

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY COAL AND URANIUM PROGRAM
CHECKLIST ENVIRONMENTAL ASSESSMENT
FOR COAL PROSPECTING PERMIT**

PERMITTEE: American Power Corporation

SITE: Judith Basin County

PERMIT ID: Prospecting Permit X2011335

CITY/TOWN: Windham

DATE: July 26, 2011

COUNTY: Judith Basin

LOCATION:

T14N, R12E: Sections 1, 2, 3, 4, 5, 10, & 11

T15N, R12E: Sections 2, 3, 4, 5, 8, 9, 10, 11, 13, 14, 15, 16, 17, 20, 22, 23, 24, 25, 26 & 35

T16N, R12E: Sections 14, 28, 32, 34 & 35

T15N, R 13E: Sections 3 & 6

T16N, R 13E: Section 24 & 28

PROPERTY OWNERSHIP:

Federal State Private County Tribal

TYPE AND PURPOSE OF ACTION:

The Application for Prospecting permit was submitted to the Department June 28, 2011 by American Power Corporation (APC) and it covers the entirety of the APC prospecting area that comprising approximately 23,724 acres. The prospecting plan includes rotary drilling of twin boreholes at each proposed drill site. Firstly, a pilot hole would be drilled and geophysically logged in order to determine core points and core would be recovered after the second hole is drilled to the projected core point.

APC proposes to begin their initial prospecting program that would include 13 drill sites throughout the proposed area. This first phase of drilling would support baseline studies and initial mine development. Prospecting boreholes proposed for the initial phase of drilling would range from 230 to 705 feet in depth and average 468 feet in depth. Additional drilling in subsequent phases would be added by application for revision as needed for coal resource assessment, environmental analysis and future mine-plan development and as additional surface access is confirmed.

Reclamation Plan:

This work and reclamation would be done pursuant to Sub-Chapter 10 of the Strip and Underground Mine and Reclamation Act: Prospecting (ARM 17.24.1001 and ARM 17.24.1005). Reclamation is described in the Application and adheres to all applicable regulations. Excavation is not expected; however, if it were needed it would be kept to a minimum (e.g. mud pits). All surface disturbances would be reclaimed and seeded as described in the reclamation plan portion of the Application. Drill cuttings would be spread over the ground surface to less than one-half inch in thickness and all boreholes would be abandoned pursuant to ARM 17.24.1005.

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?</p>	<p>[N] Field inspection of the American Power Corporation proposed prospecting area by the Department in July of 2011 indicated that the area consists primarily of flat to gently rolling hills. No unusual or unstable geologic features were observed by the Department during the field inspections. Fragile or susceptible soils were not observed during the inspection.</p>
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>[N] Field inspections of the proposed drill sites by the Department indicated that Willow Creek, Sage Creek and their associated drainages run in the vicinity of the proposed drill locations. The Department confirmed that the drill sites are located at least 100 feet from any drainage, in upland areas, and in areas where drill cuttings or drilling fluid would not enter or impact stream channels.</p> <p>Surface water is the primary source of water in the area and generally the water quality is good. Surface runoff in response to precipitation events and snow melt is the primary source of surface water. Typically, these are short temporal events and have a low potential for being impacted by the prospecting activities; especially, as drilling activities would also be short in duration as well. There would be no diversion of surface water at the sites.</p> <p>There is always the inherent risk of aquifer cross contamination while drilling. However, the Department believes that the potential for cross contamination is minimal as drilling methods would be used.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[N] Air quality conditions in the area are considered to be very good although site-specific air quality monitoring has not been done. It is anticipated that the short-term prospecting operations would have minimal impacts on the local air quality. Depending on site conditions, fugitive dust may be generated by vehicles traveling to the site(s) and by on-site activities. Short-term prospecting activities, especially drilling and geophysical logging, would not produce fugitive dust and would have very little effect upon the air quality of the area.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?</p>	<p>[N] Native grassland, small grains, and hay land are the dominant vegetation type in the area.</p> <p>Access to the proposed drill sites would be along existing roads and trails, with no new construction anticipated. Surface disturbance associated with each drilling site would be approximately one acre the area required to mobilize the drilling rig and place portable mud pits including support equipment. Disturbance of these sites would be short-term and each area reclaimed upon completion of the drilling activities as described in the Application.</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N] Diverse topography and vegetative communities in the area provide for a wide variety of wildlife. Big game species common within the area include mule deer, white-tailed deer and antelope. Common predators include coyote, red fox, raccoon, badger and striped skunk. A variety of small mammal and avian species are expected to inhabit the area.</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] It is anticipated that habitats of fish and wildlife including species of concern, endangered or threatened species would be minimally affected by short-duration, low intensity, prospecting operations.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N]Based upon Section 82-4-226, MCA an archaeological survey was not conducted for this project as the entire area of the prospecting permit is located on private surface.</p> <p>During the site inspection conducted in July 2011 no historical, archaeological or paleontological resources were noted near the proposed observed drill sites.</p>
<p>8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>[N] The project area is not visible from populated or scenic areas as verified by the Department during inspection of the proposed drilling sites in July 2011. The nearest community, Windham, Montana, is located approximately 2-5 miles east of the project area. Some localized noise would be associated with drilling activities but would not be excessive. Prospecting activities would be conducted during daylight hours and artificial lighting would not be required.</p>
<p>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>[N] Project work would not use any resources which are considered limited in the area. This work will not place any demands upon the resources of land, water or air. Field inspection of the area by the Department confirmed that ranching and farming are the primary activities occurring in the area.</p>
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?</p>	<p>[N] The project area is remote and there are no activities in the area that will affect prospecting operations. Except for ranching and farming there are no other human activities in the project area.</p> <p>There are sensitive communication lines for the local missile silos in the area; however, the U.S. Air Force cleared the proposed drilling operations.</p>

IMPACTS ON THE HUMAN POPULATION

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[N] The prospecting area is remote and no additional human health and safety risks are expected; there would be minimal health and safety risks associated with the actual operation of the prospecting equipment and other vehicles. No harmful chemicals or materials would be used during the prospecting activities.</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>[N] The prospecting area is remote and with the exception of livestock grazing and agricultural operations there are no industrial or commercial activities near the proposed prospecting area.</p>
<p>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>[N] Drilling would require approximately 5-10 workers to support at least two drilling rigs. Several workers would operate each drilling rig; other support jobs will include operation of heavy equipment (e.g. semi tractor trailers, water truck) and the onsite geologist. Other support jobs would include geophysical logging of each borehole. No jobs would be eliminated as a result of prospecting operations.</p>
<p>14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>[N] The project would not create tax revenues, except for taxes directly related to the employment of the individuals associated with the prospecting activities.</p>
<p>15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?</p>	<p>[N] Proposed work would not add substantial traffic to existing roads and no public services will be required. Traffic to and from the proposed site would include three to five vehicles each day to transport workers and support equipment. The project work would be self sufficient and no public services would be required.</p>
<p>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>[N] No locally adopted environmental plans and goals are in effect.</p>
<p>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>[N] Wilderness, recreational areas, public parks or historic sites are not nearby or accessed through the proposed prospecting area. Work in the proposed prospecting area would not adversely affect any publicly owned park or places included in the national register of historic sites. The proposed prospecting area is not used for recreational activities as confirmed by the Department during a field inspection of the proposed drill sites in July of 2011.</p>

IMPACTS ON THE HUMAN POPULATION

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>[N]. Field inspection by the Department confirmed that very few buildings or manmade structures are near or within the proposed prospecting area. Additional housing would not be required; drilling personnel will lodge in Stanford or Lewistown, Montana.</p>
<p>19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>[N] Inspection by the Department confirmed that the area is remote from most human activities and communities. Disruption of lifestyles is not expected since there is minimal human activity within or near the proposed prospecting area.</p>
<p>20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>[N] Field inspection by the Department confirmed that the area is remote and the proposed work will not affect or shift any unique quality of the area.</p>
<p>21. PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.</p>	<p>[N]</p>
<p>22. PRIVATE PROPERTY IMPACTS: Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required.</p>	<p>[N] Surface ownership of the American Power Corporation Tracks is private. Prospecting to determine the location, quantity, and quality of the coal reserve will allow the mineral owners, as well as a prospective mining company to better define the reserve and develop mine plans if the reserve warrants. The surface owners would be compensated for the activities on their land. Proposed state government activities would place some restrictions on the owner's use of the surface property, but not sufficient enough to constitute a taking because the owner is not deprived of property or all economic use of that property.</p>
<p>23. PRIVATE PROPERTY IMPACTS: Does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency</p>	<p>[Y] The Department has a level of discretion in its permitting decisions.</p>

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives.	
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

25. Alternatives Considered:

- a) No Action: No prospecting activity would be conducted. The mineral owners, as well as a potential mine developer, would not have the additional information on the location, quality, and quantity of the coal resource they would like to develop; therefore, this would probably preclude any development of the coal resource until such information is gathered. The potential use of this coal reserve would not be realized.
- b) Approval: This proposed exploration work would begin under the authority of Prospecting Permit X2011335 and would be subject to requirements of that permit, including, but not limited to, access, drilling, borehole plugging and abandonment, reclamation, and bonding.
- c) Approval with Modification: The Department found no need to modify the permit from what was presented in the application; therefore, this alternative was not pursued.

26. Public Involvement: The Notice of Application was published for 1 week in the Judith Basin Press (July 14, 2011) with a 10-day comment period following the final date of publication.

27. Other Governmental Agencies with Jurisdiction: None

28. Magnitude and Significance of Potential Impacts: None Expected

29. Cumulative Effects: None

Recommendation for Further Environmental Analysis:

- EIS
- More Detailed EA
- No Further Analysis

EA Checklist Prepared By: Bob Smith, Permit Coordinator