

Conformity Determination Report – Eagle Plains Resources (For Discussion Only)

Applicant: Eagle Plains Resources Ltd

Application #: S07C-006

Project Name: Type A Land Use Permit, Mineral Exploration, Bronco Project, Tulita District

WORKSHOP NOTE: This application was chosen for its land use and location within the Tulita District as a test case for the current drafting of the Sahtu Land Use Plan. The Sahtu Land Use Plan is not currently in effect and applications are not required to conform at this time. This application is 4 years old and was developed with Draft 1 and different regulatory expectations as a guide. It is therefore unlikely to conform to the current draft. Findings of non-conformity in this report are intended as discussion tools only to illustrate where changes in process may be needed post-plan approval. They are not intended to reflect the quality of the applications themselves.

Overall Questions/Discussion

- For discussion purposes, assuming this application was received after Plan approval.
- This is a smaller project (though still large enough to require a land use permit) with less potential for impacts. Did application of any of the CRs seem unreasonable or onerous?
- In this case, because the entire project is in a SMZ, there is considerable overlap between CR #2 and the other CRs – if they pass or fail on the requirements for water, wildlife, archaeological sites, and sensitive features, they do the same for this CR.

Existing Use Exemption:

- Yes – Prospecting Permit 7030
- The activities are exempt from the prohibitions in CR #1. All other CRs apply to the extent that they do not block the exercise of rights provided by the prospecting permit.

Overall Conformity Determination: Does Not Conform

- The activity as proposed does not conform to the following CRs:
 - CRs #2, 10, 12
- The activity as proposed conforms to the following CRs, subject to the further Implementation Requirements identified for each. Failure or inability to adhere to the identified Implementation Requirements for each means the activity does not conform and cannot be authorized:
 - CRs #6, 7, 8, 13
- The activity conforms as proposed to the following CRs:
 - CRs #1, 3, 4, 5, 9, 11, 14
- The following CRs are not applicable to this activity: CRs #15-20

Project Description:

The land use operation proposed will consist of a diamond drilling program within Prospecting Permit 7030 which is located 224.3 km SSW of Norman Wells and 258 km SW of Tulita. The existing guide outfitters camp at Willowhandle Lake, approximately 30 km from the proposed drillsites, will be utilized. Temporary structures with tarps will be constructed. The program is anticipated to occur between June 1 and August 30, 2007 for geological mapping and sampling, with July 26 to August 15, 2007 the proposed dates for diamond drilling.

The drill program will utilize a heli-portable diamond-drill that will be flown to the area to test targets of interest. The helicopter will either be a Hughes 500 or a Bell Long Ranger. The drill rig will be operated on a 24-hr basis by two crews, each consisting of two persons who will work 12-hr shifts. On average between 50-100m of drilling are completed in a 24-hr period.

Individual drill sites would approximate 30 m x 30 m with the actual timbered drill pad approximating 5 m x 5 m. Water consumption for drill activities will be 86.4 m³/day. With each drill hole, steel casing is drilled into the bedrock, such that drill fluids, and cuttings may be properly returned and managed. Drill fluids are pumped to sumps away from the drill site, lakes and streams.

Diesel fuel, Jet A fuel, and propane will be stored at the camp. Diesel fuel for camp and diamond drill use would be stored in metal 205 L drums. Jet A fuel for helicopter and fixed wing use is also stored in 205 L drums. Propane is to be stored in 100 lb cylinders. Empty fuel drums will be shipped to Norman Wells on scheduled service flights. It is anticipated that approximately 16 drums of Jet A fuel, 20 drums of diesel fuel and 3 propane cylinders will be stored at the camp.

Camp waste is to be incinerated (where possible) daily. Residual ashes can be buried on-site. Human wastes (in pit privies) will be limed and covered with sand daily. Metal collected from the incinerator will be shipped to the nearest landfill site on the regular service flights. Water consumption for camp activities is anticipated to be less than 1 m³/day.

Upon completion of the land use operation the drill sites will be restored, as near as possible, to their original state. All waste, empty drums and non-essential materials are to be removed on scheduled flights and all equipment and materials will be removed from the site.

There are five to eight drill holes from three sites that will be completed during an initial drill program. All sites are located on Federal Crown Land.

Fuel transfer methods will involve utilizing a hand pump or small electric fuel pump. Spill kits and sorbent matting are kept at the drill sites. Sorbent matting is used around open fuel drums, and equipment, as required.

CR #1 – Zoning

Zones Impacted: Mackenzie Mountains SMZ

Conformity Determination: Conforms (exempted anyways)

Analysis: Mineral Exploration is a permitted use in SMZs.

CR #2 – Protection of Special Values

Values to be protected (as appropriate for the geographical area of activity):

- Significant level of traditional trails, archaeological and burial sites, cultural and heritage values owing to long history of traditional use;
- Important wildlife habitat for Dall's sheep, mountain goats, mountain woodland caribou (Redstone Herd Calving and early to mid-summer range),
- Significant level of ecological features – mineral licks, may-be-at-risk plants, IBP sites, hot springs, karst, etc.

Conformity Determination: Does not conform

Criteria:

- Looking for identification of the values above and specific sites related to them through community engagement and TK collection, and evidence of avoidance or appropriate mitigation to protect those values
- Looking for mapping/identification of sites with particular values and designations (e.g. IBP sites, archaeological sites, Important Wildlife Areas) and special consideration given to those sites

Description of Impacts & Mitigation:

- See mitigation measures described for other applicable CRs related to the above values

Analysis:

- Not all values appear to have been mapped or taken into consideration
- While potential impacts may be minimal in general with the proposed mitigation measures, the CR still imposes an obligation to understand where these values are and demonstrate that the proposed activity will be carried out in a manner that protects them – this has not been adequately demonstrated.

Questions/Discussion:

- In this case, there is nothing specific identified for this zone description that is not already captured under another CR so there is complete overlap between this CR and the others. Is there any other way in which we should distinguish SMZs to reduce overlap?

Implementation Requirements: None

CR #3 – Project-Specific Monitoring

Values to be protected: As per above (CR #2)

Conformity Determination: Conforms

Criteria:

- "...sufficient to monitor effectiveness of proposed mitigation measures in protecting zone values and impacts to those values"
- Expect to see evidence of a monitoring program in place to ensure that the activity is not affecting the key values within SMZ
- Requires assessment of potential for impact. Where little to no impact is anticipated, monitoring may also be minimal.

Description of Impacts & Mitigation:

- Employment of a wildlife monitor
- No other monitoring activities mentioned

Analysis:

- Impacts to wildlife would be short-term – related to overflights, noise from drilling and camps – presence of wildlife monitor is sufficient for that
- No monitoring indicated for sensitive ecological features. However, as long as they were avoided, there would be no impacts to them
- Archaeological sites and cultural sites identified through TK study were to be avoided – again no impacts to them
- Does not appear to be a need for an ongoing monitoring plan

Questions/Discussion:

- Does the SLWB regularly require monitoring of sumps as a condition of authorization? For how long?

Implementation Requirements: None

CR #4 – Community Engagement and Traditional Knowledge

Conformity Determination: Conforms

Criteria:

- Looking for evidence of consultations with affected communities (land corps, band, RRC, public) on activities, concerns and TK
- In the future, will be looking for specific discussion on CRs that rely on community input to be fulfilled
- Looking for demonstration of how this information was considered and used in project design

Description of Impacts & Mitigation:

- Initial consultation held in Tulita on Dec 13/06; updates provided on April 10th/07 and April 25/07; Consultation with NWLC on April 10/07 – Presentations included in application

- TK study conducted in Feb/07 with 13 Elders by Mackay Range Development Corporation and Challenger Geomatics

Analysis:

- Presentations and TK study were comprehensive and covered all required topics (except discussion of CRs obviously)
- Questions about employment, use of equipment, impacts to wildlife – addressed through use of monitors, avoiding wildlife by 500 m and avoiding flying over key wildlife areas
- No map available from TK study but assume that one was produced by Challenger Geomatics (otherwise why were they involved?)
- No indication of how the information was used

Questions/Discussion:

- Assumed the information was used to identify key sites to avoid drilling, key wildlife use areas and times to avoid flying over – no outstanding community concerns indicated

Implementation Requirements: None

CR #5 – Community Benefits

Conformity Determination: Conforms

Criteria:

- Looking for a summary of community benefits or public interest benefits in the application
- ABAs or an INAC Benefits Agreement would fulfill this CR where they are required

Description of Impacts & Mitigation:

- Crown land - no Access agreement required
- Minimum of 3 local positions for cook/camp maintenance, wildlife monitor, and field technician
- Use of local contractors and companies (Sahtu Helicopters, Northwright Airways)

Analysis:

- Relatively good economic benefits for a small project and low potential for impacts
- Fairly comprehensive TK study done also constitutes a benefit

Questions/Discussion: None

Implementation Requirements: None

CR #6 – Community Land Use Monitors

Conformity Determination: Conforms, subject to implementation requirements below

Criteria:

- Looking for intent to use a community monitor or field assistant, evidence of community input into values to be monitored, description of appropriate role in locating values and monitoring impacts to them in the field
- Reporting requirements can be handled through terms and conditions in authorizations

Description of Impacts & Mitigation:

- Local monitor and field technician to be hired
- Input into important sites, plants and wildlife provided through TK study

Analysis:

- Key requirement to hire a monitor is met
- No indication that the monitor would work for the RRC or his/her role – could be worked out through contracts

Questions/Discussion:**Implementation Requirements:**

- Monitor to be hired by or report to RRC, not proponent
- Contract to address role and responsibilities of monitor as per CR requirements
- SLWB to attach condition to implement reporting requirements

CR #7 – Archaeological Sites, Historic Sites and Burial Sites

Conformity Determination: Conforms, subject to implementation requirements below

Criteria:

- Looking for identification of sites through both PWNHC and community engagement/TK studies and evidence that such sites are being avoided by 150m, and 500m for burial sites
- If there is high potential for undocumented sites, evidence that a heritage resource assessment is carried out

Description of Impacts & Mitigation:

- Archaeological sites obtained from the PWNHC will be avoided and any undocumented sites found will be left alone and reported to the proper authority.
- The TK study identified the presence of burial sites in the Mackenzie Mountains generally, but locations were not identified.

Analysis:

- Does not specify setbacks – could be specified in conditions to authorizations
- Given the very localized impacts, minimal ground disturbance, and avoidance of any undocumented sites that are found, an archaeological assessment is not required

Questions/Discussion: None

Implementation Requirements:

- Implement 150 m and 500 m setbacks as a condition of authorization

CR #8 – Watershed Management

Conformity Determination: Conforms, subject to implementation requirements below

Criteria:

- Need to assess potential impacts to water quality, quantity and rate of flow within SMZs or CZs
- Nothing significant would be allowed

Description of Impacts & Mitigation:

- Use of small volume of fresh water for drilling – will recirculate drill fluids to reduce volume requirements
- Use of sumps for drill fluids and grey water from camp – all sumps will be located away a minimum of 100 m from high water mark of any creek or stream to avoid water contamination; sumps will be covered with rock and overburden when drill hole is completed
- Pits and privies used for sewage, organic garbage buried in a wet pit; both will be covered with sand and lime daily
- Spill equipment and contingency plans in place to address and clean up any spills
- Fuel cache at least 100 m from ordinary high water mark of any water body or water course

Analysis:

- Water use expected to be very minor – withdrawal from specific water bodies/courses should be approved by DFO to ensure withdrawal volumes are sustainable
- Potential for impacts to water quality as proposed are minimal

Questions/Discussion: None

Implementation Requirements:

- DFO to approve water withdrawal volumes

CR #9 – Drinking Water

Conformity Determination: Conforms

Criteria:

- Need to assess potential impacts to downstream drinking water sources based on Map 6 of the Plan
- Nothing significant would be allowed
- Where there is significant risk, need to see specific evidence of discussions with the community on the topic, and either a commitment to do baseline water quality collection and regular monitoring, or it would have to be a condition of authorization to require those things.

Description of Impacts & Mitigation:

- As above for CR #8

Analysis:

- Few impacts to water anticipated generally
- No drinking water source catchments nearby and little potential for migration of contaminants

Questions/Discussion: None

Implementation Requirements: None

CR #10 – Wildlife

Conformity Determination: Does not conform (no evidence that most current wildlife information was requested or used); passes other requirements subject to implementation measures below

Criteria:

- Looking for a statement that data was requested from appropriate organizations and discussed with community RRCs in community engagement and TK study
- Looking for evidence that key wildlife impacts are being mitigated, and particular attention to be given to special harvesting areas – if uncertain, additional measures can be imposed as conditions of authorizations where appropriate
- Looking for special consideration for protection of barren-ground caribou if in applicable area
- Look for adherence or commitment to horizontal setbacks and minimum flight altitudes for relevant species, or implement through conditions of authorizations

Description of Impacts & Mitigation:

- Camp and drill sites are in grizzly bear and mountain caribou habitat – a clean camp site and small crew will minimize chance of conflict with local wildlife
- Use of wildlife monitor – land use operations will be suspended temporarily if caribou, moose, grizzly bear and/or sheep are spotted within 500 m of any work/camp site. Operations may resume once the animal(s) have left the area.
- Eagle Plains committed to minimum flight altitude of 650 m during point to point flights to avoid impacts to nesting birds. Should large concentrations of birds be sighted the aircraft will maintain a minimum horizontal distance of 3 km.
- Wildlife habitat, harvesting and impacts discussed in TK study and consultations

Analysis:

- No evidence that most current data was collected from wildlife managers (no mapping or specifics included in application materials)
- SLUPB data and zone description identified important wildlife habitat for Dall's sheep, mountain goats, mountain woodland caribou (Redstone Herd Calving and early to mid-summer range)

- Biggest concern is impact from flights on wildlife – addressed through min flight altitudes;
- Impacts from noise and direct interaction around camps and drill sites mitigated by ceasing operations when wildlife are nearby
- Barren-ground caribou requirements not applicable
- Setbacks and min altitude requirements – can be applied as conditions of authorization:
 - Dall’s sheep and mountain goats (2000 m horiz, 300 m alt);
 - raptor nest sites (1000 m horiz, 650 m alt);
 - waterfowl nest sites (250 m horiz, 650 m alt);
 - waterfowl staging areas/concentrations (250 m horiz on ground, 650 m alt and 1500 m horiz setback in the air)

Questions/Discussion:

- For a project of this scale, what is reasonable to require in terms of collecting and assessing current wildlife information?

Implementation Requirements:

- Regulators to require adherence to setbacks and minimum altitudes as outlined in the CR as a condition of authorization

CR #11 –Species Introductions

Conformity Determination: Conforms

Criteria:

- Looking for basic precautions to be taken to avoid introduction of species
- Where revegetation is required, that seed mixes are approved by the GNWT, ENR

Description of Impacts & Mitigation:

- No discussion of species introductions in application

Analysis:

- No vehicles used so very minimal risk of introductions – could only be brought in on boots, or on the drill
- Virtually no ground disturbance so no need to reseed

Questions/Discussion:

- Would it be typical to require the drill to be cleaned? Is there a possibility that it could transfer non-native species into the area?

Implementation Requirements: None (pending answer to above question)

CR #12 – Sensitive Species and Features

Conformity Determination: Does not conform (to requirement to get most current information on features of concern and mitigate impacts to them)

Criteria:

- Looking for evidence that information was sought on the location of plants, karst, hot and warm springs, mineral licks, amphibian sightings, and ice patches from appropriate departments and adherence to setbacks other requirements as appropriate

Description of Impacts & Mitigation:

- Mineral springs mentioned in TK report

Analysis:

- No indication of any other special features in applications or evidence that such information was requested
- May-be-at-risk plants, springs and mineral licks known to be in the vicinity based on information in SLUP
- Does not meet requirements of the CR

Questions/Discussion:**Implementation Requirements:**

- Assuming proponent could demonstrate the most current information was used, adherence to setbacks and other requirements in this CR would have to be a condition of authorization to achieve conformity
- Need to attach requirement to report new sites as a condition of authorization

CR #13 – Closure and Reclamation

Conformity Determination: Conforms, subject to implementation requirements

Criteria:

- Part 1: Security to be calculated to cover full cost of reclamation and required by SLWB as a condition of authorization
- Part 2: Expect to see discussion of long term use of the area with community orgs and government bodies to determine an appropriate reclamation goal, and a draft closure and reclamation plan to be included to achieve that goal.
 - Generally, the goal should be for full reclamation to the extent possible/reasonable.
 - Where a decision is made to not do that in order to accommodate further use, then that should be made explicit.
 - The "Plan" does not have to be a separate document but sufficient to describe intent, especially at early stages of land use.

Description of Impacts & Mitigation:

- Bury all cuttings in mud sumps
- Restore all drill sites – cover any sumps, fill in holes dug for levelling timbers
- Remove all empty fuel drums
- Remove all garbage from camp and drill sites
- Bury all sumps, pits and privies

- Store diamond drill core and the drill sites or at camp site in covered wooden boxes
- Remove all food and supplied from camp at end of program
- Remove all drill equipment and drilling supplies from project area
- Ensure all fallen trees are limbed and bucked into short lengths

Analysis:

- Restoring sites as close as possible to pre-activity conditions
- As remote locations, this is the most appropriate reclamation goal

Questions/Discussion: None

Implementation Requirements:

- Security sufficient to cover the full cost of reclamation to be required and collected by the SLWB as a condition of authorization.

CR #14 – Permafrost

Conformity Determination: Conforms

Criteria:

- Looking for consideration of impacts to permafrost and mitigation measures in place to limit impacts to permafrost

Description of Impacts & Mitigation:

- TK study indicated that permafrost is present throughout the area except around hotspots
- No other mention of permafrost

Analysis:

- Very minimal ground disturbance so little potential for impacts to permafrost
- Using existing camp (outfitters)

Questions/Discussion: None

Implementation Requirements: None

CR #15 – Climate Change

- Not applicable - content not yet determined

CR #16 - 20

- Not applicable