FINAL FINDINGS OF FACTS AND DECISIONS

Coal Exploration Permit: No. E-1402

The Division of Mining, Land and Water has reviewed the permit request submitted by Linc Energy Operations, Inc., 3000 C Street, Suite 103, Anchorage, Alaska, 99503; permit (E-1401). The Division makes the following Preliminary Findings of Fact and Decision in accordance with 11 AAC 90.165.

1. An application for Coal Exploration Permit (File No. E-1401) was filed with the Division of Mining, Land and Water on July 1, 2011. A copy of the permit application along with a request for comments was distributed to Alaska Division of Fish and Game, Alaska Department of Environmental Conservation, Department of Natural Resources Water Section, U.S. Environmental Protection Agency, U.S Fish and Wildlife Service, and Office of Surface Mining Reclamation and Enforcement.

2. The proposed exploration area is approximately 4 miles North of Healy, Alaska, and approximately 2 miles east of Anderson Alaska, including all or portions of:

   Sections17-19 and 30, T004S, R007W;
   Sections 1-4, 10, 11, 13-15, 22, 23, 25-27, 32, 34, 35, T004S, R008W;
   Sections 1, 10-15, 22-28, 32, 34 -36, T006S, R008W;
   Sections 1-15, 17-24, 27-31, 35, T011S, R007W;
   Sections 4-9, 13, 14, 17-36, T012S, R006W;
   Sections 1, 2, 8-15, 17, 20-29, 32-36, T012S, R007W; Fairbanks Meridian.

   A total of 60,270.00 acres of land are within the exploration area in which the Alaska Mental Health Trust Authority is the owner of both the surface and subsurface rights. Detailed TRS information can be found in the application.

3. The proposed exploration activities would consist of drilling up to 2 exploration holes. All drill sites would be reclaimed and all drill holes not retained as monitoring wells would be sealed immediately upon completion of work at the site. All equipment used on site would be removed upon completion of the exploration program.

4. A preliminary review by MLW staff determined that an adjusted bond and further information on the project was necessary. This additional information included more detailed information about the drilling program, updates to background information, additional information on how the drill sites would be reclaimed. An updated permit application was received on August 30, 2011. The application was deemed complete on August 30, 2011. The application contains all the information required by 11 AAC 90.163 and is sufficient for this office to make a decision.

5. Public notice of this application started on **August 31, 2011** and ended on **September 30, 2011.** Legal ads will be placed in the Fairbanks Daily News-Miner on August 31. Also, on August 31, the notice will be mailed directly to the Division's mailing list of affected persons and agencies.

6. During the comment period nine comments were received in response to the joint public notice. Responses to comments concerning the proposed exploration program are located in an attached document titled "Appendix A: Department of Natural Resources (DNR) Responses to Public Comments Concerning the Linc Energy Healy Anderson Exploration Permit application".

7. The approved permit area is not within an area designated unsuitable for mining under AS 27.21.260.

8. The proposed coal exploration activities will not affect threatened or endangered species or their critical habitat.
9. Pursuant to 11 AAC 90.167(b) the Division has determined that the reclamation bond in the amount of $71,491.99 sufficient to cover the associated reclamation costs. The reclamation bond for reclaiming drill holes will be released upon inspection and documentation that they are capped and sealed and meeting the requirements of the permit and 11 AAC 90.303.
10. The activities proposed in the meet the requirements of AS 27.21.200 and 11 AAC 90.163 through 11 AAC 90.167, subject to the stipulations of the permit, which ensure that the exploration and reclamation will comply with these requirements. The exploration permit is approved for a two year period that expires October 21, 2013.
11. Appropriate water use authorization must be acquired prior to withdrawing any water.
12. In addition to an approval of this coal exploration permit by Department of Natural Resources Coal Regulatory Program, the project was also subject to consistency review by habitat permits approvals from the Alaska Department of Fish and Game and temporary water use permits form Department of Natural Resources Water Section.

The Permit and Final Findings of Facts and Decision are available for review at the Alaska Department of Natural Resources, Division of Mining, Land and Water, 550 W. 7th Ave., Suite 920, Anchorage, AK 99501-3577, or on our website (www.dnr.state.ak.us/mlw/mining/index.htm). The applicant or a person with an interest which is or may be adversely affected by this decision may request in writing a hearing under AS 27.21.150 to review the reasons for this decision. The request for a hearing may be mailed or delivered to Daniel S. Sullivan, Commissioner, Department of Natural Resources, 550 West 7th Avenue, Suite 1400, Anchorage, AK 99501; faxed to 907.269.8918; or sent by electronic mail to dnr.appeals@alaska.gov. The request for a hearing must be received within 30 days after the applicant is notified of this decision; the request must be received by 5:00 p.m. of the 30th day.

Russell Kirkham/Manager
Coal Regulatory Program

20 Oct 2011
Date

Appendix A: Department of Natural Resources (DNR) Responses to Public Comments Concerning

The Linc Energy Healy-Anderson Exploration Permit application

Following are the responses to the comments received from the public in writing during the public comment period (August 31, 2011 to September 30, 2011).

The DNR received a total of 9 comment submittals (letters, comment forms, e-mails and other transcripts) containing 11 individual comments.

Of the nine comments submitted, three comments came from private individuals, four were from Non-Government Organizations and two was from State and Local Government Agencies. There were no comments from Federal Agencies. The table below breaks down comments based where the comments originated.

General Area	0
Mat-Su Area	0
Fairbanks-Healy	3
Kenai	0
State Wide	0
Out of State	0
Non-Government Organizations	4
Community and Tribal Councils	0
Borough Government	0
State Agencies	2
Federal Agencies	0
Total	**9**

Responses to Comments:

Carbon Capture and Sequestration (CCS)

C: Concerns were raised about greenhouse gas emissions. Exploration should not continue unless Linc Energy commits to some sort of CCS in advance of the project. At a minimum, the state should make sure that technologies for CCS are safe, available, and required before permitting applicants to move

ahead with UCG...project. Without CCS, UCG produces more CO2 pollution than other method of burning coal.

R: The application being considered by the department is for coal exploration under 11 AAC 90.163. This exploration is similar to other exploration activities, which have been conducted in the Tyonek and Beluga area that have been successfully reclaimed. In 2006, the Alaska Climate Impact Assessment Commission was formed to assess the effects of climate change on citizens, resources, economy, and assets of the State of Alaska (ACIAC 2008). In September 14, 2007, Administrative Order 238 was signed, creating the Climate Sub-Cabinet to develop an Alaska Climate Change Strategy. The strategy will serve as a guide for responding to climate change and will identify immediate priorities as well as long-term strategies, including recommendations for saving energy and reducing greenhouse gas emissions.

Underground Coal Gasification (UCG)

C: Concern was raised that Carbon Capture and Sequestration, Underground Coal Gasification technology is complex and is new to Alaska; as such, understanding the impacts of this exploration deserves an appropriate time to review the correct supporting documents.

R: At this time, the application being considered by the department is for coal exploration under 11 AAC 90.163. This exploration is similar to other exploration activities, which have been conducted in the Tyonek and Beluga area that have been successfully reclaimed. Prior to full scale UCG production, any company would have to meet all the requirements of 11 AAC 90 and other State and federal regulations.

Alaska Oil and Gas Conservation Commission Review:

C: Questions were raised concerning the "Permit to Drill" application submitted to the Alaska Oil and Gas Conservation Commission (AOGCC) ... But two of the "Supporting Application for Permit to drill'' documents are missing.

R: Attachment of Application for Permit to Drill, see pages 30-55, was submitted to the AOGCC. HEEX-01, see page 33; ANEX 01, see page 46, were provided for reference and are authorized under AOGCC statutes and regulations. For more information please contact AOGCC Application. DNR determined that the maps including ANEX01, see page 28, and HEEX01, see page 29 submitted to the DNR meet the requirements of 11AAC 90. 163 (4).

Schedule for Drilling

C: The applicant indicates in file E-1402 that exploratory drilling will commence on September 30, 2011, the same day public comment closes. No permit should be issued to begin drilling until those commenting have a chance to review the project and provide input on the decision before the decision is a foregone conclusion.

R: Concern was raised that exploratory drilling will commence in September of 2011. The September 30th date was submitted by the operator as the date the operator proposes to commence drilling. The operator may not commence coal exploration drilling until permits are issued. Once the operator begins exploration they are required to display permit identification signs throughout the period of the activity per 11 AAC 90. 301.

Temporary Water Use Permit (TWUP) File:

C: There was one comment concerning the Temporary Water Use Permit (TWUP) file being made available in Anchorage or online during the public comment period.

R: The TWUP is issued by the Water Section within the Division of Mining Land and Water. The requirement for putting TWUP file in Anchorage, online or electronic format is outside the authority of the Coal Regulatory Program under 11 AAC 90. This application file is available from the Water Section within the Division of Mining Land and Water. The Water Section has indicated that they will not issue the TWUP until an exploration permit under 11 AAC 90.163 is issued.

Impacts of UCG on Air Quality:

C: The potential impacts to the air are difficult to ascertain.

R: An air pollution control plan is required for the mining permit and must comply with all federal and state quality air standards and regulations, including the requirements under 11 AAC 90.079, Air Pollution Control Plan. If air quality problems are encountered, either by residents or Division Staff during our regularly scheduled inspections, Department of Environmental Conservation (DEC) will be notified and appropriate measures will be taken to mitigate the impacts.

Ground Water Contamination

C: The most significant local risk from UCG development is ground water contamination...DNR should require a more thorough characterization of the hydrology of the proposed drill sites before approving exploration permits.

R: The application being considered by the department is for exploration under 11 AAC 90.163. The applicant intends to do core drilling to evaluate the areas geology and coal characteristics. This exploration is similar to other exploration activities, which have been conducted in the Healy areas that have been successfully reclaimed. All drill holes will be sealed from top to bottom to prevent aquifer contamination. Prior to full scale production an applicant must provide the information under 11 AAC 90.43 through 11 AAC 90. 49, including a description of the geology, hydrogeology and water resources. The applicant must also submit a plan that meets the requirements of 11 AAC 90.085 and 11 AAC 90.321 for the protection of the hydrologic balance.

Best Management Practices (BMPs)

C: Permit documents state that Best Management Practices will be used to ensure storm water drainage. These BMPs should be identified in these documents … because of the potential implications to water quality.

R: Linc Energy provided a clarification letter, in which they state, "Storm water that falls on the pad during drilling that does not infiltrate will be treated with a hay bales, booms and/or silt fences. This includes snow melt that does not infiltrate in the spring; and water that is produced during drilling that does not infiltrate. ." Also, they state, "After the drill pad has been reseeded we would use silt fence or

straw waddles or booms to manage any storm water that might be coming off that pad. Drilling fluids will be controlled using sumps and tanks to recycle drill fluids.

Extension of Time Allowed for Public Comment:

C: The DNR received two comments requesting an extension of the comment period. This extension was requested because the petitioners claim that adequate time should be allocated to review public comments.

R: Linc Energy submitted an application for a permit, which contains all information, required under 11AAC 90.161 to 11 AAC 165. The project at this time is limited to core drilling and does not include UCG operations. Therefore, the DNR decided not to extend the comment period.

Legal Description Comments:

C: The Alaska Railroad Corporation (ARRC) submitted comments regarding the legal description. The ARRC owns surface and subsurface rights in portions of several Sections, Townships and Ranges that also include lands in the proposed lease area. The ARRC requested acknowledgement of their corporate lands in any future public notices.

R: The DNR public notice included a general legal description of the proposed lease sale. Several minor corrections have been made to this description. DNR compared the complete Linc Energy legal description in its application and the Sections, Townships and Ranges of ARRC concern. Several Township Sections contain both proposed lease lands and ARRC corporate lands; however DNR did not find any areas where the proposed lease area and ARRC corporate lands overlap. The ARRC corporate lands and the proposed lease area are separate.

Supporting Comments:

C: The DNR received three comments supporting Linc Energy's application for Exploration permit.

R: The DNR welcomes all commentary concerning the Application for Exploration permit.