI legally could use the existing road, and the assumption that moving the road further down gradient to the route preferred by the local residents would only reduce the effect by a few decibels. It is not DNR's intent to place any restrictions on TLO development of its land or on any operation it may authorize on the road for Trust purposes. Should FGMI and the local residents mutually reach a separate arrangement or agreement that mitigates noise effects in addition to or without implementation of DNR's standard, DNR would honor it. Additionally, FGMI is not prohibited from applying additional mitigation methods to reduce noise provided that such measures receive any necessary authorization that may be required prior to implementation.

To mitigate the effects of light shining directly at local residents, particularly those operating commercial "aurora viewing" facilities, at night, FGMI will implement the measures identified in the True North Project transportation and maintenance plan. The standard that DNR has imposed on FGMI is that there will be no alignment (unless mitigated by an acceptable means approved by DNR) that will result in headlights from ore haul trucks shining directly at the present aurora viewing facilities. **During construction of the road** [shouldn't this be "Before FGMI can begin operations on the road,"?] FGMI shall demonstrate to the satisfaction of DNR that this standard has been achieved.

With respect to the operation of ore haul trucks effecting property values, DNR does not believe property values will be greatly affected. However, without comparable sales information it is difficult to predict how the real estate market will react.

DNR has reviewed the True North Project Plan of Operations and has taken into consideration the information and recommendations provided by the State's consultant, SRK, in evaluating the ore and waste rock for the project, considered public comments and agency input, and required FGMI to make changes to its plan of operations which includes the project description, reclamation plan and monitoring plan. Based on DNR's review of those documents and input from the public as well as any changes FGMI has made and public comments resulting from those changes, DNR has approved the Plan of Operations.

Concerns were expressed by the public regarding the adequacy of the True North Project reclamation bond. DNR has reviewed the bond with FGMI as part of evaluating the project. Based on DNR's review, FGMI has made adjustments to the Reclamation Plan and reclamation bond acceptable to DNR. Based on these changes, DNR approves the Reclamation Plan. Specific changes can be found in the revised reclamation plan.

The Monitoring Plan has been reviewed and changes required to be made by FGMI by DEC, DF&G and DNR. With the incorporation of these changes DNR finds and decides the Monitoring Plan is acceptable and approves it as part of the plan of operations.

The issue of frequency of ore haul trucks and the safety of the Steese Highway intersection in FGMI's original proposal both received considerable public comments. The issue of frequency is a factor of available operating time, number of trucks and amount of ore to be transported per FGMI's plan of operations. DNR will issue a private exclusive right-of-way on State managed lands so primary use of the right-of-way will be dedicated to moving the 10,000 tons of ore per day from True North Project to the Ft. Knox facility, consistent with the approved Plan of Operations. Approved operations allow for 24 hours per day year-round. Should it become necessary for DNR to reduce operating hours under the noise standard requirements, FGMI may increase the frequency of haul trucks during operating hours or request to amend its Plan of Operations to meet the 10,000 tons per day operating requirement.

By removing the Steese Highway intersection and the crossing of the highway by ore trucks, FGMI eliminated the major concern for safety expressed by the public and agencies. The underpass has been reviewed by DOTPF and will be the primary location for access to the True North Project and Ft. Knox. The authorization for the underpass is the responsibility and jurisdiction of DOTPF.

The legal obligations of DNR in granting a right-of-way on State managed land are set out in AS 38.05.850. The Director of the Division of Mining, Land and Water "shall give preference to that use of the land that will be of the greatest economic benefit to the State in the development of its resources." Since the primary purpose of the TBAP for this area is mining and timber activities, it has already been decided that mining will provide economic benefit to the state in this area. What DNR has attempted to do in this instance is to balance the need to grant the right-of-way to FGMI to develop the True North Project with the concerns raised by the local residents.

In addition, DNR has considered the fact that those who live along highways do not have an absolute right to be "noise free" and "light free" during the night. The public has a right to use the roads. In the same way, the company, which must align the road and operate according to conditions imposed by DNR, has the right to use its road for mining purposes. The effort to condition the use allowed by TBAP so that it does not harm other businesses is thus a question of reasonableness and balance. DNR has determined what it believes are reasonable standards that FGMI must comply with for both noise and light.

Statements were made that DNR decision-makers may not be making objective decisions. DNR recognized the effects on local residents from the True North Project. The opinions of Cleary summit and Skiland residents were reviewed and considered by DNR. Additionally, DNR supports aurora viewing associated businesses and has no intention of allowing mining to occur in such a way that will have unreasonable effects on it. However, given the primary use of State land in this area pursuant to TBAP is for mineral extraction and timber harvest, DNR has exercised its discretion to authorize development of the True North Project with the conditions imposed on FGMI.

DNR recognizes that the scenic integrity of the area was altered by the Ft. Knox Project and will also be affected by development of the True North Project haul road. Because of landownership pattern and valid mining claims in the area, the scenic integrity will continue to be affected. Landowners have the right to develop its land within the bounds of zoning and planning requirements; the lands owned and managed by the State and the Mental Health Trust Authority are no exception. The residents of the area have no absolute right to an unaltered view shed.

CONCLUSION

On the basis of the facts and issues presented to DNR in the public comment period, the DNR's entire administrative record of this project, the applicable statutes and regulations, and the documents reviewed during preparation of these decisions, DNR concludes that the potential benefits of authorizing the True North Project under the terms and conditions presented herein, outweigh the possible adverse impacts.

for  December 20, 2000
Robert Loeffler, Director
Division of Mining, Land & Water

 December 20, 2000
Pat Pourchot, Commissioner
Department of Natural Resources

APPEAL RIGHT AND PROCEDURE

This is a final administrative order and decision of the department for purposes of an appeal to Superior Court. A person adversely affected by this final order and decision may (1) appeal to Superior Court within 30 days in accordance with the rules of the court, and to the extent permitted by applicable law, or (2) first request reconsideration of this decision, in accordance with AS 44.37.011 and 11 AAC 02.020, to Pat Pourchot, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501. Any such request for reconsideration must be received at that address, or received by being faxed to 1-907-269-8918, by 4:30 pm, January 9, 2001. Failure of the commissioner to act on a request for reconsideration by January 19, 2001 is a denial of reconsideration and is also a final administrative order and decision for purposes of an appeal to Superior Court. It may then be appealed to Superior Court within a further 30 days in accordance with the rules of the court, and to the extent permitted by applicable law. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources. This decision goes into effect January 20, 2001 unless the commissioner first orders reconsideration.

At the time a request for reconsideration is filed, an appellant may submit additional written material to support it, including evidence or legal argument. If the Commissioner orders reconsideration and if the Commissioner in his discretion under 11 AAC 02.050(a) further determines that there are questions of fact to be resolved that require a hearing, the hearing will be held in Fairbanks on January 16, 2001 at 10:00 A.M. at the Noel Wien Library. The hearing procedures under 11 AAC 02.050(b) will be announced at the time of his determination, if any. If a hearing is held, an appellant may submit additional written material at the hearing.