Montem Resources
Alberta Operations Ltd
Tent Mountain Project

Resuming Activities – Tent Mountain Mine
Coal Handling and Processing Plant

Project Description
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February 2021
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1 Project Description

Montem Resources Alberta Operations Ltd., a subsidiary of Montem Resources Corp., is seeking to recommence operations at their Tent Mountain Project. Tent Mountain is a metallurgical mining asset in southwestern Alberta. Located 26 km west of the town of Coleman within the Municipality of Crowsnest Pass, coal was first discovered at Tent Mountain by prospectors in the early 1900s; with small-scale underground mining occurring sporadically until the 1940s. In 1948 the first open-cut mine was opened at Tent Mountain, and various phases of open-cut mining occurred until 1983 when operations of the Coleman Collieries were suspended.

The Project area is covered by a total of 36 crown coal leases and freehold tenements at Tent Mountain that cover approximately 1,931 ha. The current mine permit, C85-16G and Mine Number 1695 granted by the Alberta Energy Regulator (AER) covers 750 ha. The mine also has an Environmental Protection and Enhancement Act (EPEA) Approval #47679 which governs the operations within the mine permit and the road leading to the Highway 3. As well, a Licence of Occupation (LOC) 981599 covering three settling ponds is held by Montem Resources Alberta Operations Ltd.

Montem has completed environmental assessment work, applications and management plans to recommence mining. The proposed mining operations and environmental management programs will meet a much higher standard than that of the historic practices. Montem is also proposing a 14 year program, utilizing open pit mining, truck/shovel conventional mining to complete the economic development of the suspended mine operations. Montem is also proposing to build and operate a new coal handling and processing plant that will be located immediately adjacent to the mine operations. Coal transportation and loading is proposed to be located to the north of the Project, utilizing CP Rail facilities next to Provincial Highway #3. The loading facility will be located primarily within the Province of BC.

1.1 Project Name

The project is named the Tent Mountain Project.

1.2 Proponent

The proponent of the Tent Mountain Project is Montem Resources Alberta Operations Ltd (Montem AB). Montem AB is a subsidiary of the Montem Resources Limited. Montem is a public unlisted company headquartered in Australia. Montem has several key metallurgical coal properties in Western Canada.

Montem corporate structure and Board/Management team are available online at http://montem-resources.com/about-us.
Montem AB has established a community presence in Coleman and is actively pursuing the Tent Mountain project. The engagement office is scheduled to be open to the public late November 2019. The office will have a dedicated engagement center for the public to learn about our projects and speak to staff.

1.3 Location, size, nature of proposed activity

The Tent Mountain Project is located within the legal land descriptions (LLD) found in Table 1 below and as illustrated on Figure 1. The mine permit area is 750 ha of previously disturbed and undisturbed lands from the previous operation. No amendment to the mine permit is anticipated at this time.

The Project will see a significant reduction in the size associated with the Project. Montem is planning to move the CHPP out of Coleman, to a pre-disturbed location within the Tent Mountain Project Permit area. Montem will also cease transportation of raw coal along Highway 3 and instead utilize a preexisting road to haul clean coal to rail. The stockpile location is tucked behind a hill to decrease wind exposure and to have the product closer to the proposed loadout. Montem is pursuing an agreement with CP to load clean product for transport to port on pre-disturbed lands closer to the mine.

Table 1: Legal Land Description for Tent Mountain Project

<table>
<thead>
<tr>
<th>Quarter Section</th>
<th>MSL Application</th>
<th>Freehold</th>
<th>Tent Mountain Mine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Section</td>
<td>Township</td>
<td>Range</td>
</tr>
<tr>
<td>NE 1/4</td>
<td>11</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>NW 1/4</td>
<td>12</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>E 1/2</td>
<td>14</td>
<td>7</td>
<td>6</td>
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<tr>
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<td>6</td>
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<tr>
<td>W 1/12</td>
<td>1</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>
Figure 1: Tent Mountain Project
1.4 Technology

The activities associated with the resumed operations at Tent Mountain will employ existing and proven technology for all components of the Project. The activities can be categorized into mining, coal processing and operations management.

1.4.1 Mining

Mining will be undertaken in the same manner as previously approved. A combination of truck/shovel mining will be employed to extract the raw coal. Newer and more efficient trucks and equipment, than were available during the last operations, will reduce potential environment impacts in comparison. The resumption of mining will enable a more complete development of the Tent Mountain operation. Remnant features, such as the Pit 4 waterbody, which is covered under a current reclamation certificate, can be more fully developed and reclaimed to current standards of mine reclamation. In a similar way, several of the rock dumps along the north and west perimeters of the mine although certified as reclaimed, are planned for re-activation and a more complete closure after additional rock material placement. There are no complexities anticipated with the resumption of mining that would require the development of new or unproven technologies.

1.4.2 Coal Processing

Coal processing will be done basically in the same manner as previously approved, however at a different location. Montem is proposing a proven technology of crushing, screening and gravity separation of waste rock from coal at Tent Mountain. The current design calls for the use of dense medium cyclones for the clarification of coarse coal, reflux classifiers for the recovery of fine coal and the use of flotation for the recovery of ultrafine coal. These are all leading technologies, with known performance histories, that are significant improvements over the previously approved operation. These technologies will increase the recovery of available coal and decrease the processing costs.

Fines management will also experience improvements over the existing operations, which included tailing ponds and coarse reject storage locations adjacent to the Crowsnest River in the Town of Coleman. Montem is proposing that tailings will be filtered at the Tent Mountain CHPP and combined with coarse rejects for co-emplacement. This design may eliminate the need for a tailing impoundment and will utilize less water.

Finally, the change in location of the CHPP will have benefits to the Project. By eliminating the transportation of raw coal, which includes a significant portion of rock and other non-coal components, the 25 kilometers to the previous CHPP in the Town of Coleman, the Project will decrease the overall environmental and social impacts of the operation. There will be a definable decrease in GHG emission for the transportation, there will be a significant social and health benefit to the community with
the absence of the CHPP activity within the townsite and finally the amended location will facilitate the retention of coarse and fine reject materials at the Mine, where they originate from.

The current design for the CHPP is modular and is intended to be reused at future operations. There are no complexities anticipated with the resumption of coal processing that would require the development of new or unproven technologies.

1.4.3 Operations Management

The overall Project management, which includes such items as environmental, safety and other operational controls, will follow similar programs to those employed at the previously approved operations. There is significant operational experience within the mining community for identical operations to those at Tent Mountain. Montem is already employing experienced operations personnel who are well versed in the management of mining operations in these environments. Environmental controls to understand, manage and mitigate all potential environmental effects are being developed and will be presented in the upcoming applications for approvals. Reclamation will follow current reclamation practices and provide opportunities for improvement over the current certified features in areas such as the use of native species of vegetation and improvements in biodiversity of the reclaimed landscape. The development of end pit lakes as part of the reclaimed landscape will follow the current guidelines for these features and provide potential improvement over the existing features. There are no complexities anticipated with the resumption of reclamation activities that would require the development of new or unproven technologies.

During operations, existing technologies will be employed to define, manage and mitigate emissions from the Project. Noise, air and waste emissions are being quantified and will be managed. The adoption of newer technologies, in particular a better understanding of the noise and air emissions through the use of current modelling, will provide improvements over the previous operations. Water usage and emissions are also being quantified and mitigation plans being developed. Montem will utilize the settling ponds covered under LOC 981599 as well as utilize the ponds identified in the original mine permit for the management of mine wastewater. The settling ponds require maintenance and integrity checks prior to use. Potential impacts to water quality are understood and mitigation plans are being developed as part of the application process.

The presence of components of water quality concern is known within the existing operations. Our ongoing monitoring of the Project, and updated baseline data collection, has provided a good understanding of the current water quality situation at the Project. As part of the resumption of operations and the closure proposal, Montem will take the responsibility of managing and improving historical water quality impacts as well as ensuring the mine resumption will meet Federal and Provincial regulation. There are no complexities anticipated with the resumption of operations and the mitigation of water quality effects that would require the development of new or unproven technologies.
2 Existing Land Uses and Activities

This area of the Country has a rich history of metallurgical coal mining dating back to the late 1800’s early 1900’s. The nearby town of Coleman is a classic example of one of the defining features of early twentieth-century coal mining in North America—the emergence of the “company town.” Coleman was established in 1903 by the International Coal and Coke Company, an American corporation that needed a new source of coal to fuel its copper-smelting operations in British Columbia. The town site was surveyed, and lots were put on the market in late 1903. The first buildings erected were the residences of the mine manager and superintendent, and the International Coal and Coke Company’s general office. Reflecting the many roles that the company played in the town, the general office was long one of the busiest buildings in Coleman. In addition to serving as the administrative center of the mining company, the office was the town’s main real estate office and the place where families paid their utility bills.

The resource in this region represents significant coal and other mining opportunities. When considered with the infrastructure, proximity to shipping ports and availability of local work force expertise, the Crownest Pass situated adjacent to the Elk Valley in British Columbia, is an important future mining area. Within the Municipality of the Crownest Pass, there are a number of existing and proposed mining operations. The Tent Mountain Project is the only operation that currently holds mining approvals for metallurgical coal in the region. Other operators as indicated in Figure 2 below, including Riversdale Resources and Atrum Coal are at a variety of stages in their pre-development activities. Riversdale, who have been in the regulatory process since 2013, is finally at the stage of a public hearing to have their mine development reviewed and assessed in a joint process involving the Provincial and Federal regulatory agencies. Atrum Coal is exploring the potential to develop an export metallurgical coal mine in adjacent to the Riversdale proposal. All of these projects are looking to redevelop historical mining areas as the technology and market need allow for further recovery of coal deposits in existence.

Other activities within this region include the newly established Castle Provincial Park and Castle Wildland Provincial Park with the associated land use and access controls. Established as an extension of the Waterton Lakes National Park, the Castle is an important component in the preservation of the unique ecological features of this area. The Park is an important keystone in the increasingly important tourism and recreation activities within the Region.

Petroleum and natural gas exploration and development is not a significant component of the region as past activities have proven to be less than successful and abandoned generally in favor of more easily developed areas. There is substantial hydrocarbon transportation infrastructure throughout the area with the presence of several interprovincial pipeline corridors in the region.

Large portions of the region are included in the Spray Lakes Forest Management Area (FMA) and are subject to controlled timber and land management activities.

Transportation is an important component of the regional activities as well with the presence of a major interprovincial highway, one of the main east-west connectors for the Canadian Pacific Railway and several entry points for resource development and recreation access points to the Eastern Slopes in this area.
Figure 2: Regional Overview.
3 Environmental Setting

3.1 Past EIA

An Environmental Impact Assessment was conducted and submitted by a previous operator in 1974 as part of the expansion of the Tent Mountain Project and as directed by the Provincial regulator at that time.

The Company was required to perform the following;

1. An Environmental Impact Assessment of the entire Tent Mountain exploration, mining and coal hauling operations as well as the coal processing and loading operations at Coleman as prescribed under Section 8 of the Act shall be completed and submitted on or before July 1, 1975
2. An exploration plan for the entire Tent Mountain operations now being considered by Coleman Collieries Limited as prescribed under the Regulated Coal Surface Operation Regulations shall be completed and submitted for review on or before December 31, 1974
3. Coleman Collieries Limited’s plans for the whole of the Tent Mountain mining are regarding present, applied for, and foreseeable future operations shall be submitted pursuant to the regulations under The Land Surface Conservation and Reclamation Act and The Clean Water Act prior to March 31, 1975 and shall include:
   a. Mining and reclamation plans, showing how the different operations may be integrated
   b. Hydrological report including both surface and subsurface waters
   c. An assessment of the adequacy of the existing and proposed water pollution control systems that will be required to meet provincial standards.

Montem has reviewed the past EIA document that is available to us and determined that the scope of the EIA data gathering, assessment and mitigation development was comprehensive. The document undertook to assess both regional and local parameters for biophysical and cultural effects of the proposed project. The project at that time included the following parameters;

- Continued expansion of the mining activities at Tent Mountain Mine,
- Relocation of the CHPP from the Town of Coleman to a location near the Mine, and
- The assessment and possible development of underground mining.

In assessing the validity of the previous EIA with the standard of today, it must be noted that while the methods of modern impact assessment have certainly changed since the 1970’s, the methodology has remained fairly consistent. The collection of baseline data followed sound scientific standards and gathered sufficient information to understand the state of the local and regional environment at the time. The assessment then undertook to estimate and quantify the potential of effects of the project, with the appropriate mitigation proposals being identified. Also, the context and development of the various mitigation sciences must be considered. For example, a significant uncertainty at that time was the expected success of reclamation programs as mitigation for the obvious effects of the surface disturbance associated with mining. This was reflected in the assessment of the effect of the expansion at that time.

The science and technology around the successful reclamation of previously disturbed land and the restoration of a functioning ecosystem in those reclaimed areas provides a predictable and reliable mitigation of the effects of land disturbances. What is apparent when examining that difference between the project as assessed in 1970 and the Project today is that while the technology and science are more refined, the basic parameters of assessment methodology have not changed.
The Tent Mountain Project has not changed significantly in nature since the original EIA assessment. As outlined above, the Project will be an open pit mine with associated coal processing plant and load out facility. The Project will represent some significant positive changes in that:

- No increase in the size of the approved Mine Permit is required for the resumption of activities at the Project
- The CHPP will be at the Mine, not in the Town of Coleman
- The Project will be much smaller in overall size. Montem will no longer require the use of approximately 20 kilometers of a public major highway and will no longer need approximately 100 hectares of industrial facility in the Town of Coleman.

3.2 2021 Impact Assessment Determination

The Alberta Energy Regulator was requested to review the Project details associated with the resumption of mining activities. The Director determined on January 8, 2021 that the proposed hours of operation, size of equipment and overall production volumes, are substantial changes to the previously authorized activity. It was determined that an EIA would be required for the mine resumption activity.

The CHPP construction and operations components to the Project proposal are a mandatory activity and the development of an EIA is well underway.

A proposed “Draft Terms of Reference” has been approved by the AER is currently under public and internal review.

3.3 Environmental Setting of Project

The environmental setting for the Project has not changed significantly since the original EIA. The Crowsnest Pass continues to be a busy area with multiple linear developments and increasing recreational use and development. The application process, as proposed by Montem will address any changes in environmental assessment parameters such as the continuously changing listing of rare and endangered plant/animal species, the changing nature of human health effects as a result of industrial activity and the increasing awareness of the potential effects of water quality effects as a result of mining in the Canadian Rockies.

3.3.1 Baseline Data

Montem is conducting a comprehensive and inclusive baseline review for the Tent Mountain project area which will update the environmental, social, economic and cultural baseline data and assessment that was conducted in the 1970’s. Montem has focused its current review of the TMM within the original Project footprints as well as utilizing existing disturbance leading to Montem’s proposed rail loadout area.
Montem is nearing completion of the field studies and reports and are moving towards impacts reports and management plans to mitigate impacts to the environment, Indigenous and alleviate any potential community concerns.

As mining responsibly is a core value of Montem, we have used the standard terms of reference for coal projects to direct the field studies and engagement with our Communities and Indigenous Peoples. We believe that this approach is the industry standard and represents the best regulatory path forward. The Project is located in the Rocky Mountain Natural Region, which is characterized by highly variable topography, geology, and vegetation. The north to south and east to west variation in bedrocks across this Natural Region result in the highly variable physiographic nature of this region and the characteristic vegetation distributions. The vegetation is indicative of the Montane and Subalpine Natural Subregions, which are characterized as follows:

- **Montane Natural Subregion** – characterized by a pattern of open forests and grasslands, with modal sites having forested stands of Douglas fir, lodgepole pine, white spruce, aspen, or mixtures of all. The Montane Subregion occurs at lower elevations than the Subalpine Subregion and has warmer and drier climatic conditions as a result. Limber pine may be present, but is commonly restricted to dry, exposed ridge tops. Abrupt changes in vegetation can occur over very short distances due to high variability in microclimates from differing aspects, slope positions, and wind exposure.
- **Subalpine Natural Subregion** – occurs at high elevations on strongly rolling ridges and lower slopes of mountains, often with bedrock near the surface. A broad range of vegetation species are characteristic of on mesic sites due to significant variations in elevation. Vegetation communities at lower elevations are characterized by closed canopy forests of lodgepole pine, Engelmann spruce, and subalpine fir.

As part of the preparation for the resumption of the activities at Tent Mountain Project, Montem began a series of scientific studies in the summer of 2018. In all cases, the studies are being conducted by the best available subject matter experts and in a manner to predict the eventual regulatory requirements. The studies are first gathering an update to all required baseline information, then are assessing the project resumption for the determination of any effects associated with that resumption. Finally, all disciplines are using the most recent mitigation determinations, including avoidance if necessary, to assess the potential effects of the resumed activities.

The studies include:

**Biophysical Assessments.**

- Wildlife
- Vegetation (including wetlands)
- Soils
- Air

**Aquatic Assessment**

- Fish and other invertebrates
• Aquatic habitats
• Water quality (surface and groundwater)
• Water quantity (surface and groundwater)

Mining Assessment
• Geotechnical assessment
• Geochemistry assessment
• Mine and infrastructure assessment

Coal Preparation Facility
• Design/build of best available technology coal processing facility

The Montem technical team is currently completing the initial assessment of these baseline assessment in preparation of the resumption applications. While the work is preliminary, it has been noted that no unforeseen effects to the studied environmental components have been identified. This is due to a number of factors, but most notably that most of the lands associated with the Project have either been previously disturbed by the previous mining activities, or have been affected by the active forestry, recreation, oil & gas or quarrying activities carried out in this region.

4 Potential Environmental Impacts

4.1.1 Wildlife

The 2018-2020 inventory and assessment of the existing wildlife in the area of the Project is complete and the assessment of potential effects is underway. At this time, there are no species of particular concern evident in the Project area. The Crowsnest Pass is a congested and active corridor with a number of linear and intensive developments create stresses on the resident and transitory wildlife species.

Tent Mountain is not expected to create any new effects on the local and regional wildlife. The Project will be using existing infrastructure to access the mine and deliver clean coal. There will be additional effects with increased traffic, noise and human interactions.

As the Project is immediately adjacent to the Castle Wildland Park, Montem is expecting additional operational engagement with the Parks staff on site specific wildlife and habitat mitigations and enhancement opportunity.
4.1.2 Vegetation (including wetlands)

The 2018-2020 inventory and assessment of the existing vegetation and wetlands in the area of the Project is complete and the assessment of potential effects is underway. As much of the Project area is previously disturbed lands, either by previous mining operations or by other activities in this historically active area, there is very limited areas of undisturbed vegetation.

There have been no rare or endangered species identified as part of the data collection. The effects of the project are therefore expected to be limited to local and will not require any species-specific avoidance or recovery activities.

4.1.3 Soils

The 2018-2020 inventory and assessment of the existing soils in the area of the Project is complete and the assessment of potential effects is underway. The Project area is heavily disturbed by previous operations and there are limited native soils present.

The initial assessment does indicate however that there are sufficient reclamation materials (soils) present in the proposed area to accommodate the reclamation of the disturbed area to support the return to equivalent land capability.

4.1.4 Air

The 2018-2020 assessment and modelling of the potential effects to air quality in the area of the Project is underway. Greenhouse gas (GHG) emissions in the atmosphere caused by human activity result in climate change. GHG emissions include Carbon dioxide (CO2), Methane (CH4), and Nitrous Oxide (N2O). A change in GHG concentrations may result in a higher frequency of extreme weather conditions (e.g., floods, droughts, wildfires, violent storms) as well as changes to local temperature patterns and ambient air humidity. GHG emissions from the Project were quantified to assess the GHG emission from the Project compared against the Provincial and National Emission Inventory.

Based on the site operation process, the following emission sources will be included in the GHG emission inventory:

- On-site mobile emissions
- Mining operation equipment (diesel)
- Trucks (diesel)
- Complete emission assessment of CHPP
- Fugitive emissions of coal bed methane
- Indirect GHG emissions from purchased electricity

Some propane is also used at site for space heating. The contribution of GHG emissions from propane is insignificant, thus is treated as minimum source.
Table 2: Tent Mountain GHG Emission Summary

<table>
<thead>
<tr>
<th>GHG Emission Sources</th>
<th>GHG Emissions (tonne)</th>
<th>Contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CO2</td>
<td>CH4</td>
</tr>
<tr>
<td>Diesel Combustion</td>
<td>44,249</td>
<td>1.20</td>
</tr>
<tr>
<td>Fugitive Methane</td>
<td>-</td>
<td>1,548</td>
</tr>
<tr>
<td>Electricity Consumption</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>44,249</td>
<td>1,549</td>
</tr>
</tbody>
</table>

The project will use diesel equipment/vehicles that have low engine emission Levels meeting the US EPA Tier 4 emission standards. The tier 4 equipment has higher fuel efficiency than previous engines models, resulting in less energy consumption and GHG emissions. In addition, the Processing Plant will not have a dryer which will also result in less energy consumption and GHG emissions. The project emission is estimated to be only 23% of the neighboring Grassy Mountain Mine. Considering the provincial and Federal wide emission inventory, the Project is estimated to account for 0.03% and 0.012% of the provincial and National wide emission inventory, respectively.

GHG emissions can be mitigated by implementing programs such as regular maintenance, minimizing idling time, and efficient use of equipment. GHG emissions will cease after mine closure and reclamation activities will further reduce GHG concentration still existing in the air. Possible residual effects from GHG are considered reversible and air quality is expected to revert to its original state after the Project ceases to operate.

4.1.5 Fish and other invertebrates

The 2018-2020 inventory and assessment of the existing fish and other invertebrates in the area of the Project is complete and the assessment of potential effects is underway. The resumption of activities at the Project will not directly affect any fish or fish bearing water bodies as the area is heavily disturbed by previous operations and the bulk of the activity is limited to the top of Tent Mountain.

Assessment of potential effects to fish bearing waterbodies adjacent to or near the proposed infrastructure (access road, clean coal haul route and load out) have not identified effects at this time.

4.1.6 Aquatic habitats

The 2018-2020 inventory and assessment of the existing aquatic habitat in the area of the Project is complete and the assessment of potential effects is underway. The resumption of activities at the Project has the potential to affect aquatic habitat through changes to the water quality of mine water that will
be, under license, released to the aquatic environment. As the certified and released previous operational area is currently releasing waters to a number of environments where the potential of effects currently exists, the resumption of mining and implementation of current mitigation technologies are expected to improve the effects to aquatic habitats.

4.1.7 Water quality (surface and groundwater)

The 2018-2020 inventory and assessment of the existing water quality in the area of the Project is complete and the assessment of potential effects is underway.

The existing water quality is affected by a number of water quality parameters existing from the currently certified and released previous operations. Parameters of concern include TSS, selenium and other metals associated with runoff from the existing area. The resumption of activities may, during operations, eliminate these water quality concerns as active water management consistent with the mine operations approvals will ensure that released water meets or exceeds the licensed requirements.

As part of the proposed closure commitments for the resumption of mining activities at the Project, it is anticipated the water quality mitigation programs will alleviate the existing concerns.

4.1.8 Water quantity (surface and groundwater)

The 2018-2020 inventory and assessment of the available water quantity in the area of the Project is complete and the assessment of potential effects is underway.

The Project area is at the headwaters of a small drainage area that contributes to the Crowsnest River and is part of the Oldman River Basin. There are significant water quantity concerns in the Oldman River Basin for the use of water for industrial purposes. There are only limited amounts of groundwater available as the Project area is at higher elevations.

The Project does contain a significant quantity of stranded water in the Pit 4 water body. Our assessment indicates that this water body is not significantly contributing to the water quantity environment either in the local drainage basin and certainly not within the regional context of the Crowsnest River. It is our initial assessment that this stranded water source can be made available and satisfy the water requirements of the Project with no effect on water quantity in the area. Furthermore, our initial modelling indicates that the additional runoff present in the local area as a result of increased runoff from disturbed lands may provide a potential source of water quantity if required.

4.1.9 Mining Assessment

Montem is in the final stages of a feasibility assessment and report detailing the mining potential, economics and known or expected technical challenges with the resumption of activities at the Tent
Mountain Mine. At this time there are no project significant challenges with existing or expected geotechnical or mining technology conditions at the Project.

The Tent Mountain Mine was previously developed as a surface mine. That experience coupled with the developmental drilling recently conducted within the Permit area by Montem provide the required confidence in the geology and mining conditions. A mine development plan is in preparation that maximizes the recovery of available coal reserves and maintains Montem’s principles of safe and orderly development of the mine.

A geochemistry assessment is underway with static and kinetic testing being completed. Initial results indicate that while there is the absence of acid generating materials that could result in acid rock drainage concerns, there is the presence of selenium generating materials in the geologic profile that will require specific handling and mitigation practices.

4.1.10 Coal Preparation Facility

Montem is proposing a proven technology of crushing, screening and gravity separation of waste rock from coal at Tent Mountain. The current design calls for the use of dense medium cyclones for the clarification of coarse coal, reflux classifiers for the recovery of fine coal and the use of flotation for the recovery of ultrafine coal. These are all leading technologies, with known performance histories, that are significant improvements over the previously approved operation. These technologies will increase the recovery of available coal and decrease the processing costs. Fines management will also experience improvements over the existing operations. Montem is proposing that tailings will be filtered at the Tent Mountain CHPP and combined with coarse rejects for co-emplacement. This design may eliminate the need for a tailing impoundment and will utilize less water. The current design for the CHPP is modular and is intended to be reused at future operations. There are no complexities anticipated with the resumption of coal processing that would require the development of new or unproven technologies.

4.2 Mitigation Plans

The mitigation and management plans are in development based off what is currently expected in operating mine’s EPEA approvals as well as forecasted potential impacts by reopening Tent mine. At this time however, Montem is confident that all potential effects can be satisfactorily mitigated with known and proven technology or avoidance practices.

4.3 Cumulative Effects Assessment

The requirement to assess the cumulative effects of planned developments are legislated both under the Environmental Protection and Enhancement Act (EPEA) and the Impact Assessment Act (IAA). As previously indicated, the initial assessments of impacts and mitigation plans, completed as part of the previous Impact Assessment process, are being updated to the current standards. However, Tent
Mountain is an existing operation so the examination of the cumulative effect of the resumption of activities will be limited to those components of the Project that have changed in location. For example, the relocation of the CHPP from Coleman to the proposed location will be examined in light of the cumulative effect.

Under EPEA, environmental effects must include an evaluation of the environmental, social, economic and cultural consequences of a project. Positive and negative impacts are to be assessed with an indication of plans the proponent will implement to manage negative impacts.

The assessment process must take into account an examination of the potential cumulative effects of the planned development, taking into account the existing environmental effects at the time of the Project application, the anticipated effects considering the Project application proceeds and then an examination of the effects in consideration of other planned/approved/known projects.

Montem’s Project, the resumption of activities at the Tent Mountain Project, is not a new Project and as such does not fall cleanly in the effect’s assessment methodology for cumulative effects. An examination of the project applications currently under review indicates that the assessment of cumulative effects for those proposals does in fact consider “various historic mining” activities. As shown in the Benga Mining Limited, Grassy Mountain Mine Coal Project application, Table D 2.4-2 lists as an existing cumulative influence the presence of historic mining.

Table 3 - Example of Cumulative Effects Summary

<table>
<thead>
<tr>
<th>Company</th>
<th>Project</th>
<th>Existing &amp; Approved Activity</th>
<th>Project (Application Case)</th>
<th>Planned Projects (CEA Case)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benga Mining Limited</td>
<td>Grassy Mountain Coal Project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Various</td>
<td>Historic Mining Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teck Coal Limited</td>
<td>Coal Mountain Operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elkview Operations</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Elkview Baldy Ridge Extension</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Michel Creek Coking Coal Project</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Montem is focused not only on potential impacts for the reopening of Tent Mountain Mine but mitigating the historical influences on the current mine site as well as surrounding areas. Examples include; the use of previously disturbed areas, moving the CHPP to the mine site and using water resources currently not
significantly contributing to the surrounding watershed. The long-term prospect of recommencing mining at Tent Mountain is a reduction in cumulative effects through mitigation strategies and proven reclamation practices.

The previous EA addressed potential effects by identifying Valued Components (VCs). VCs are those environmental attributes associated with Project development, which have been identified to be of concern either by directly-affected stakeholders, government agencies or the professional community. In modern assessment processes, these would be referred to as key indicators or parameters in the ToR. VCs consider both biophysical and socio-economic attributes.

In the upcoming application package, Montem will ensure that measurable parameters are selected, where possible and appropriate, to facilitate quantitative or qualitative measurement of potential Project effects and cumulative effects. Measurable parameters provide a means to determine the level or amount of change in a VC. Each of our environmental disciplines are responsible for identifying and defining measurable parameters for their respective VCs. The degree of change in these measurable parameters will be used to help characterize Project specific and cumulative effects and evaluate potential residual effects. Thresholds or standards will be identified, where possible and appropriate, for each measurable parameter.

Planned Development Case (Cumulative Effects), which includes the “Application Case” combined with past studies, existing and anticipated future environmental conditions, existing projects or activities, plus other “planned” projects or activities.

For the purposes of defining assessment scenarios, “approved” means approved by any federal, provincial or municipal regulatory authority, and “planned” means any project or activity that has been publicly disclosed prior to the issuance of the Project’s ToR or up to six months prior to the submission of the Project Application and the EIA report, whichever is most recent.
Table 4 – Project Summary Table

Consider the terminology and capacities and sizes in the *Environmental Protection and Enhancement Act (EPEA)*, *Environmental Assessment (Mandatory and Exempted Activities) Regulation* and *Activities Designation Regulation* when completing this project summary table.

<table>
<thead>
<tr>
<th>Date:</th>
<th>January 26, 2021</th>
<th>Proponent name:</th>
<th>Montem Resources Alberta Operations Ltd. (Montem AB)</th>
</tr>
</thead>
</table>
| **Project name:** | Tent Mountain Mine – Resumption of Mining and Coal Handling and Processing Plant | **Project contact name and mailing address:** | Shireen Ouellet P. Biol. Director of Environment and Regulatory  
+1 587.425.5996  
souellet@montem-resources.com  
7720 17 Ave  
PO Box 610  
Coleman, AB T0K 0M0 |
| **Name of company that will hold approval:** | Montem Resources Alberta Operations Ltd. | **New project, expansion, additional phase, or modification:** | Modification (amendment) to an existing approved Mine  
New construction of CHPP |
| **Type of project (e.g., oil sands mine, coal mine, in-situ):** | Coal Mine and Coal Processing Plant (CHPP) | **Type of activities (major processes, components):** | Montem AB proposes to  
• resume mining operations at the Tent Mountain Mine  
• construct and operate a new CHPP to produce metallurgical coal |
| **Project location (legal land description and municipality):** | Mine  
• Twp. 7-Rge 6-W5M  
• W ½ 1-Twp 8-Rge 6-W5M  
• SW 12-Twp 8-Rge 6-W5M  
CHPP  
• NE 9 & Sec 23-Twp-7-Rge 6-W5M (within Mine Permit C 85-16)  
Municipality of the Crowsnest Pass | **Infrastructure requirements (e.g., roads, pipelines, storage, tankage):** | Access to the project site location is existing. |
| **Is the project on private, provincial, or federal land?** | Combination of private and provincial lands | **List any parks, protected areas, or conservation areas that may be affected:** | The Project is located adjacent or near the following:  
• Castle Wildland Park  
• South Saskatchewan Regional Plan  
• Oldman Watershed Management zones include: Grizzly Bear; Bighorn Sheep and Mountain Goat; *Pinus flexilis* (Limber Pine) and *Pinus albicaulis* (Whitebark Pine) protection areas. |
| **Total project area (hectares [ha]):** | Permit C-85-16. | 750 ha |
| | Existing Pits | 127 ha |
| | Existing Rock Storage | 246 ha |
| | Existing area | 373 ha |
| | Resumed Mining | 144 ha |
| | CHPP | 2 ha |
| | New Activity | 146 ha |
| **Total Required Area** | **419 ha** |

| **Nearest Indigenous communities (names and distances in kilometres [km]):** | Kainai First Nation (Blood Tribe) - 75 km |
| | Piikani Nation - 50 km |
| | Siksika Nation - 160 km |
| | Stoney Nakoda Nation (Bearsaw, Chiniki and Wesley Bands) - 180 km |
| | Tsuut’ini Nation - 90 km |

A comprehensive and inclusive Indigenous Engagement and Consultation Plan has been implemented. Consultation with Treaty 7 Nations has been initiated.

A record of consultation (ROC) is available.

| **Project construction and operation starts (quarter and year):** | Q4 - 2023 |
| **Life of project (years):** | 14 years |

| **Feedstocks and maximum design feed rates:** | 4925 tonnes of raw coal per day |
| **Maximum design production rate:** | An annual saleable production of 1.2 mt/year of clean metallurgical coal |

| **Project products:** | Metallurgical coal utilized for steel making for International markets |
| **Average production capacity:** | 3,288 t/day |

| **Method of transportation to end-market:** | Train loading facility in BC, to CP rail, to Westshore terminal, to seaborne ships |
| **Location of end-market:** | Markets include China, Japan, Korea, India, Brazil, and Western Europe |

| Is an EPEA approval required? | Amendment to EPEA Approval #47679 |
| **Is a Water Act approval required?** | Yes – in pit water diversions |

| Is a Water Act licence required? | Yes. Uses of water at CHPP require a licence. |
| **Are there any requirements under the Impact Assessment Act?** | No. Impact Assessment Agency has reviewed the Project and determined that no further review is required. |